Pierre CHAMBON

SELECTED LIST OF RESEARCH ARTICLES

Thematic classification (p. 1-52) and REVIEW ARTICLES (p. 53-61)

1. DISCOVERY OF A NEW POLYNUCLEOTIDE : polyADPribose

1-A **18a** P. CHAMBON, J.D. WEILL, and P. MANDEL :
Nicotinamide mononucleotide activation of a new DNA-dependent polyadenylic acid synthesizing nuclear enzyme.
Biochem. Biophys. Res. Comm. (1963) **11**, 39-43.

1-B **26** P. CHAMBON, J.D. WEILL, J. DOLY, M.T. STROSSER, and P. MANDEL
On the formation of a novel adenylic compound by enzymatic extracts of liver nuclei.
Biochem. Biophys. Res. Comm. (1966) **25**, 638.

1-C **36** J. DOLY, M. COCHET, P. MANDEL, and P. CHAMBON :
Solubilization and partial purification of polyADPR synthetase.
Abstr. FEBS Meeting, Prague (1968) **588**, p. 147.

1-D **1925** J. MENISSIER de MURCIA, C. NIEDERGANG, C. TRUCCO, M. RICOUL, B. DUTRILLAUX, J. OLIVER, M. MASSON, A. DIERICH, M. LEMEUR, C. BALZINGER, P. CHAMBON, and G. de MURCIA :
Requirement of poly(ADP-ribose) polymerase in recovery from DNA damage in mice and in cell.
Proc. Natl. Acad. Sci. (1997) **94,** 7303-7307.

2. DISCOVERY OF MULTIPLICTY OF EUKARYOTIC RNA POLYMERASES

2-A **39** C.KEDINGER, M. GNIAZDOWSKI, J.L. MANDEL, F. GISSINGER, and P. CHAMBON:
α-amanitin : a specific inhibitor of one of two DNA-dependent RNA polymerase activities from calf thymus.
Biochem. Biophys. Res. Comm. (1970) **38**, 165.

2-Aa **40** M. GNIAZDOWSKI, J.L. MANDEL, F. GISSINGER, C. KÉDINGER, and P. CHAMBON:
Calf thymus RNA polymerase exhibit template specificity.
BIOCHEM. BIOPHYS. RES. COMM. (1970) **38**, 1033.

2-B **42** M. MEILHAC, C. KEDINGER, P. CHAMBON, H. FAULSTICH, M.V. GOVINDAN and T. WIELAND :
Amanitin binding to calf thymus RNA polymerase B.
FEBS Letters (1970) **9**, 258.

2-C **41** P. CHAMBON, F. GISSINGER, J.L. MANDEL, C. KEDINGER, M GNIAZDOWSKI, and M. MEILHAC :
Purification and properties of calf thymus DNA-dependent RNA polymerase A and B.
Cold Spring Harbor Symposia on Quantitative Biol. (1970) **35**,693.

2-Ca **43** C. KÉDINGER, P. NURET and P. CHAMBON:
Structural evidence for two α-amanitin sensitive RNA polymerases in calf thymus
FEBS Letters (1971) **15**, 169.

2-Cb **44** J.L. MANDEL and P. CHAMBON
Purification of RNA polymerase B activity from rat liver.

FEBS Letters (1971) **15**, 175.

2-D **48** C. KEDINGER, F. GISSINGER, M. GNIAZDOWSKI, J.L. MANDEL, and P. CHAMBON: Animal DNA-dependent RNA polymerases. I. Large scale solubilization of A and B calf thymus RNA polymerase activities.
Eur. J. Biochem. (1972) **28**, 269.

2-E **49** F. GISSINGER, and P. CHAMBON : Animal DNA-dependent RNA polymerases. II. Purification of calf thymus AI enzyme. Eur. J. Biochem. (1972) **28**, 277.

2-F **50** C. KEDINGER, and P. CHAMBON : Animal DNA-dependent RNA polymerases. III. Purification of calf thymus BI and BII enzymes.
Eur. J. Biochem. (1972) **28**, 283.

2-G **64** C. KEDINGER, F. GISSINGER, and P. CHAMBON : Animal DNA-dependent RNA polymerases. IX. Molecular structures and immunological properties of calf thymus enzyme AI and of calf thymus and rat liver enzymes B.
Eur. J. Biochem. (1974) **44**, 421-436.

2-H **67** M. COCHET-MEILHAC, and P. CHAMBON : Animal-DNA dependent RNA polymerases. XI. Mechanism of the inhibition of RNA polymerases B by amatoxins.
BBA (1974) **353**, 160-184.

2-I **68** M. COCHET-MEILHAC, P. NURET, J.C. COURVALIN, and P. CHAMBON : Animal DNA-dependent RNA polymerases. XII. Determination of the cellular number of RNA polymerase B molecules.
BBA (1974) **353**, 185-192.

3. STRUCTURE OF INACTIVE AND ACTIVE CHROMATIN. THE NUCLEOSOME

3-A **72** P. OUDET, M. GROSS-BELLARD, and P. CHAMBON : Electron microscopic and biochemical evidence that chromatin structure is a repeating unit.
Cell (1975) **4**, 281-300.

3-B **86** C. SPADAFORA, M. BELLARD, J.L. COMPTON, and P. CHAMBON : The DNA repeat lengths in chromatins from sea urchin sperm and gastrula cells are markedly different.
FEBS Letters (1976) **69**, 281-285.

3-C **91** J.L. COMPTON, M. BELLARD, and P. CHAMBON : Biochemical evidence of variability in the DNA repeat length in the chromatin of higher eukaryotes.
Proc. Natl. Acad. Sci. USA (1976) **73**, 4382-4384.

3-D **106** P. OUDET, C. SPADAFORA, and P. CHAMBON : Nucleosome Structure II. Structure of the SV40 minichromosome and electron microscopic evidence for reversible transitions of the nucleosome structure.
Cold Spring Harbor Symp. Quant. Biol. (1978), Vol. **42**, 301-313.

3-E **107** M. BELLARD, F. GANNON, and P. CHAMBON : Nucleosome Structure III. The structure and transcriptional activity of the chromatin containing the ovalbumin and globin genes in chick oviduct nuclei.
Cold Spring Harbor Symp. Quant. Biol. (1978), Vol. **42**, 779-791.

3-F **117** P. GARIGLIO, R. LLOPIS, P. OUDET, and P. CHAMBON : The template of the isolated native SV40 transcription complex is a minichromosome.

J. Mol. Biol. (1979) **131**, 75-106.

3-G **136** B. WASYLYK, P. OUDET, and P. CHAMBON :
Preferential *in vitro* assembly of nucleosome cores on some AT-rich regions of SV40 DNA.
Nucl. Acids Res. (1979) **7**, 705-713.

3-H **270** J.S. KAYE, M. BELLARD, G. DRETZEN, F. BELLARD, and P. CHAMBON
A close association between sites of DNAse I hypersensitivity and sites of enhanced cleavage by micrococcal nuclease in the 5'-flanking region of the actively transcribed ovalbumin gene.
EMBO J. (1984), **3**, 1137-1144.

3-I **2652** A. LADE NIELSEN, M. OULAD-ABDELGHANI, J.A ORTIZ, E. REMBOUTSIKA, P. CHAMBON, and R. LOSSON :
Heterochromatin formation in mammalian cells : interaction between histones and HP1 proteins.
Mol. Cell (2001) **7**, 729-739.

4. DISCOVERY THAT HISTONES ARE RESPONSIBLE FOR DNA SUPERCOILING IN CHROMATIN

4-A **73** J.E. GERMOND, B. HIRT, P. OUDET, M. GROSS-BELLARD, and P. CHAMBON :
Folding of the DNA double helix in chromatin-like structures from SV40.
Proc. Natl. Acad. Sci. USA (1975) **72**, 1843-1847.

4-B **105** P. OUDET, J.E. GERMOND, M. SURES, D. GALLWITZ, M. BELLARD, and P. CHAMBON :
Nucleosome Structure I. All four histones, H2A, H2B, H3 and H4 are required to form a nucleosome, but an H3-H4 subnucleosomal particle is formed with H3-H4 alone.
Cold Spring Harbor Symp. Quant. Biol. (1978) Vol. **42**, 287-301.

5. DISCOVERY OF SPLIT CELLULAR GENES

5-A **94** P. HUMPHRIES, M. COCHET, A. KRUST, P. GERLINGER, P. KOURILSKY, and P. CHAMBON :
Molecular cloning of extensive sequences of the *in vitro* synthesized chicken ovalbumin structural gene.
Nucl. Acids Res. (1977) **4**, 2389-2406.

5-B **97** R. BREATHNACH, J.L. MANDEL, and P. CHAMBON :
The ovalbumin gene is split in chicken DNA.
Nature (1977) **270**, 314-319.

5-C **112** R. BREATHNACH, C. BENOIST, K. O'HARE, F. GANNON, and P. CHAMBON :
The ovalbumin gene : evidence of a leader sequence in mRNA and DNA sequences at the exon-intron boundaries.
Proc. Natl. Acad. Sci. USA (1978) **75**, 4853-4857.

5-D **103a** J.L. MANDEL, R. BREATHNACH, P. GERLINGER, M. LE MEUR, F. GANNON, and P. CHAMBON :
Organization of coding and intervening sequences in the chicken ovalbumin split gene.
Cell (1978) **14**, 641-653.

5-E **120** F. GANNON, K. O'HARE, F. PERRIN, J.P. LEPENNEC, C. BENOIST, M. COCHET, R. BREATHNACH, A. ROYAL, A. GARAPIN, B. CAMI, and P.CHAMBON :
A cloned complete ovalbumin gene : organisation and sequences at the 5' end. Nature (1979) **278**, 428-434.

5-F **122** A. ROYAL, A. GARAPIN, B. CAMI, F. PERRIN, J.L. MANDEL, M. LEMEUR, F. BREGEGERE, F. GANNON, J.P. LEPENNEC, P. CHAMBON, and P. KOURILSKY : The ovalbumin gene regions : common features in the organization of three genes expressed in chicken oviduct underhormonal control. Nature (1979) **279**, 125-132.

5-G **135** M. COCHET, F. GANNON, R. HEN, L. MAROTEAUX, F. PERRIN, and P.CHAMBON : Organisation and sequence studies of the 17-piece conalbumin gene. Nature (1979) **282**, 567-574.

5-H **121** P. CHAMBON, C. BENOIST, R. BREATHNACH, M. COCHET, F. GANNON, P. GERLINGER, A. KRUST, M. LEMEUR, J.P. LE PENNEC, J.L. MANDEL, K.O'HARE, and F. PERRIN : Structural organization and expression of ovalbumin and related chicken genes. "From Gene to Protein : Transfer in Normal and Abnormal Cells", Proceedings of the 11th Miami Winter Symp., (1979) Academic Press, Inc., pp. 55-81.

5-I **138** R. BREATHNACH, N. MANTEI, and P. CHAMBON : Correct splicing of a chicken ovalbumin gene transcript in mouse L cells. Proc. Natl. Acad. Sci. USA (1980) **77**, 740-744.

5-J **146** R. HEILIG, F. PERRIN, F. GANNON, J.L. MANDEL, and P. CHAMBON : The ovalbumin gene family : structure of the X gene and evolution of duplicated split genes. Cell (1980) **20**, 625-637.

5-K **442** E. SCHAEFFER, M.A. LUCERO, J.M. JELTSCH, M.C. PY, M.J. LEVIN, P. CHAMBON, G.N. COHEN, and M.M. ZAKIN : Complete structure of the human transferrin gene.Comparison with analogous chicken gene and human pseudogene. Gene (1987) **56**, 109-116.

5-L **530** J.M. JELTSCH, R. HEN, L. MAROTEAUX, J.M. GARNIER, and P. CHAMBON : Sequence of the chicken ovotransferrin gene. Nucl. Acids Res. (1987) **15**, 7643-7645.

6. CHARACTERIZATION AND FUNCTIONAL DISSECTION OF CIS-ACTING PROMOTER ELEMENTS OF EUKARYOTIC GENES CODING FOR PROTEINS AND OF THEIR COGNATE TRANS-ACTING BINDING FACTORS.

6-A **141** C. BENOIST, K. O'HARE, R. BREATHNACH, and P. CHAMBON : The ovalbumin gene - sequence of putative control regions. Nucl. Acids Res. (1980) **8**, 127-142.

6-B **144** B. WASYLYK, C. KEDINGER, J. CORDEN, O. BRISON, and P. CHAMBON : Specific *in vitro* initiation of transcription on conalbumin and oval bumin genes. Comparison with adenovirus-2 early and late genes. Nature (1980) **285**, 367-373.

6-C **150** J. CORDEN, B. WASYLYK, A. BUCHWALDER, P. SASSONE-CORSI, C.KEDINGER, and P. CHAMBON : Promoter sequences of eukaryotic protein-coding genes localization by surrogate genetics. Science (1980) **209**, 1406-1414.

6-Ca **167** P. SASSONE-CORSI, J. CORDEN, C. KÉDINGER, and P. CHAMBON: Promotion of specific in vitro transcription by excised "TATA" box sequences inserted in a foreign nucleotide environment. Nucleic Acids Res. (1981) **9**, 3941-3958.

6-D **152** B. WASYLYK, R. DERBYSHIRE, A. GUY, D. MOLKO, A. ROGET, R. TEOULE, and P. CHAMBON :
Specific *in vitro* transcription of conalbumin gene is drastically decreased by single-point mutation in T-A-T-A box homology sequence.
Proc. Natl. Acad. Sci. USA (1980) **77**, 7024-7028.

6-Da **171** R. GROSSCHEDL, B. WASYLYK, P. CHAMBON, and M.L.BIRNSTIEL:
Point mutation in the TATA box curtails expression of sea urchin H2A histone gene in vivo
Nature (1981) **294**, 179-181.

6-Db **168** D.J. MATHIS, R. ELKAIM, C. KÉDINGER, P. SASSONE-CORSI and P. CHAMBON:
Specific in vitro initiation of transcription on the Adenovirus-2 early and late EII transcription units.
Proc. Natl. Acad. Sci. USA (1981) **78**, 7383-7387.

6-Dc **156** D.J. MATHIS and P. CHAMBON:
The SV40 early region TATA box, but not the upstream sequences, is required for accurate in vitro initiation of transcription.
Nature (1981) **290**, 310-316.

6-E **207** R. HEN, P. SASSONE-CORSI, J. CORDEN, M.P. GAUB, and P. CHAMBON :
Sequences upstream from the TATA box are required *in vivo* and *in vitro* for efficient transcription from the Adenovirus-2 major late promoter.
Proc. Natl. Acad. Sci. USA (1982) **79**, 7132-7136.

6-F **199** B.L. DAVISON, J.M. EGLY, E.R. MULVIHILL, and P. CHAMBON :
Formation of stable preinitiation complexes between eukaryotic class B transcription factors and promoter sequences.
Nature (1983) **301**, 680-686.

6-G **259** D. BATY, H.A. BARRERA-SALDANA, R.D. EVERETT, M. VIGNERON, and P. CHAMBON :
Mutational dissection of the 21 bp repeat region of the SV40 early promoter reveals that it contains overlapping elements of the early-early and late-early promoters.
Nucl. Acids Res. (1984) **12**, 915-932.

6-Ga **285** M. VIGNERON, H.A. BARRERA-SALDANA, D. BATY, R.E. EVERETT, and P. CHAMBON :
Effect of the 21 bp repeat upstream element in vitro transcription from the early and late SV40 promoters.
EMBO J. (1984) **3**, 2373-2382.

6-H **284** J.M. EGLY, N. MIYAMOTO, V. MONCOLLIN, and P. CHAMBON :
Is actin a transcription initiation factor for RNA polymerase B ?
EMBO J. (1984) **3**, 2363-2371.

6-I **309** N.G. MIYAMOTO, V. MONCOLLIN, M. WINTZERITH, R. HEN, J.M. EGLY, and P. CHAMBON :
Stimulation of *in vitro* transcription by the upstream element of the Adenovirus-2 major late promoter involves a specific factor.
Nucl. Acids Res. (1984) **12**, 8779-8799.

6-J **369** D. GIDONI, J.T. KADONAGA, H. BARRERA-SALDANA, K. TAKAHASHI, P.CHAMBON, and R. TJIAN :
Bidirectional SV40 transcription mediated by tandem Sp1 binding interactions. Science (1985) **230**, 511-517.

6-K **362** H. BARRERA-SALDANA, K. TAKAHASHI, M. VIGNERON, A. WILDEMAN, I.DAVIDSON and P. CHAMBON :
All six GC-motifs of the SV40 early upstream element contribute to promoter activity *in vivo* and *in vitro*.
EMBO J. (1985) **4**, 3839-3849.

6-L **359** N.G. MIYAMOTO, V. MONCOLLIN, J.M. EGLY, and P. CHAMBON :
Specific interaction between a transcription factor and the upstream element of the Adenovirus-2 major late promoter.
EMBO J. (1985) **4**, 3563-3570.

6-La **413** V. MONCOLLIN, N.G. MIYAMOTO, X.M. ZHENG, and J.M. EGLY:
Purification of a factor specific for the upstream element of the adenovirus-2 major late promoter.
EMBO J. (1986) 5, 2577-2584.

6-M **493** E. MAY, F. OMILLI, M. ERNOULT-LANGE, M. ZENKE, and P. CHAMBON :
The sequence motifs that are involved in SV40 enhancer function also control SV40 late promoter activity.
Nucl. Acids Res. (1987) **15**, 2445-2461.

6-O **594** B. CAVALLINI, J. HUET, J.L. PLASSAT, A. SENTENAC, J.M. EGLY, and P. CHAMBON:
A yeast activity can substitute for the HeLa cell TATA box factor *in vitro*.
Nature (1988) **334**, 77-80.

6-P **703** A.C. LENNARD, H.W.D. MATTHES, J.M. EGLY, and P. CHAMBON :
Stereospecific relationships between elements in a SV40/adenovirus-2 heterologous promoter.
Nucl. Acids Res. (1989) **17**, 6903-6914.

6-Q **732** B. CAVALLINI, I. FAUS, H. MATTHES, J.M. CHIPOULET, B. WINSOR, J.M. EGLY, and P. CHAMBON :
Cloning of the gene encoding the yeast protein BTF1Y that can substitute for the human TATA box factor.
Proc. Natl. Acad. Sci. USA (1989) **86**, 9803-9807.

6-S **968** M. GERARD, L. FISHER, V. MONCOLLIN, J.M. CHIPOULET, P. CHAMBON, and J.M. EGLY :
Purification and interaction properties of the human RNA polymerase B(II) general transcription factor BTF2.
J. Biol. Chem. (1991) **266**, 20940-20945.

6-U **1050** M. PAULY, M. TREGER, E. WESTHOF, and P. CHAMBON :
The initiation accuracy of the SV40 early transcription is determined by the functional domains of two TATA elements.
Nucl. Acids Res. (1992) **20**, 975-982.

6-V **1073** L. FISCHER, M. GERARD, C. CHALUT, Y. LUTZ, S. HUMBERT, M. KANNO, P. CHAMBON, and J.M. EGLY :
Cloning of the 62-Kilodalton component of basic transcription factor BTF2.
Science (1992) **257**, 1392-1395.

6-Va **946** J.H. WHITE,, C. BROU, J. WU, N. BURTON, J.M. EGLY and P. CHAMBON:
Evidence for a factor required for transcriptional stimulation by GAL-V16 in HeLa cell extracts.
Proc. Natl. Acad. Sci. USA (1991) **88**, 7674-7678.

6-Vb **1053** J. WHITE, C. BROU, J. WU, Y. LUTZ, V. MONCOLLIN, and P. CHAMBON:
The acidic transcriptional activator GAL-VP16 acts on preformed template-commited complexes.
EMBO J. (1992) **11**, 2229-2240.

6-W **1193** L. SCHAEFFER, R. ROY, S. HUMBERT, V. MONCOLLIN, W. VERMEULEN, J.H.J. HOEIJMAKERS, P. CHAMBON, and J.M. EGLY :
DNA repair helicase: a component of BTF2 (TFIIH) basic transcription factor.
Science (1993) **260**, 58-63.

6-Wa **1152** C. BROU, S. ALI, J. WU, E. SCHEER, C. LANG, I. DAVIDSON, P. CHAMBON. and L. TORA :
Different TBP-associated factors are required for mediating the stimulation of transcription in vitro by the acidic transactivator GAL-VP16 and the two nonacidic activation functions of the estrogen receptor
Nucl. Acids Res. (1993) **21**, 5-12.

6-Wb **1144** C. BROU, C. CHAUDHARY, I. DAVIDSON, Y. LUTZ, J. WU, J.M. EGLY L. TORA and P. CHAMBON :
Distinct TFIID complexes mediate the effect of different transcriptional activators.
EMBO J. (1993) **12**, 489-499.

6-X **1320** A. LESCURE, Y. LUTZ, D. EBERHARD, X. JACQ, I. GRUMMT, A. KROL, I. DAVIDSON, P. CHAMBON, and L. TORA :
The N-terminal domain of the human TATA-binding protein plays a role in transcription from TATA-containing RNA polymerase II and III promoters.
EMBO J. (1994) **13**, 1166-1175.

6-Y **1404** X. JACQ, C. BROU, Y. LUTZ, I. DAVIDSON, P. CHAMBON, and L. TORA :
Human $TAF_{II}30$ is present in a distinct TFIID complex and is required for transcriptional activation by the estrogen receptor.
Cell (1994) **79**, 107-117.

6-Z **1486** G. MENGUS, M. MAY, X. JACQ, A. STAUB, L. TORA, P. CHAMBON, and I. DAVIDSON :
Cloning and characterisation of $hTAF_{II}18$, $hTAF_{II}20$, and $hTAF_{II}28$: three subunits of the human transcription factor TFIID.
EMBO J. (1995) **14**, 1520-1531.

6-A1 **1571** E. SCHEER, M.G. MATTEI, X. JACQ, P. CHAMBON, and L. TORA :
Organization and chromosomal localization of the gene encoding the human TBP-associated factor II 30 ($TAF_{II}30$).
Genomics (1995) **29**, 269-272.

6-B1 **1727** A. BERTOLOTTI, Y. LUTZ, D.J. HEARD, P. CHAMBON, and L. TORA :
$hTAF_{II}68$, a novel RNA/ssDNA binding protein with homology to the pro-oncoproteins TLS/FUS and EWS is associated with both TFIID and RNA polymerase II.
EMBO J. (1996) **15**, 5022-5031.

6-C1 **1747** A.C. LAVIGNE, G. MENGUS, M. MAY, V. DUBROVSKAYA, J.M. WURTZ, L. TORA, P. CHAMBON, and I. DAVIDSON :
Multiple interactions between $hTAF_{II}55$ and other TFIID subunits:requirements for the formation of stable ternary complexes between $hTAF_{II}55$ and the TATA binding protein.
J. Biol. Chem. (1996) **271**, 19774-19780.

7. DISCOVERY OF THE "ENHANCER" PROMOTER ELEMENT: STRUCTURAL AND FUNCTIONAL DISSECTION OF THE SV40 ENHANCER AND ITS COGNATE BINDNG FACTORS.

7-A **143** C. BENOIST, and P. CHAMBON :
Deletions covering the putative promoter region of early mRNAs do not

abolish T-antigen expression.
Proc. Natl. Acad. Sci. USA (1980) **77**, 3865-3869.

7-B **157** C. BENOIST, and P. CHAMBON :
In vivo sequence requirements of the SV40 early promoter region.
Nature (1981) **290**, 304-310.

7-Ba **156** D.J. MATHIS and P. CHAMBON:
The SV40 early region TATA box, but not the upstream sequences, is required for accurate in vitro initiation of transcription.
Nature (1981) **290**, 310-316.

7-C **175** P. MOREAU, R. HEN, B. WASYLYK, R. EVERETT, M.P. GAUB, and P. CHAMBON :
The SV40 72 base pair repeat has a striking effect on gene expression both in SV40 and other chimeric recombinants.
Nucl. Acids Res. (1981) **9**, 6047-6068.

7-D **191** B WASYLYK, C. WASYLYK, P. AUGEREAU, and P. CHAMBON :
The SV40 72 bp repeat preferentially potentiates transcription starting from proximal natural or substitute promoter elements.
Cell (1983) **32**, 503-514.

7-E **244** P. SASSONE-CORSI, J.P. DOUGHERTY, B. WASYLYK, and P. CHAMBON :
Stimulation of *in vitro* transcription from heterologous promoters by the SV40 enhancer.
Proc. Natl. Acad. Sci. USA (1984) **81**, 308-312.

7-F **253** J. JONGSTRA, T.L. REUDELHUBER, P. OUDET, C. BENOIST, C.B. CHAE, J.M. JELTSCH, D.J. MATHIS, and P. CHAMBON :
Induction of altered chromatin structures by the SV40 enhancer and promoter elements.
Nature (1984) **307**, 708-714.

7-G **991** A.G. WILDEMAN, P. SASSONE-CORSI, T. GRUNDSTRÖM, M. ZENKE, and P. CHAMBON :
Stimulation of *in vitro* transcription from the SV40 early promoter by the enhancer involves a specific trans-acting factor.
EMBO J. (1984) **3**, 3129-3133

7-H **292** P. SASSONE-CORSI, A. WILDEMAN,and P. CHAMBON :
A trans-acting factor is responsible for the SV40 enhancer activity *in vitro* Nature (1985) **313**, 458-463.

7-I **294** E BORRELLI, R. HEN, and P. CHAMBON :
The Adenovirus-2 EIA products repress stimulation of transcription by enhancers.
Nature (1984) **312**, 608-612.

7-J **364** R. HEN, E. BORRELLI, and P. CHAMBON :
Repression of the immunoglobulin heavy chain enhancer by the Adenovirus-2 E1A products.
Science (1985) **230**, 1391-1394.

7-K **365** K.TAKAHASHI, M. VIGNERON, H. MATTHES, A. WILDEMAN, M. ZENKE, and P. CHAMBON :
Stereospecific alignments are required for initiation from the SV40 early promoter.
Nature (1986) **319**, 121-126.

7-L **366** M. ZENKE, T. GRUNDSTRÖM, H. MATTHES, M. WINTZERITH, C. SCHATZ, A. WILDEMAN, and P. CHAMBON :
Multiple sequence motifs are involved in SV40 enhancer function.
EMBO J. (1986) **5**, 387-397.

7-M A. WILDEMAN, M. ZENKE, C. SCHATZ, M. WINTZERITH, T. GRUNDSTRÖM,

367 H. MATTHES, K. TAKAHASHI, and P. CHAMBON :
Specific protein binding to the SV40 enhancer *in vitro.*
Mol. Cell. Biol. (1986) **6**, 2098-2105.

7-N **402** I. DAVIDSON, C. FROMENTAL, P. AUGEREAU, A. WILDEMAN, M. ZENKE, and P. CHAMBON :
Cell-type specific protein binding to the enhancer of simian virus 40 in nuclear extracts.
Nature (1986) **323**, 544-548.

7-O **446** M. ZENKE, A. WILDEMAN, and P. CHAMBON :
The SV40 early promoter.
"Molecular Aspects of the Papovavirus", Y. Aloni (Ed.), Martinus Nijhoff, Pays-Bas (1987), pp. 53-83.

7-P **499** J.H. XIAO, I. DAVIDSON, M. MACCHI, R. ROSALES, M. VIGNERON, A. STAUB, and P. CHAMBON :
In vitro binding of several cell-specific and ubiquitous nuclear proteins to the GT-I motif of the SV40 enhancer.
Genes Dev. (1987) **1**, 794-807.

7-Q **498** J.H. XIAO, I. DAVIDSON, D. FERRANDON, R. ROSALES, M. VIGNERON, M. MACCHI, F. RUFFENACH, and P. CHAMBON :
One cell-specific and three ubiquitous nuclear proteins bind *in vitro* to overlapping motifs in the domain B1 of the SV40 enhancer.
EMBO J. (1987) **6**, 3005-3014.

7-R **497** R. ROSALES, M. VIGNERON, M. MACCHI, I. DAVIDSON, J.H. XIAO, and P. CHAMBON :
In vitro binding of cell-specific and ubiquitous nuclear proteins to the octamer motif of the SV40 enhancer and related motifs present in other promoters and enhancers.
EMBO J. (1987) **6**, 3015-3026.

7-S **529** H. NOMIYAMA, C. FROMENTAL, J.H. XIAO, and P. CHAMBON :
Cell-specific activity of the constituent elements of the SV40 enhancer.
Proc. Natl. Acad. Sci. USA (1987) **84**, 7881-7885.

7-T **393** P. SASSONE-CORSI, C. FROMENTAL, and P. CHAMBON :
A trans-acting factor represses the activity of the polyoma virus enhancer in undifferentiated embryonal carcinoma cells.
Oncogene Research (1987) **1**, 113-119

7-U **560** N. WEBSTER, J.R. JIN, S. GREEN, M. HOLLIS, and P. CHAMBON :
The yeast UAS is a transcriptional enhancer in human HeLa cells in the presence of the GAL4 trans-activator.
Cell (1988) **52**, 169-178.

7-V **621** I. DAVIDSON, J.H. XIAO, R. ROSALES, A. STAUB, and P. CHAMBON :
The HeLa cell protein TEF-1 binds specifically and cooperatively to two unrelated motifs of the SV40 enhancer.
Cell (1988) **54**, 931-942.

7-W **620** C. FROMENTAL, M. KANNO, H. NOMIYAMA, and P. CHAMBON :
Cooperativity and hierarchical levels of functional organization in the SV40 enhancer.
Cell (1988) **54**, 943-953.

7-X **722** M. KANNO, C. FROMENTAL, A. STAUB, F. RUFFENACH, I. DAVIDSON, and P CHAMBON :
The SV40 TC–II (κB) and the related H-2KB enhansons exhibit different cell-type specific and inducible proto-enhancer activities, but the SV40 core sequence and the AP-2 binding site have no enhanson properties.

EMBO J. (1989) **8**, 4205-4214.

7-Y **723** M. MACCHI, J.M. BORNERT, I. DAVIDSON, M. KANNO, R. ROSALES, M. VIGNERON, J.H. XIAO, C. FROMENTAL, and P. CHAMBON :
The SV40 TC-II (•B) enhanson binds ubiquitous and cell type-specifically inducible nuclear proteins from lymphoid and non-lymphoid cell lines.
EMBO J. (1989) **8**, 4215-4227.

7-Z **750** C. ROCHETTE-EGLY, C. FROMENTAL, and P. CHAMBON :
General repression of enhanson activity by the adenovirus-2 EIA proteins.
Genes Dev. (1990) **4**, 137-150.

7-A1 **917** J.H. XIAO, I. DAVIDSON, H. MATTHES, J-M. GARNIER, and P. CHAMBON :
Cloning, expression and transcriptional properties of the human enhancer factor TEF-1.
Cell (1991) **65**, 551-568.

7-D1 **1075** T. ISHIJI, M.J. LACE, S. PARKKINEN, R.D. ANDERSON, T.H. HAUGEN, T.P. CRIPE, J.H. XIAO, I. DAVIDSON, P. CHAMBON , and L.P. TUREK :
Transcriptional enhancer factor (TEF)-1 and its cell-specific co-activator activate human papillomavirus-16 E6 and E7 oncogene transcription in keratinocytes and cervical carcinoma cells.
EMBO J.(1992) **11**, 2271-2281.

7-H1 **1192** J.J. HWANG, P. CHAMBON, and I. DAVIDSON :
Characterization of the transcription activation function and the DNA binding domain of transcriptional enhancer factor-1
EMBO J. (1993) **12**, 2337-2348.

7-I1 **1381** S. CHAUDHARY, C. BROU, M.E. VALENTIN, N. BURTON, L. TORA, P. CHAMBON, and I. DAVIDSON :
A cell-specific factor represses stimulation of transcription *in vitro* by transcriptional enhancer factor-1.
Mol. Cell. Biol.(1994) **14**, 5290-5299.

7-J1 **1565** D.S.W. BOAM, I. DAVIDSON, and P. CHAMBON :
A TATA-less promoter containing binding sites for ubiquitous transcription factors mediates cell type specific regulation of the gene for transcription enhancer factor-1 (TEF-1)
J. Biol. Chem. (1995) **270**, 19487-18494.

7-K1 **1610** G. LYONS, and P. CHAMBON :
Direct activation and anti-repression functions of GAL4-VP16 use distinct molecular mechanisms.
Biochem. J. (1995) **312**, 899-905.

8. DISCOVERY THAT DNA OF ACTIVE GENES IS HYPOMETHYLATED

8-A **139** J.L. MANDEL, and P. CHAMBON :
DNA methylation : organ specific variation in the methylation pattern within and around ovalbumin and other chicken genes.
Nucl. Acids Res. (1979) **7**, 2081-2103.

8-B M.T. KUO, J.L. MANDEL, and P. CHAMBON :
140 DNA methylation : correlation with DNAse I sensitivity of chicken ovalbumin and conalbumin chromatin.
Nucl. Acids Res. (1979) **7**, 2105-2113.

9. MECHANISM OF ACTION OF STEROID HORMONES ON OVALBUMIN AND CONALBUMIN GENE EXPRESSION

9-A E. MULVIHILL, J.P. LEPENNEC, and P. CHAMBON :
214 Chicken oviduct progesterone receptor : location of specific regions of high affinity binding in cloned DNA fragments of hormone responsive chicken genes.
Cell (1982) **28**, 621-632.

9-B P. CHAMBON, M.P. GAUB, J.P. LePENNEC, A. DIERICH, and D. ASTINOTTI
293 Steroid hormones relieve repression of the ovalbumin gene promoter in chick oviduct tubular gland cells.
"Endocrinology", Proceedings of the 7th International Congress of Endocrinology, Québec, Canada, Elsevier Biomedical Press (F. Labrie et L. Proulx, eds), 1984, pp 3-10.

9-C A. DIERICH, M.P. GAUB, J.P. LePENNEC, D. ASTINOTTI, and P. CHAMBON :
480 Cell-specificity of the chicken ovalbumin and conalbumin promoters.
EMBO J. (1987) **6**, 2305-2312.

9-D M.P. GAUB, A. DIERICH, D. ASTINOTTI, I. TOUITOU ,and P. CHAMBON :
481 The chicken ovalbumin promoter is under negative control which is relieved by steroid hormones.
EMBO J. (1987) **6**, 2313-2320.

10. CLONING, STRUCTURE AND FUNCTION OF LIGAND-ACTIVATED ENHANCER-BINDING FACTORS: RECEPTORS FOR ESTROGEN, PROGESTIN AND GLUCOCORTICOID HORMONES.

10-A P. WALTER, S. GREEN, G. GREENE, A. KRUST, J.M. BORNERT, J.M.JELTSCH, A.
361 STAUB, E. JENSEN, G. SCRACE, M. WATERFIELD ,and P. CHAMBON :
Cloning of the human estrogen receptor cDNA.
Proc. Natl. Acad. Sci. USA (1985) **82**, 7889-7893.

10-B M.V. GOVINDAN, M. DEVIC, S. GREEN, H. GRONEMEYER, and P. CHAMBON
377 Cloning of the human glucocorticoid receptor cDNA.
Nucl. Acids Res. (1985) **13**, 8293-8304.

10-C S. GREEN, P. WALTER, V. KUMAR, A. KRUST, J.M. BORNERT, P. ARGOS,
386 and P. CHAMBON :
The human oestrogen cDNA : sequence, expression and homology to v-erbA.
Nature (1986) **320**, 134-139.

10-D A. KRUST, S. GREEN, P. ARGOS, V. KUMAR, P. WALTER, J.M. BORNERT,
396 and P. CHAMBON :
The chicken oestrogen receptor sequence : homology with v-erbA and the human oestrogen and glucocorticoid receptors.
EMBO J. (1986) **5**, 891-897.

10-E J-M. JELTSCH, Z. KROZOWSKI, C. QUIRIN-STICKER, H. GRONEMEYER,
405 R.J. SIMPSON, J.M. GARNIER, A. KRUST, F. JACOB, and P. CHAMBON :
Cloning of the chicken progesterone receptor.
Proc. Natl. Acad. Sci. USA (1986) **83**, 5424-5428.

10-F V. KUMAR, S. GREEN, A. STAUB, and P. CHAMBON :

411 Localisation of the oestradiol-binding and putative DNA-binding domains of the human oestrogen receptor.
EMBO J., (1986) **5**, 2231-2236.

10-G S. GREEN, and P. CHAMBON :
447 Oestradiol induction of a glucocorticoid-responsive gene by a chimeric receptor.
Nature (1987) **325**, 75-78.

10-H V. KUMAR, S. GREEN, G. STACK, M. BERRY, J.R. JIN, and P. CHAMBON :
534 Functional domains of the human estrogen receptor.
Cell (1987) **51**, 941-951.

10-I H. GRONEMEYER, B. TURCOTTE, C. QUIRIN-STRICKER, M.T. BOCQUEL, M.E.
536 MEYER, Z. KROZOWSKI, J.M. JELTSCH, T. LEROUGE, J.M. GARNIER, and P. CHAMBON :
The chicken progesterone receptor : sequence, expression and functional analysis.
EMBO J. (1987) **6**, 3985-3994.

10-J N. WEBSTER, S. GREEN, J.R. JIN, and P. CHAMBON :
586 The hormone-binding domains of the estrogen and glucocorticoid receptors contain an inducible transcription activation function.
Cell (1988) **54**, 199-207.

10-K M.G. MATTEI, A. KRUST, U. STROPP, J.F. MATTEI and P. CHAMBON :
514 Assignment of the human progesterone receptor to the q22 band of chromosome 11.
Hum. Genet. (1988) **78**, 96-97.

10-L D. METZGER, J.H. WHITE, and P. CHAMBON :
592 The human oestrogen receptor functions in yeast.
Nature (1988) **334**, 31-36.

10-M V. KUMAR, and P. CHAMBON :
624 The oestrogen receptor binds tightly to its responsive element as a ligand-induced homodimer.
Cell (1988) **55**, 145-156.

10-N L. TORA, H GRONEMEYER, B. TURCOTTE, M.P. GAUB, and P. CHAMBON :
583 The N-terminal region of the chicken progesterone receptor specifies target gene activation.
Nature (1988) **333**, 185-188.

10-Na I. THEULAZ, R. HIPSKIND, B. TEN HEGGELER-BORDIER, S. GREEN, V. KUMAR,
578 P. CHAMBON, and W. WAHLI :
Expression of Human Estrogen Receptor Mutants in Xenopus Oocytes Correlation between Transcriptional Activity and Ability to form Protein-DNA Complexes.
EMBO J. (1988) **7**, 1653-1660.

10-O L. TORA, M.P. GAUB, S. MADER, A. DIERICH, M. BELLARD, and P. CHAMBON :
627 Cell-specific activity of a GGTCA half-palindromic oestrogen-responsive element in the chicken ovalbumin gene promoter.
EMBO J. (1988b) **7**, 3771-3778.

10-P M. PONGLIKITMONGKOL, S. GREEN, and P. CHAMBON :
616 Genomic organisation of the human oestrogen receptor gene.
EMBO J. (1988) **7**, 3385-3388.

10-Pa M. SACEDA, M.E. LIPPMAN, P. CHAMBON, R.K. LINDSEY, M. PONGLIKITMONGKOL,
625 M. PUENTE, and M.B. MARTIN:
Regulation of the estrogen receptor in MCF-7 cells by estradiol.
Mol. Endocrinology (1988) **2**, 1157-1162.

10-Q **600** S. GREEN, V. KUMAR, I. THEULAZ, W. WAHLI, and P. CHAMBON :
The N-terminal DNA-binding "zinc-finger" of the oestrogen and glucocorticoid receptors determines target gene specificity.
EMBO J. (1988) **7**, 3037-3044.

10-Qa **602** J.H. WHITE, D. METZGER, and P. CHAMBON :
Expression and function of the human estrogen receptor in yeast.
Cold Spring Harbor Symp. (1988) **53**, 819-828.

10-R **657** S. MADER, V. KUMAR, H. de VERNEUIL, and P. CHAMBON :
Three amino acids of oestrogen receptor play a key role in discriminating an oestrogen from a glucocorticoid-responsive element.
Nature (1989) **338**, 271-274.

10-S **662** N. WEBSTER, S. GREEN, D. TASSET, M. PONGLIKITMONGKOL, and P. CHAMBON :
The transcriptional activation function located in the hormone-binding domain of the human oestrogen receptor is not encoded in a single exon.
EMBO J. (1989) **8**, 1441-1446.

10-T **678** L. TORA, A. MULLICK, D. METZGER, M. PONGLIKITMONGKOL, I. PARK, and P. CHAMBON :
The cloned human oestrogen receptor contains a mutation which alters its hormone binding properties.
EMBO J. (1989a) **8**, 1986-1989.

10-U **673** M.E. MEYER, H. GRONEMEYER, B. TURCOTTE, M.T. BOCQUEL, D. TASSET, and P. CHAMBON :
Steroid hormone receptors compete for factors that mediate their enhancer function.
Cell (1989) **57**, 433-442.

10-V **665** S. GREEN, and P. CHAMBON :
Chimaeric receptors used to probe the DNA binding domain of the oestrogen and glucocorticoid receptors.
Cancer Res. (1989) **49**, 2282s-2285s.

10-W **674** M.T. BOCQUEL, V. KUMAR, C. STRICKER, P. CHAMBON, and H. GRONEMEYER:
The contribution of the N- and C-terminal regions of steroid receptors to activation of transcription is both receptor and cell-specific.
Nucl. Acids Res. (1989) **17**, 2581-2595.

10-X **642** J. EUL, M.E. MEYER, L. TORA, M.T. BOCQUEL, C. QUIRIN-STRICKER, P. CHAMBON, and H. GRONEMEYER :
Expression of active hormone and DNA-binding domains of the chicken progesterone receptor in E.coli.
EMBO J. (1989) **8**, 83-90.

10-Y **675** A. MIGLIACCIO, M. DI DOMENICO, S. GREEN, A. DE FALCO, E.L. KAJTANIAK, F. BLASI, P. CHAMBON, and F. AURICCHIO :
Phosphorylation on tyrosine of in vitro synthesized human oestrogen receptor activates its hormone binding.
Mol. Endocrinol. (1989) **3**, 1061-1069.

10-Z **594** S. GREEN, N. WEBSTER, J.R. JIN, and P. CHAMBON :
The use of chimeric proteins to study transcriptional regulatory factors.
Proceedings of the UCLA Symposium on DNA-Protein Interactions in Transcription, Alan R. Liss, Inc. (1989) vol. **95**, pp.125-150.

10-A1 **645** H.GRONEMEYER, V. KUMAR, S. GREEN, M.T. BOCQUEL, L. TORA, M.E. MEYER, J. EUL, and P. CHAMBON :
Functional domains of steroid hormone receptors.
In "Molecular Mechanisms and Consequences of Activation of Hormone and

Growth Factor Receptors". M.N. Alexis and C.E. Sekeris (Ed.), Kluwer Academic Publ. (1990) **295**, 203-211.

10-B1 **646** H. GRONEMEYER, V. KUMAR, S. GREEN, M.T. BOCQUEL, L. TORA, M.E. MEYER, J. EUL, and P. CHAMBON :
Functional domains of steroid hormone receptors.
In "The Steroid/Thyroid Hormone Receptor Family and Gene Regulation". Proceedings of the 2nd International CBT Symposium. Stockholm, Sweden, Nov. 4-5, 1988. J. Carlstedt-Duke, H. Eriksson, J.A. Gustafsson (Eds.), (1989) 55-67.

10-C1 **710** L. TORA, J. WHITE, C. BROU, D. TASSET, N. WEBSTER, E. SCHEER, and P. CHAMBON :
The human estrogen receptor has two independent nonacidic transcriptional activation functions.
Cell (1989b) **59**, 477-487.

10-D1 **714** J. WHITE, L. TORA, C. BROU, D. TASSET, N. WEBSTER, E. SCHEER, and P. CHAMBON :
The human estrogen receptor : a modular transcriptional activator containing two independent and different activation functions whose properties are distinct from acidic domains.
In Proceedings of the 5th FAOB Congress, Seoul (Korea) (1991) 135-153.

10-E1 **724** A. MULLICK, and P. CHAMBON :
Caracterization of the estrogen receptor in the two antiestrogen-resistant cell lines LY2 and T47D.
Cancer Res. (1990) **50**, 333-338.

10-F1 **775** P. KASTNER, A. KRUST, B. TURCOTTE, U. STROPP, L. TORA, H. GRONEMEYER, and P. CHAMBON :
Two distinct estrogen-regulated promoters generate transcripts encoding the two functionally different human progesterone receptor forms A and B.
EMBO J. (1990a) **9**, 1603-1614.

10-G1 **751** J.M. JELTSCH, B. TURCOTTE, J.M. GARNIER, T. LEROUGE, Z. KROSOWSKI, H. GRONEMEYER, and P. CHAMBON :
Characterization of multiple messenger RNAs originating from the chicken progesterone receptor gene : evidence for a specific transcript encoding form A.
J. Biol. Chem. (1990) **265**, 3967-3974.

10-H1 **800** M. PONGLIKITMONGKOL, J.H. WHITE, and P. CHAMBON :
Synergistic activation of transcription by the human estrogen receptor bound to tandem responsive elements.
EMBO J. (1990) **9**, 2221-2231.

10-I1 **801** B. TURCOTTE, M.E. MEYER, M.T. BOCQUEL, L. BELANGER, and P. CHAMBON:
Repression of the α-fetoprotein gene promoter by progesterone and chimeric receptors in presence of hormones and antihormones.
Mol. Cell. Biol. (1990) **10**, 5002-5006.

10-J1 **804** P. KASTNER, M.T. BOCQUEL, B. TURCOTTE, J.M. GARNIER, K.B. HORWITZ, P. CHAMBON, and H. GRONEMEYER :
Transient expression of human and chicken progesterone receptors does not support alternative translational initiation from a single mRNA as the mechanism generating two receptor isoforms.
J. Biol. Chem. (1990b) **265** 12163-12167

10-K1 **821** M. BERRY, D. METZGER, and P. CHAMBON :
Role of the two activating domains of the oestrogen receptor in the cell-type promoter context-dependent agonistic activity

of the antioestrogen 4-hydroxytamoxifen.
EMBO J. (1990) **9**, 2811-2818.

10-L1 **778** D.V. HARBOUR, P. CHAMBON, and E.B. THOMPSON :
Steroid mediated lysis of lymphoblasts requires the DNA binding region of the steroid hormone receptor.
J. Steroid Biochem. (1990) **35**, 1-9.

10-N1 **841** D. PICARD, V. KUMAR, P. CHAMBON, and K.R. YAMAMOTO :
Signal transduction by steroid hormones: nuclear localization is differentially regulated in estrogen and glucocorticoid receptors.
Cell Regulation (1990) **1**, 291-299.

10-O1 **820** D. TASSET, L. TORA, D. FROMENTAL, E. SCHEER, and P. CHAMBON :
Distinct classes of transcriptional activating domains function by different mechanisms.
Cell (1990) **62**, 177-1187.

10-P1 **842** B. CHAMBRAUD, M. BERRY, G. REDEUILH, P. CHAMBON, and E.E.BAULIEU:
Several regions of human estrogen receptor are involved in the formation of receptor-heat shock protein 90 complexes.
J. Biol. Chem. (1990) **265**, 20686-20691.

10-Q1 **845** R. MUKHERJEE, and P. CHAMBON :
A single-stranded DNA-binding protein promotes the binding of the purified oestrogen receptor to its responsive element.
Nucl. Acids Res. (1990) **18**, 5713-5716.

10-R1 **850** M.E. MEYER, A. PORNON, J. JI, M-T. BOCQUEL, P. CHAMBON, and H. GRONEMEYER:
Agonist and antagonist activities of RU486 on the functions of the human progesterone receptor.
EMBO J. (1990) **9**, 3923-3932.

10-S1 **880** M.P. GAUB, M. BELLARD, I. SCHEUER, P. CHAMBON , and P. SASSONE-CORSI :
Activation of the ovalbumin gene by the estrogen receptor involves the Fos/Jun complex.
Cell (1990) **63**, 1267-1276.

10-T1 **883** B. TURCOTTE, M.E. MEYER, M. BELLARD, G. DRETZEN, H. GRONEMEYER, and P. CHAMBON :
Control of transcription of the chicken progesterone receptor gene : *in vitro* and *in vivo* studies.
J. Biol. Chem. (1991) **266**, 2582-2589.

10-U1 **929** H. GRONEMEYER, M-E MEYER, M-T. BOCQUEL, P. KASTNER, B. TURCOTTE, and P. CHAMBON :
Progestin receptors : isoforms and antihormone action.
J. Steroid Biochem. Mol. Biol. (1991) **40**, 271-278.

10-V1 **963** A. MIGLIACCIO, G. CASTORIA, A. DE FALCO, M. DI DOMENICO, M.GALDIERO, E. NOLA, P. CHAMBON, and F. AURICCHIO :
In vitro phosphorylation and hormone binding activation of the synthetic wild type human estradiol receptor.
J. Steroid Biochem. Mol. Biol. (1991) **38**, 407-413

10-W1 **964** H. GRONEMEYER, B. BENHAMOU, M. BERRY, M.T. BOCQUEL, D. GOFFLO, T. GARCIA, T. LEROUGE, D. METZGER, M.E. MEYER, L.TORA, A. VERGEZAC, and P. CHAMBON :
Mechanisms of anti-hormone action.
J. Steroid Biochem. Mol. Biol. (1992) **41**, 217-221.

10-X1 **1003** S. KATO, L. TORA, J. YAMAUCHI, S. MASUSHIGE, M. BELLARD, and P. CHAMBON :
A far upstream oestrogen-response element of the ovalbumin gene contains several half-palindromic 5'-TGACC-3 motifs acting synergistically.
Cell (1992) **68**, 731-742.

10-Y1 **1010** B. BENHAMOU, T. GARCIA, T. LEROUGE, A. VERGEZAC, D. GOFLO, C.BIGOGNE, P. CHAMBON, and H. GRONEMEYER :
A single amino acid that determines the sensitivity of progesterone receptors to RU486
Science (1992) **255**, 206-209.

10-Y1a **994** L. SHEMSHEDINI, J. JI, C. BROU, P. CHAMBON , and H. GRONEMEYER :
In vitro activity of the transcription activation functions of the progesterone receptor: evidence for intermediary factors.
J. Biol.Chem. (1992) **267**, 1834-1839.

10-Z1 **1067** D. METZGER, R. LOSSON, J.M. BORNERT, Y. LEMOINE, and P.CHAMBON :
Promoter specificity of the two transcriptional activation functions of the human oestrogen receptor in yeast.
Nucl. Acids Res. (1992) **20**, 2813-2817.

10-A2 **1106** D.M. GILBERT, R. LOSSON, and P. CHAMBON :
Ligand dependence of estrogen receptor induced changes in chromatin structure.
Nucl. Acids Res. (1992) **20**, 4525-4531.

10-B2 **1108** T. YLIKOMI, M.T. BOCQUEL, M. BERRY, H. GRONEMEYER, and P. CHAMBON:
Cooperation of proto-signals for nuclear accumulation of estrogen and progesterone receptors.
EMBO J. (1992) **11**,3681-3694.

10-C2 **1134** D.M. GILBERT, D.M. HEERY, R. LOSSON, P. CHAMBON, and Y. LEMOINE :
Estradiol-inducible squelching and cell growth arrest by a chimaeric VP16-estrogen receptor expressed in *Saccharomyces cerevisiae*: suppression by an allele of PDR1.
Mol. Cell. Biol. (1993) **13**, 462-472.

10-D2 **1139** T. GARCIA, B. BENHAMOU, D. GOFLO, A. VERGEZAC, D. PHILIBERT, P. CHAMBON, and H. GRONEMEYER :
Switching agonistic, antagonistic and mixed transcriptional responses to 11β-subsituted progestins by mutation of the progesterone receptor.
Mol. Endocrinol. (1992) **6**, 2071-2078.

10-E2 **1160** M.T. BOCQUEL, J. JI, T. YLIKOMI, B. BENHAMOU, A.VERGEZAC, P. CHAMBON, and H. GRONEMEYER :
Type II antagonists impair the DNA binding of steroid hormone receptors without affecting dimerization.
J. Steroid Biochem. Mol. Biol. (1993) **45**, 205-215.

10-F2 **1153** S. ALI, D. METZGER, J.M. BORNERT, and P. CHAMBON :
Modulation of transcriptional activation by ligand-dependent phosphorylation of the human oestrogen receptor A/B region.
EMBO J.(1993) **12**, 1153-1160.

10-G2 **1151** G. CASTORIA, A. MIGLIACCIO, S. GREEN, M. DI DOMENICO, P. CHAMBON, and F. AURICCHIO :
Properties of a purified estradiol-dependent calf uterus tyrosine kinase.
Biochemistry (1993) **32**, 1740-1750.

10-H2 **1191** S. MADER P. CHAMBON, and J. WHITE :
Defining a minimal estrogen receptor DNA binding domain.
Nucl. Acids Res. (1993) **21**, 1125-1132.

10-I2 **1303** B. PIERRAT, D.M. HEERY, P. CHAMBON, and R. LOSSON :
A highly conserved region in the hormone binding domain of the human estrogen receptor functions as an efficient transactivation domain in yeast.
Gene (1994) **143**, 193-200.

10-J2 **1502** D. METZGER, S. ALI, J.M. BORNERT, and P. CHAMBON :
Characterization of the N-terminal transcriptional activation function (AF-1) of the human oestrogen receptor in animal and yeast cells.
J. Biol. Chem. (1995) **270**, 9535-9542.

10-K2 **1503** D. METZGER, M. BERRY, S. ALI, and P. CHAMBON :
Effect of antagonists on DNA binding properties of the human oestrogen receptor <u>in vitro</u> and <u>in vivo</u>.

Mol. Endocrinol. (1995) **9**, 579-591.

10-L2 **1527** L. CICATIELLO, G. COBELLIS, R. ADDEO, M. PAPA, L. ALTUCCI, V. SICA, F. BRESCIANI, M. LEMEUR, V.L. KUMAR, P. CHAMBON, and A. WEISZ :
In vivo functional analysis of the mouse estrogen receptor gene promoter: A transgenic mouse model to study tissue-specific and developmental regulation of estrogen receptor gene transcription.
Mol. Endocrinol. (1995) **9**, 1077-1090.

10-M2 **1616** S. KATO, H. ENDOH, T. MASUHIRO, T. KITAMOTO, S. UCHIYAMA, T.SASAKI; S. MASUSHIGE, Y. GOTOH, E. NISHIDA, H. KAWASHIMA, D. METZGER, and P. CHAMBON :
Activation of the estrogen receptor through phosphorylation by mitogen-activated protein kinase.
Science (1995) **270**, 1491-1494.

10-N2 **1789** S. ROUX, B. TEROUANNE, P. BALAGUER, N. MOFFREDA-JAUSONS, M. PONS, P. CHAMBON, H. GRONEMEYER, and J.C. NICOLAS :
Mutation of isoleucine 747 by a threonine alters the ligand responsiveness of the human glucocorticoid receptor.
Mol. Endocrinol.(1996) **10**, 1214-1226.

10-O2 **1798** H. ICHINOSE, J.M. GARNIER, P. CHAMBON, and R. LOSSON :
Ligand-dependent interaction between the estrogen receptor and the human homologues of SWI2/SNF2.
Gene (1997) **188**, 95-100.

10-P2 **2508** L. BROUCHET, A. KRUST, S. DUPONT, P. CHAMBON, F. BAYARD, and J.F. ARNAL :
Estradiol accelerates reendothelialization in mouse carotid artery through estrogen receptor-α, but not estrogen receptor-β.
Circulation. (2001) **103**, 423-428.

10-Q2 **2542** S. DUPONT, A. KRUST, A. GANSMULLER, A. DIERICH, P. CHAMBON, and M. MARK :
Effect of single and compound knockouts of estrogen receptors α (ERα) and β (ERβ) on mouse reproductive phenotypes.
Development (2000) **127**, 4277-4291.

10-R2 **2368** H. ENDOH, K. MARUYAMA, Y. MASUHIRO, M. GOTO, Y. KOBAYASHI, H. TAI, D. METZGER, P. CHAMBON, S. HASHIMOTO, S. KATO :
Purification and identification of p68 RNA helicase acting as a transcriptional coactivator specific for the activation function 1 of human estrogen receptor α.
Mol. Cell. Biol. (1999) **19**, 5363-5372.

10-S2 M. BETH-MARTIN, T.F. FRANKE, G.E. STOICA, A. WELLSTEIN,
2616 B.S. KATZENELLENBOGEN, P. CHAMBON, B.A. STOICA, M.S. MCLEMORE, S.E. OLIVO, and A. STOICA :
A role for Akt in mediating the estrogenic functions of epidermal growth factor and insulin-like growth factor I.
Endocrinology (2000) **141**, 4503-4511.

10-T2 A. BENECKE, P. CHAMBON and H. GRONEMEYER:
2541 Synergy between estrogen receptor α activation function AF1 and AF2 mediated by transcription intermediary factor TIF2.
EMBO Reports (2000) **1**, 151-157.

11. TWO FAMILIES OF LIGAND-DEPENDENT ENHANCER-BINDING FACTORS, THE RETINOIC ACID RECEPTORS (RARs and RXRs): DISCOVERY, STRUCTURAL AND FUNCTIONAL DISSECTION IN VIVO AND IN VITRO

11-A M. PETKOVICH, N.J. BRAND, A. KRUST, and P. CHAMBON :
547 A human retinoic acid receptor which belongs to the family of nuclear receptors.
Nature (1987) **330**, 444-450.

11-B N. BRAND, M. PETKOVICH, A. KRUST, P. CHAMBON, H. DE THE, A. MARCHIO,
577 P. TIOLLAIS, and A. DEJEAN :
Identification of a Second Human Retinoic Acid Receptor.
Nature (1988) **332**, 850-853.

11-C M.G. MATTEI, M. PETKOVICH, J.F. MATTEI, N. BRAND, and P. CHAMBON :
579 Mapping of the human retinoic acid receptor to the q21 band of chromosome 17.
Hum. Genet. (1988) **80**, 186-188.

11-Ca B. ARVEILER, M. PETKOVICH, J.L. MANDEL, and P. CHAMBON :
574 A PstI RFLP for the human retinoic acid receptor in 17q21.
Nucl. Acids Res. (1988) **16**, 6252.

11-D M.P. GAUB, Y. LUTZ, E. RUBERTE, M. PETKOVICH, N. BRAND, and P. CHAMBON:
672 Antibodies specific to the retinoic acid human nuclear receptors α and ß.
Proc. Natl. Acad. Sci. USA (1989) **86**, 3089-3093.

11-E Y. HASHIMOTO, M. PETKOVICH, M.P. GAUB, H. KAGECHIKA, K. SHUDO, and
677 P. CHAMBON :
The retinoic acid receptors α and ß are expressed in the human promyelocytic leukemia cell line HL-60.
Mol. Endocrinol. (1989) **3**, 1046-1052.

11-F A. ZELENT, A. KRUST, M. PETKOVICH, P. KASTNER ,and P. CHAMBON :
684 Cloning of murine retinoic acid receptor αand ß cDNAs and of a novel third receptor γ predominantly expressed in skin.
Nature (1989) **339**, 714-717.

11-G A. KRUST, P. KASTNER, M. PETKOVICH, A. ZELENT, and P. CHAMBON.:
683 A third human retinoic acid receptor, hRAR-γ.
Proc. Natl. Acad. Sci. USA (1989) **86**, 5310-5314.

11-H G.W. VASIOS, J.D. GOLD, M. PETKOVICH, P. CHAMBON, and L.J. GUDAS :
717 A retinoic acid responsive element is present in the 5'-flanking region of the laminin B1 gene.
Proc. Natl. Acad. Sci. USA (1989) **86**, 9099-9103.

11-I **719** C.W. RAGSDALE, JR., M. PETKOVICH, P.B. GATES, P. CHAMBON, and J.P. BROCKES :
Identification of a novel retinoic acid receptor in regenerative tissues of the newt.
Nature (1989) **341**, 654-657.

11-J **746** P. DOLLE, E. RUBERTE, P. KASTNER, M. PETKOVICH, C.M. STONER, L.J. GUDAS, and P. CHAMBON :
Differential expression of genes encoding α, ß and γ retinoic acid receptor and CRABP in the developing limbs of the mouse.
Nature (1989) **342**, 702-705.

11-K **745** E. RUBERTE, P. DOLLE, A. KRUST, A. ZELENT, G. MORRISS-KAY, and P. CHAMBON :
Specific spatial and temporal distribution of retinoic acid receptor gamma transcripts during mouse embryogenesis.
Development (1990) **108**, 213-222.

11-L **765** P. KASTNER, A. KRUST, C. MENDELSOHN, J.M. GARNIER, A. ZELENT, P. LEROY, A. STAUB, and P. CHAMBON :
Murine isoforms of retinoic acid receptor-γ with specific pattern of expression.
Proc. Natl. Acad. Sci. USA (1990) **87**, 2700-2704.

11-M **829** J.L. CLIFFORD, M. PETKOVICH, P. CHAMBON , and R. LOTAN :
Modulation by retinoids of mRNA levels for nuclear retinoic acid receptors in murine melanoma cells.
Mol. Endocrinol. (1990) **4**, 1546-1555.

11-N **838** P. DOLLE, E. RUBERTE, P. LEROY, G. MORRISS-KAY, and P. CHAMBON :
Retinoic acid receptors and cellular retinoid binding protein I.A systematic study of their differential pattern of transcriptional during mouse organogenesis.
Development (1990) **110**, 1133-1151.

11-O **861** A. ZELENT, C. MENDELSOHN, P. KASTNER, J-M. GARNIER, F. RUFFENACH, P.LEROY, and P. CHAMBON :
Differentially expressed isoforms of the mouse retinoic acid receptor beta are generated by usage of two promoters and alternative splicing.
EMBO J. (1991) **10**, 71-81.

11-P **862** P. LEROY, A. KRUST, A. ZELENT, C. MENDELSOHN, J-M. GARNIER, P. KASTNER, A. DIERICH, and P. CHAMBON :
Multiple isoforms of the mouse retinoic acid receptor alpha are generated by alternative splicing and differential induction by retinoic acid.
EMBO J. (1991) **10**, 59-69.

11-Q **867** A. ASTRÖM, U. PETTERSSON, A. KRUST, P. CHAMBON, and J.J. VOORHEES:
Retinoic acid and synthetic analogs differentially activate retinoic acid receptor dependent transcription.
Biochem. Biophys. Res. Comm. (1990) **173**, 339-345.

11-R **863** R.C. NICHOLSON, S. MADER, S. NAGPAL, M. LEID, C. ROCHETTE-EGLY, and P. CHAMBON :
Negative regulation of rat stromelysin gene promoter by retinoic acid is mediated by an AP1 binding site.
EMBO J. (1990) **9**, 4443-4454.

11-S **869** J.T. ELDER, G.J. FISHER, Q.Y. ZHANG, A. KRUST, D. EISEN, P. KASTNER, P. CHAMBON, and J.J. VOORHEES :
Retinoic acid receptor gene expression in human skin.
J. Invest. Dermatol. (1991) **96**, 425-433.

11-T **870** N.J. BRAND, M. PETKOVICH, and P. CHAMBON :
Characterisation of a functional promoter for the human retinoic acid receptor-alpha.
Nucl. Acids Res. (1990) **18**, 6799-6806.

11-U **871** E. RUBERTE, P. DOLLE, P. CHAMBON, and G. MORRISS-KAY :
Retinoic acid receptors and cellular retinoid binding proteins: II. Their differential pattern of transcription during early morphogenesis in mouse embryos.
Development (1991) **111**, 45-60.

11-V **884** P. CHAMBON, A. ZELENT, M. PETKOVICH, C. MENDELSOHN, P. LEROY, A. KRUST, P. KASTNER , and N. BRAND :
The family of retinoic acid nuclear receptors.
In 'Retinoids: 10 years on' (1991), ed. Saurat J-H., Karger Basel,pp 11-27.

11-W **913** G. VASIOS, S. MADER, J.D. GOLD, M. LEID, Y. LUTZ, M-P.GAUB, P. CHAMBON, and L. GUDAS :
The late retinoic acid induction of laminin B1 gene transcription involves RAR binding to the responsive element.
EMBO J. (1991) **10**, 1149-1158.

11-X **924** C. NERVI, T.M. VOLLBERG, M.D. GEORGE, A. ZELENT, P. CHAMBON, and A.M. JETTEN :
Expression of nuclear retinoic acid receptors in normal tracheobronchial cells and in lung carcinoma cells.
Experimental Cell Res. (1991) **195**, 163-170.

11-Y **934** FRANK A.E.KRUYT, C.E. VAN DEN BRINK, L.H.K. DEFIZE, M.J. DONATH, P. KASTNER, W. KRUIJER, P. CHAMBON, and P.T. VAN DER SAAG :
Transcriptional regulation of retinoic acid receptor ß in retinoic acid-sensitive and -resistant P19 embryocarcinoma cells.
Mechanisms Dev. (1991) **33**, 171-178.

11-Z **936** W. C. SMITH, H.NAKSHATRI, P. LEROY, J. REES, and P. CHAMBON :
A retinoic acid response element is present in the mouse cellular retinol binding protein I (mCRPB I) promoter.
EMBO J (1991) **10**, 2223-2230.

11-A1 **943** LAN HU, D. CROWE, J. RHEINWALD, P. CHAMBON, and L.J. GUDAS :
Abnormal expression of retinoic acid receptors and keratin 19 by human oral squamous cell carcinoma cell lines.
Cancer Res. (1991) **51**, 3972-3981.

11-B1 **950** F.C. DALMAN, L.J. STURZENBECKER, A.A. LEVIN, D.A. LUCAS, G.H. PERDEW, M. PETKOVITCH, P.CHAMBON, J.F. GRIPPO, and W.B PRATT :
Retinoic acid receptor belongs to a subclass of nuclear receptors that do not form "docking" complexes with hsp90.
Biochemistry (1991) **30**, 5605-5608.

11-C1 **961** C. ROCHETTE-EGLY, Y. LUTZ, M. SAUNDERS, I. SCHEUER, M.P. GAUB, and P. CHAMBON :
Retinoic acid receptor γ: Specific immunodetection and phosphorylation.
J.Cell. Biol. (1991) **115**, 535-545.

11-D1 **965** M.G. MATTEI, M. RIVIERE, A. KRUST, S. INGVARSSON, B. VENNSTRÖM, M.Q. ISLAM, G. LEVAN, P. KAUTNER, A. ZELENT, P.CHAMBON, J.SZPIRER and C.SZPIRER :
Chromosomal assignment of retinoic acid receptor (RAR) genes in the human, mouse, and rat genomes.
Genomics (1991) **10**, 1061-1069.

11-E1 **967** C. MENDELSOHN, E. RUBERTE, M. LEMEUR, G. MORRISS-KAY, and P.CHAMBON :
Developmental analysis of the retinoic acid-inducible RAR-ß2 promoter

in transgenic animals.
Development (1991) **113**, 723-734.

11-F1 P. LEROY, H. NAKSHATRI, and P. CHAMBON :
971 Mouse retinoic acid receptor α-2 isoform is transcribed from a promoter that contains a retinoic acid response element.
Proc. Natl. Acad. Sci. USA (1991) **88**, 10138-10142.

11-G1 P. KASTNER, A. PEREZ, Y. LUTZ, C. ROCHETTE-EGLY, M.P. GAUB, B. DURAND,
1001 M. LANOTTE, R. BERGER, and P. CHAMBON :
Structure, localization and transcriptional properties of two classes of retinoic acid receptor α (RAR-α) fusion proteins in acute promyelocytic leukemia (APL). Structural similarities with a new family of oncoproteins.
EMBO. J. (1992) **11**, 629-642.

11-H1 P.P.PANDOLFI, M. ALCALAY, M. FAGIOLI,D. ZANGRILLI A.MENCARELLI, D. **1023**
DIVERIO, A. BIONDI, F. LO COCO, A. RAMBALDI, F. GRIGNANI, C. ROCHETTE-EGLY, M.P. GAUB, P. CHAMBON, and P.G. PELLICI :
Genomic variability and alternative splicings generate multiple PML/RARα transcripts that encode aberrant PML proteins and PML/RARα isoforms in acute promyelocytic leukemias.
EMBO J. (1992) **11**, 1397-1407.

11-I1 M. LEID, P. KASTNER, R. LYONS, H. NAKSHATRI, M. SAUNDERS, T.
1009 ZACHAREWSKI, J.Y. CHEN, A. STAUB, J.M. GARNIER, S. MADER, and P. CHAMBON :
Purification, cloning and RXR identity of the HeLa cell factor with which RAR or TR heterodimerizes to bind target sequences efficiently.
Cell (1992) **68**, 377-395.

11-J1 S. NAGPAL, A. ZELENT, and P. CHAMBON :
1012 RAR-β4, a retinoic acid receptor isoform is generated from RAR-β2 by alternative splicing and usage of a CUG initiator codon.
Proc. Natl. Acad. Sci. USA (1992) **89**, 2718-2722.

11-K1 M.P. GAUB, C. ROCHETTE-EGLY, Y. LUTZ, S.ALI, H. MATTHES, I. SCHEUER,
1059 and P. CHAMBON :
Immunodetection of multiple species of retinoic acid receptor α: evidence for phosphorylation.
Exp. Cell. Res. (1992) **201**, 335-346.

11-L1 E.A. DUELL, A. ASTROM, C.E.M. GRIFFITHS, P. CHAMBON, and J.VOORHEES :
1062 Human skin levels of retinoic acid and Cytochrome P-450 derived 4-OH retinoic acid after topical application of retinoic acid *in vivo* compared to concentrations required to stimulate retinoic acid receptor mediated transcription *in vitro*.
J. Clin. Invest. (1992) **90**, 1269-1274.

11-M1 E. RUBERTE, V. FRIEDERICH, G. MORRISS-KAY, and P. CHAMBON :
1063 Differential distribution patterns of CRAPB I and CRAPB II transcripts during mouse embryogenesis.
Development (1992) **115**, 973-987.

11-N1 J.T. ELDER, A. ASTROM, U. PETERSON, A. TAVAKKOL, C. GRIFFITHS, A.
1065 KRUST, P. KASTNER, P. CHAMBON, and J.J. VORHEES :
Differential regulation of retinoic acic receptors and binding proteins in human skin.
J. Invest. Dermatol. (1992) **98**, 673-679.

11-O1 M.P. COSTA-GIOMI, M.P. GAUB, P. CHAMBON, and P. ABARZUA :
1096 Characterization of a retinoic acid responsive element isolated by whole genome PCR.

Nucl. Acids Res. (1992) **20**, 3223-3232.

11-P1 **1109** S. NAGPAL, M. SAUNDERS, P. KASTNER, B. DURAND, H. NAKSHATRI, and P. CHAMBON :
Promoter-context-and response element-dependent specificity of the transcriptional activation and modulating functions of retinoic acid receptors.
Cell (1992) **70**, 1007-1019.

11-Q1 **1110** G. ALLENBY, M.T. BOCQUEL, M. SAUNDERS, S. KAZMER, J. SPECK, M. ROSENBERGER, A. LOVEY, P. KASTNER, J.F. GRIPPO, P. CHAMBON, and A.A. LEVIN :
Retinoic acid receptor and retinoid X receptors : Interactions with endogenous retinoic acids.
Proc. Natl. Acad. Sci. USA (1993) **90**, 30-34.

11-R1 **1117** B. DURAND, M. SAUNDERS, P. LEROY, M. LEID, and P. CHAMBON :
All-trans and 9-cis retinoic acid induction of mouse CRABPII gene transcription is mediated by RAR/RXR heterodimers bound to DR1 and DR2 repeated motifs.
Cell (1992) **71**, 73-85.

11-S1 **1130** S. MADER, P. LEROY, J.Y. CHEN, and P. CHAMBON :
Multiple parameters control the selectivity of nuclear receptors for their response elements.
J. Biol. Chem. (1993) **268**, 591-600.

11-T1 **1137** C. ROCHETTE-EGLY, M.P. GAUB, Y. LUTZ, S. ALI, I. SCHEUER, and P. CHAMBON :
Retinoic acid receptor β : Immunodetection and phosphorylation on tyrosine residues.
Mol. Endocrinol. (1992) **6**, 2197-2209.

11-U1 **1168** D.M. HEERY*, T. ZACHAREWSKI*, B. PIERRAT, H. GRONEMEYER, P. CHAMBON, and R. LOSSON :
Efficient transactivation by retinoic acid receptors in yeast requires retinoid X receptors.
Proc. Natl. Acad. Sci. USA (1993) **90**, 4281-4285.

11-V1 **1190** S. NAGPAL, S. FRIANT, H. NAKSHATRI, and P. CHAMBON :
RARs and RXRs : evidence for two autonomous transactivation functions (AF-1 and AF-2) and heterodimerization *in vivo*.
EMBO J. (1993) **12**, 2349-2360.

11-W1 **1211** D. LOHNES, P. KASTNER, A. DIERICH, M. MARK, M. LEMEUR, and P. CHAMBON :
Function of retinoic acid receptor γ in the mouse.
Cell (1993) **73**, 643-658.

11-X1 **1216** T. LUFKIN, D. LOHNES, M. MARK, A. DIERICH, P. GORY, M.P. GAUB, M. LEMEUR, and P. CHAMBON :
High postnatal lethality and testis degeneration in retinoic acid receptor α mutant mice.
Proc. Natl. Acad. Sci.USA (1993) **90**, 7225-7229.

11-Y1 **1217** A. PEREZ, P. KASTNER, S. SETHI*, Y. LUTZ, C. REIBEL, and P. CHAMBON :
PMLRAR homodimers: distinct DNA binding properties and heteromeric interactions with RXR.
EMBO J. (1993) **12**, 3171-3182.

11-A2 **1228** J. T ELDER, M.A. CROMIE, C.E.M. GRIFFITHS, P. CHAMBON, and J.J. VOORHEES :
Stimulus-selective induction of CRABP-II mRNA: a marker for retinoic acid action in human skin.
J. Invest. Dermatol. (1993) **100**, 356-359

11-B2 E. RUBERTE, V. FRIEDERICH, P. CHAMBON, and G. MORRISS-KAY :
1233 Retinoic acid receptors and cellular retinoid bindinproteins. III. Their differential transcript distribution during mouse nervous system development.
Development (1993) **118**, 267-282.

11-C2 J.F. BOYLAN, D. LOHNES, R. TANEJA, P. CHAMBON, and L.J. GUDAS :
1252 Loss of retinoic acid receptor γ function in F9 cells by gene disruption results in aberrant *Hoxa-1* expression and differentiation upon retinoic acid treatment.
Proc. Natl. Acad. Sci.USA (1993) **90**, 9601-9605.

11-D2 S. MADER, J.Y. CHEN, Z. CHEN, J. WHITE, P. CHAMBON, AND H. GRONEMEYER:
1270 The patterns of binding of RAR, RXR, and TR homo-and heterodimers to direct repeats are dictated by the binding specificities of their DNA binding domains.
EMBO J. (1993) **12**, 5029-5041.

11-E2 H. TÖRMÄ, D. ASSELINEAU, E. ANDERSON, B. MARTIN, P. REINICHE, P.
1271 CHAMBON, B. SHROOT, M. DARMON, and A. VAHLQUIST :
Biologic activities of retinoic acid and 3,4 didehydroretinoic acid in human keratinocytes are similar and correlate to receptor affinities and transactivation properties.
J. Invest. Dermatol. (1994) **102**, 49-54.

11-F2 H. NAKSHATRI, and P. CHAMBON :
1289 The directly repeated RG(G/T)TCA motifs of the rat and mouse cellular retinol-binding protein II genes are promiscuous binding sites for RAR, RXR, HNF-4 and ARP-1 homo- and heterodimers.
J. Biol. Chem. (1994) **269**, 890-902.

11-G2 P. DOLLE, V. FRAULOB, P. KASTNER, and P. CHAMBON :
1295 Developmental expression of murine retinoid X receptor (RXR) genes.
Mech. Dev. (1994) **45**, 91-104.

11-H2 J.L. VONESCH, H. NAKSHATRI, M. PHILIPPE, P. CHAMBON, and P. DOLLE :
1317 Stage and tissue-specific expression of the alcohol dehydrogenase 1 (*Adh-1*) gene during mouse development.
Develop. Dynam. (1994) **199**, 199-213.

11-I2 C. ZECHEL, X-Q SHEN, J-Y CHEN, Z-P CHEN, P. CHAMBON, and H.GRONEMEYER:
1321 The dimerization interfaces formed between the DNA binding domains of RXR, RAR and TR determine the binding specificity and polarity of the full-length receptors to direct repeats.
EMBO J. (1994) **13**, 1425-1433.

11-J2 C. ZECHEL, X-Q. SHEN, P. CHAMBON, and H. GRONEMEYER :
1322 Dimerization interfaces formed between the DNA binding domains determine the cooperative binding of RXR/RAR and RXR/TR heterodimers to DR5 and DR4 elements.
EMBO J. (1994) **13**, 1414-1424.

11-K2 D.M. HEERY, B. PIERRAT, H. GRONEMEYER, P. CHAMBON, and R. LOSSON :
1332 Homo- and heterodimers of the retinoid X receptor (RXR) activate transcription in yeast.

Nucl. Acids Res. (1994) **22**, 726-731.

11-L2 **1335** C. MENDELSOHN, S. LARKIN, M. MARK, M. LEMEUR, J. CLIFFORD, A.ZELENT, and P. CHAMBON :
RARβ isoforms: distinct transcriptional control by retinoic acid and specific spatial patterns of promoter activity during mouse embryonic development.
Mech. Dev. (1994) **45**, 227-241.

11-M2 **1339** J.T. ELDER, A. ASTROM, U. PETERSON, A. TAVAKKOL, A. KRUST, P. KASTNER, P. CHAMBON, and J.J. VOORHEES :
Retinoic acic receptors and binding proteins in human skin.
J. Invest. Dermatol. (1992) **98**, 36S-41S.

11-N2 **1370** P. GORRY, T. LUFKIN, A. DIERICH, C. ROCHETTE-EGLY, D. DECIMO, P.DOLLE, M. MARK, B. DURAND, and P. CHAMBON :
The cellular retinoic acid binding protein I is dispensable.
Proc. Natl. Acad. Sci. (1994) **91**, 9032-9036.

11-O2 **1388** C. MENDELSOHN, M. MARK, P. DOLLE, A. DIERICH, M.P. GAUB, A. KRUST, C. LAMPRON, and P. CHAMBON :
Retinoic acid receptor β2 (RARβ2) null mutant mice appear normal.
Dev. Biol. (1994) **166**, 246-258.

11-P2 **1389** D. LOHNES, M. MARK, C. MENDELSOHN, P. DOLLE, A. DIERICH, P. GORRY, A. GANSMULLER, and P. CHAMBON :
Function of the retinoic acid receptors (RARs) during development.(I) Cranofacial and skeletal abnormalities in RAR double mutants.
Development (1994) **120**, 2723-2748.

11-Q2 **1390** C. MENDELSOHN, D. LOHNES, D. DECIMO, T. LUFKIN, M. LEMEUR, P. CHAMBON, and M. MARK :
Function of the retinoic acid receptors (RARs) during development.(II) Multiple abnormalities at various stage of organogenesis in RAR double mutants.
Development (1994) **120**, 2749-2771.

11-R2 **1391** P. KASTNER, J. GRONDONA, M. MARK, A. GANSMULLER, M. LEMEUR, D. DECIMO, J.L. VONESCH, P. DOLLE, and P. CHAMBON:
Genetic analysis of RXRα developmental function: convergence of RXR and RAR signalling pathways in heart and eye morphogenesis.
Cell (1994) **78**, 987-1003.

11-S2 **1410** G.J. FISHER, H.S. TALWAR, J.H. XIAO, S.C. DATTA, A.P. REDDY, M.P. GAUB, C. ROCHETTE-EGLY, P. CHAMBON, and J.J. VOORHEES :
Immunological identification and functional quantitation of retinoic acid and retinoid X receptor proteins in human skin.
J. Biol. Chem. (1994) **269**, 20629-20635.

11-T2 **1418** B. DURAND, M. SAUNDERS, C. GAUDON, B. ROY, R. LOSSON, and P. CHAMBON :
Activation function 2 (AF-2) of retinoic acid receptor and 9-cis retinoic acid receptor: presence of a conserved autonomous constitutive activating domain and influence of the nature of the response element on AF-2 activity.
EMBO J. (1994) **13**, 5370-5382.

11-U2 **1421** A. ASTRÖM, U. PETTERSSON, P. CHAMBON, and J. VOORHEES :
Retinoic acid induction of human cellular retinoic acid-binding protein-II (CRABPII) gene transcription is mediated by retinoic acid receptor-retinoid X receptor (RAR-RXR) heterodimers bound to one far upstream retinoic acid responsive element (RARE) with 5 base-pair spacing.
J. Biol. Chem. (1994) **269**, 22334-22339.

11-V2 **1429** Z-P CHEN, L. SHEMSHEDINI, B. DURAND, N. NOY, P. CHAMBON, and H. GRONEMEYER :
Pure and functionally homogeneous recombinant retinoid X receptor.
J. Biol. Chem. (1994) **269**, 25770-25776.

11-W2 **1436** C. LAMPRON, C. ROCHETTE-EGLY, P. GORRY, P. DOLLE, M. MARK, T. LUFKIN, M. LEMEUR, and P. CHAMBON :
Mice deficient in cellular retinoic acid binding protein II (CRABPII) or in both CRABPI and CRABPII are essentially normal.
Development (1995) **121**, 539-548.

11-X2 **1439** C. ROCHETTE-EGLY, Y. LUTZ, V. PFISTER, S. HEIBERGER, I. SCHEUER, P. CHAMBON, and M.P. GAUB :
Detection of retinoid X receptors using specific monoclonal and polyclonal antibodies.
Biochem. Biophys. Res. Commun. (1994) **204**, 502-536.

11-Y2 **1449** J. REICHRATH, T. MÜNSSINGER, A. KERBER, C. ROCHETTE-EGLY, P.CHAMBON, F.A. BAHMER, and H.P. BAUM :
In situ detection of retinoid-X receptor (RXR-α, -β, -γ) expression in normal and psoriatic human skin.
J. Invest. Dermatology (1995) **133**, 168-175.

11-Z2 **1451** J.H. XIAO, B. DURAND, P. CHAMBON, and J.J. VOORHEES :
Endogenous retinoic acid receptor-retinoid X receptor heterodimers are the major functional forms regulating retinoid responsive elements in human keratinocytes.
J. Biol. Chem. (1995) **270**, 3001-3011.

11-A3 **1465** C-P. ZOU, J.L. CLIFFORD, X.C. XU, P.G. SACKS, P. CHAMBON, W.K. HONG, and R LOTAN :
Modulation by retinoic acid (RA) of squamous cell differentiation, cellular RA-binding proteins, and nuclear RA receptors in human head and neck squamous carcinoma cell lines.
Cancer Res. (1994) **54**, 5479-5487.

11-B3 **1477** J.Y. CHEN, S. PENCO, J. OSTROWSKI, P. BALAGUER, M. PONS, M. MANSURI, P. RECZEK, P. CHAMBON, and H. GRONEMEYER :
RAR-specific agonist/antagonists which dissociate transactivation and AP1 transrepression inhibit anchorage-independent cell proliferation.
EMBO J. (1995) **14**, 1187-1197.

11-C3 **1512** P. BOUILLET, M. OULAD-ABDELGHINI, S. VICAIRE, J.M. GARNIER, B. SCHUHBAUR, P. DOLLE, and P. CHAMBON :
Efficient cloning of cDNAs of retinoic acid-responsive genes in P19 embryonal carcinoma cells and characterization of a novel mouse gene, stra1 (mouse LERK-2/Eplg2).
Develop. Biol. (1995) **170**, 420-433.

11-D3 **1519** C. ROCHETTE-EGLY, M. OULAD-ABDELGHANI, A. STAUB, V. PFISTER, I. SCHEUER, P. CHAMBON, and M.P. GAUB :
Phosphorylation of the retinoic acid receptor α by protein kinase A.

Mol. Endocrinol. (1995) **9**, 860-871.

11-E3 **1521** P. BOUILLET, C. CHAZAUD, M. OULAD-ABDELGHINI, P. DOLLE, and P. CHAMBON: Sequence and expression of the *Stra7 (Gbx-2)* homeobox-containing gene induced by retinoic acid in P19 embryonal carcinoma cells.
Develop. Dynam. (1995) **204**, 372-382.

11-F3 **1525** W. BOURGUET, M. RUFF, P. CHAMBON, H. GRONEMEYER, and D. MORAS : Crystal structure of the ligand binding domain of the human nuclear receptor RXRα.
Nature (1995) **375**, 377-382.

11-G3 **1494** B. LE DOUARIN, C. ZECHEL, J.M. GARNIER, Y. LUTZ, L. TORA, B. PIERRAT, D. HEERY, H. GRONEMEYER, P. CHAMBON, and R. LOSSON : The N-Terminal part of TIF1, a putative mediator of the ligand-dependent activation function (AF-2) of nuclear receptors, is fused to B-raf in the oncogenic protein T18.
EMBO J. (1995) **14**, 2020-2033.

11-H3 **1533** R. TANEJA, P. BOUILLET, J. BOYLAN, M.P. GAUB, B. ROY, L. GUDAS, and P. CHAMBON : Reexpression of retinoic acid receptor (RAR)γ or overexpression of RARα or RARβ in RARγ-null F9 cells reveals a partial functional redundancy between the three RAR types..
Proc. Natl. Acad. Sci. (1995) **92**, 7854-7858.

11-I3 **1450** J.F. BOYLAN, T. LUFKIN, C.C. ACHKAR, R. TANEJA, P. CHAMBON, and L.J. GUDAS : Targeted disruption of RAR α and RAR γ results in receptor specific alterations in retinoic acid mediated differentiation and retinoic acid metabolism.
Mol. Cell. Biol. (1995) **15**, 843-851.

11-J3 **1488** B. LE DOUARIN, B. PIERRAT, E. VOM BAUR, P. CHAMBON, and R. LOSSON : A new version of the two-hybrid assay for detection of protein-protein interactions.
Nucl. Acids Res. (1995) **23**, 876-878.

11-K3 **1554** G.J. FISHER, A.P. REDDY, S.C. DATTA, S. KANG, J.J. YI, P. CHAMBON, and J.J. VOORHEES : All-trans retinoic acid and all-trans retinol induces cellular retinol-binding protein in human skin in vivo.
J. Invest. Dermatol. (1995) **105**, 80-86.

11-L3 **1557** S. KERSTEN, D. KELLEHER, P. CHAMBON, H. GRONEMEYER, and N. NOY : The retinoic X receptor α forms tetramers in solution.
Proc. Natl. Acad. Sci. (1995) **92**, 8645-8649.

11-M3 **1572** S. KATO, H. SASAKI, M. SUZAWA, S. MASUSHIGE, L. TORA, P. CHAMBON, and H. GRONEMEYER : Widely spaced directly repeated PuGGTCA elements act as promiscuous enhancer for different classes of nuclear receptors.
Mol. Cell. Biol. (1995) **15**, 5858-5867.

11-N3 W. BOURGUET, M. RUFF, D. BONNIER, F. GRANGER, M. BOEGLIN, P. CHAMBON,

1575 D. MORAS, and H. GRONEMEYER :
Purification, functional characterization, and crystallization of the ligand binding domain of the retinoid X receptor.
Protein Express. Purif. (1995) **6**, 604-608.

11-O3 B. ROY, R. TANEJA, and P. CHAMBON :
1602 Synergistic activation of expression of retinoic acid (RA) responsive genes and induction of P19 and F9 EC cell differentiation by a RARα, a RARβ or a RARγ selective ligand in combination with a RXR specific ligand.
Mol. Cell. Biol. (1995) **15**, 6481-6487.

11-P3 E. VOM BAUR, C. ZECHEL, D. HEERY, M. HEINE, J.M. GARNIER, V. VIVAT, B.
1596 LE DOUARIN, H. GRONEMEYER, P. CHAMBON, and R. LOSSON :
Differential ligand-dependent interactions between the AF-2 activating domain of nuclear receptors and the putative transcriptional intermediary factors mSUG1 and TIF1.
EMBO J. (1996) **15**, 110-124.

11-Q3 C. CHAZAUD, M. OULAD-ABDELGHINI, P. BOUILLET, D. DECIMO, P. CHAMBON,
1612 and P. DOLLE :
AP-2.2, a novel gene related to AP-2, is expressed in the forebrain, limbs and face during mouse embryogenesis.
Mech. Dev. (1996) **54**, 83-94.

11-S3 P. KASTNER, M. MARK, M. LEID, A. GANSMULLER, J.M. GRONDONA, D. DECIMO,
1623 W. KREZEL, A. DIERICH, and P. CHAMBON :
Abnormal spermatogenesis in RXRβ mutant mice.
Genes Dev. (1996) **10**, 80-92.

11-T3 S. KERSTEN, L. PAN, P. CHAMBON, H. GRONEMEYER, and N. NOY :
1630 Role of ligand in retinoid signaling. 9-cis-retinoic acid modulates the oligomeric state of the retinoid X receptor.
Biochemistry (1995) **34**, 13717-13721.

11-U3 J.P. RENAUD, N. ROCHEL, M. RUFF, V. VIVAT, P. CHAMBON, H. GRONEMEYER,
1634 and D. MORAS :
Crystal structure of the RAR-γ ligand-binding domain bound to all-trans retinoic acid.
Nature (1995) **378**, 681-689.

11-V3 J.M. WURTZ, W. BOURGUET, J.P. RENAUD, V. VIVAT, P. CHAMBON, D. MORAS,
1638 and H. GRONEMEYER :
A canonical structure for the ligand-binding domain of nuclear receptors.
Nature Struct. Biology (1996) **3**, 87-94.

11-W3 C. BAVIK, S. WARD, and P. CHAMBON :
1641 Developmental abnormalities in cultured mouse embryos deprived of retinoic acid by inhibition of yolk-sac retinol binding protein (RBP) synthesis.
Proc. Natl. Acad. Sci. (1996) **93**, 3110-3114.

11-X3 J.M. GRONDONA, P. KASTNER, A. GANSMULLER, D. DECIMO, P. CHAMBON, and M.
1700 MARK :
Retinal dysplasia and degeneration in RARβ2/RARγ2 compound mutant mice.

Development (1996) **122**, 2173-2188.

11-Y3 **1658** N. ORIDATE, N. ESUMI, D. LOTAN, W. KI HONG, C. ROCHETTE-EGLY, P. CHAMBON, and R. LOTAN :
Implication of retinoic acid receptor γ in squamous differentiation and response to retinoic acid in head and neck SqCC/Y1 squamous carcinoma cells.
Oncogene (1996) **12**, 2019-2028.

11-Z3 **1673** R. TANEJA, B. ROY, J.L. PLASSAT, C.F. ZUSI, J. OSTROWSKI, P.R. RECZEK, and P. CHAMBON :
Cell-type and promoter-context dependent retinoic acid receptor (RAR) redundancies for *RARβ2* and *Hoxa-1* activation in F9 and P19 cells can be artefactually generated by gene knockouts.
Proc. Natl. Acad. Sci. (1996) **93**, 6197-6202.

11-A4 **1686** M. OULAD-ABDELGHANI, P. BOUILLET, C. CHAZAUD, P. DOLLE, and P. CHAMBON:
AP-2.2: a novel AP-2-related transcription factor induced by retinoic acid during differentiation of P19 embryonal carcinoma cells.
Exp. Cell Res. (1996) **225**, 338-347.

11-B4 **1687** K. NIEDERREITHER, S.J. WARD, P. CHAMBON, and P. DOLLE :
Morphological and molecular characterization of retinoic acid-induced limb duplications in mice.
Dev. Biol. (1996) **176**, 185-198.

11-C4 **1692** M. MAY, G. MENGUS, A.C. LAVIGNE, P. CHAMBON, and I. DAVIDSON :
Human $TAF_{II}28$ promotes transcriptional stimulation by activation function 2 of the retinoid X receptors.
EMBO J. (1996) **15**, 3093-3104.

11-D4 **1693** J. CLIFFORD, H. CHIBA, D. SOBIESZCZUK, D. METZGER, and P. CHAMBON :
RXRα-null F9 embryonal carcinoma cells are resistant to the differentiation, antiproliferative and apoptotic effects of retinoids.
EMBO J. (1996) **15**, 4142-4155.

11-E4 **1626** B. LE DOUARIN, E. VOM BAUR, C. ZECHEL, D. HEERY, M. HEINE, V. VIVAT, H. GRONEMEYER, R. LOSSON, and P. CHAMBON:
Ligand-dependent interaction of nuclear receptors with potential transcriptional intermediary factors (mediators).
In "Phil. Trans. R. Soc. Lond. B". P.D. Wall, ed. (1996) **351**, 569-578.

11-F4 **1706** R. TANEJA, B. THISSE, F. RIJLI, C. THISSE, P. BOUILLET, P. DOLLE, and P. CHAMBON :
The expression pattern of the mouse receptor tyrosine kinase gene MDK1 is conserved through evolution and requires Hoxa-2 for rhombomere-specific expression in mouse embryos.
Develop. Biol. (1996) **177**, 397-412.

11-G4 **1708** W. KREZEL, V. DUPE, M. MARK, A. DIERICH, P. KASTNER, and P. CHAMBON :
RXRγ null mice are apparently normal and compound $RXR\alpha^{+/-}/RXR\beta^{-/-}/RXR\gamma^{-/-}$ mutant mice are viable.
Proc. Natl. Acad. Sci. (1996) **93**, 9010-9014.

11-H4 **1721** J.J. VOEGEL, M.J.S. HEINE, C. ZECHEL, P. CHAMBON, and H. GRONEMEYER :
TIF2, a 160-kDa transcriptional mediator for the ligand-dependent activation function AF-2 of nuclear receptors.
EMBO J. (1996) **15**, 3667-3675.

11-I4 **1728** H. NAKSHATRI, P. BOUILLET, P. BHAT-NAKSHATRI, and P. CHAMBON :
Isolation of retinoic acid-repressed genes from P19 embryonal carcinoma cells.

Gene (1996) **174**, 79-84.

11-J4 **1729** P. BOUILLET, M. OULAD-ABDELGHANI, S.J. WARD, S. BRONNER, P. CHAMBON, and P. DOLLE :
A new mouse member of the *Wnt* gene family, *mWnt-8* is expressed during early embryogenesis and is ectopically induced by retinoic acid.
Mech. Dev. (1996) **58**, 141-152.

11-L4 **1756** J.Y. CHEN, J. CLIFFORD, C. ZUSI, J. STARRETT, D. TORTOLANI, J. OSTROWSKI, P.R. RECZEK, P. CHAMBON, and H. GRONEMEYER :
Two distinct actions of retinoid-receptor ligands.
Nature (1996) **382**, 819-822.

11-M4 **1769** B. LE DOUARIN, A.L. NIELSEN, J.M. GARNIER, H. ICHINOSE, F. JEANMOUGIN, R. LOSSON, and P. CHAMBON :
A possible involvement of TIF1α and TIFβ in epigenetic control of transcription by nuclear receptors.
EMBO J. (1996) **15**, 6701-6715.

11-N4 **1770** M. OULAD-ABDELGHANI, P. BOUILLET, D. DECIMO, A. GANSMULLER, S. HEYBERGER, P. DOLLE, S. BRONNER, Y. LUTZ, and P. CHAMBON :
Characterization of a pre-meiotic germ cell-specific cytoplasmic protein encoded by stra8, a novel Retinoic Acid-responsive gene.
J. Cell Biol. (1996) **135**, 469-477.

11-O4 **1786** V. DUPE, M. DAVENNE, J. BROCARD, P. DOLLE, M. MARK, A. DIERICH, P. CHAMBON, and F. RIJLI :
In vivo functional analysis of the *Hoxa-1* 3' retinoic acid response element (3'RARE)
Development (1997) **124**, 399-410.

11-P4 **1799** P. KASTNER, M. MARK, N. GHYSELINCK, W. KREZEL, V. DUPE, J.M. GRONDONA, and P. CHAMBON :
Genetic evidence that the retinoid signal is tranduced by heterodimeric RXR/RAR functional units during mouse development.
Development (1997) **124**, 313-326.

11-Q4 **1811** X. FENG, Z.H. PENG, W. DI, X.Y. LI, C. ROCHETTE-EGLY, P. CHAMBON, J.J. VOORHEES, and J.H. XIAO :
Suprabasal expression of a dominant-negative RXRα mutant in transgenic mouse epidermis impairs regulation of gene transcription and basal keratinocyte proliferation by RAR-selective retinoids.
Gene Develop. (1997) **11**, 59-71

11-S4 **1800** J. BROCARD, P. KASTNER, and P. CHAMBON :
Two novel RXRα isoforms from mouse testis.
Biochem. Biophys. Res. Commun. (1996) **229**, 211-218.

11-T4 **1839** R.A. FRASER, M. ROSSIGNOL, D.J. HEARD, J.M. EGLY, and P. CHAMBON :
SUG1, a putative transcriptional mediator and subunit of the PA700 proteasome regulatory complex, is a DNA helicase.
J. Biol. Chem. (1997) **272**, 7122-7126.

11-V4 N. ROCHEL, J.P. RENAUD, M. RUFF, V. VIVAT, F. GRANGER, D.

1855 BONNIER, T. LEROUGE, P. CHAMBON, H. GRONEMEYER, and D. MORAS : Purification of the human RARγ ligand-binding domain and crystallization of its complex with All-*trans* retinoic acid. Biochem. Biophys. Res. Commun. (1997) **230**, 293-296.

11-W4 V. SAPIN, S.J. WARD, S. BRONNER, P. CHAMBON, and P. DOLLE:
1776 Differential expression of transcripts encoding retinoid binding proteins and retinoic acid receptors during placentation of the mouse. Develop. Dynam. (1997) **208**, 199-210.

11-X4 H. CHIBA, J. CLIFFORD, D. METZGER, and P. CHAMBON :
1874 Distinct retinoid X receptor-retinoic acid receptor heterodimers are differentially involved in the control of expression of retinoid target genes in F9 embryonal carcinoma cells. Mol. Cell. Biol. (1997) **17**, 3013-3020.

11-Y4 P. BOUILLET, V. SAPIN, C. CHAZAUD, N. MESSADDEQ, D. DECIMO, P. DOLLE,
1882 and P. CHAMBON :
Developmental expression pattern of Stra6, a retinoic acid-responsive gene encoding a new type of membrane protein. Mech. Develop.(1997) **63**, 173-186.

11-Z4 N.B. GHYSELINCK, V. DUPE, A. DIERICH, N. MESSADDEQ, J.M. GARNIER, C.
1890 ROCHETTE-EGLY, P. CHAMBON, and M. MARK :
Role of retinoic acid receptor beta (RARβ) during mouse development. Int. J. Dev. Biol. (1997) **41**, 425-447.

11-A5 G. MENGUS, M. MAY, L. CARRE, P. CHAMBON, and I. DAVIDSON:
1905 Human TAF_{II}^{135} potentiates transcriptional activation by the AF-2s of the retinoic acid, vitamin D3, and thyroid hormone receptors in mammmalian cells. Gene Develop. (1997) **11**, 1381-1395.

11-B5 K. NIEDERREITHER, P. MCCAFFERY, U.C. DRÄGER, P. CHAMBON, and P. DOLLE:
1833 Restricted expression and retinoic acid-induced downregulation of the retinaldehyde dehydrogenase type 2 (RALDH-2) gene during mouse development. Mech. Develop. (1997) **62**, 67-78.

11-C5 H. UMEMIYA, H. KAGECHIKA, H. FUKASAWA, E. KAWACHI, M. EBISAWA, Y.
1898 HASHIMOTO, G. EISENMANN, C. ERB, A. PORNON, P. CHAMBON, H. GRONEMEYER, and K. SHUDO :
Action mechanism of retinoid-synergistic dibenzodiazepines. Biochem. Byophys. Res. Commun. (1997) **233**, 121-125.

11-D5 C. ROCHETTE-EGLY, S. ADAM, M. ROSSIGNOL, J.M. EGLY, and P. CHAMBON :
1924 Stimulation of RARα activation function AF-1 through binding to the general transcription factor TFIIH and phosphorylation by CDK7. Cell (1997) **90**, 97-107.

11-E5 S.J. WARD, P. CHAMBON, D. E ONG, and C. BAVIK :
1944 A retinol binding protein-receptor mediated mechanism for uptake of vitamin A to post-implantation rat embryos. Biol. Reprod. (1997) **57**, 751-755..

11-F5 V. SUBBARAYAN, P. KASTNER, M. MARK, A. DIERICH, P. GORRY, and P.
1949 CHAMBON:
Limited specificity and large overlap of the functions of the mouse RARγ1 and RARγ2 isoforms.
Mech. Develop. (1997) **66**, 131/142.

11-G5 M. BOUDJELAL, R. TANEJA, S. MATSIBARA, P. BOUILLET, P. DOLLE,
1961 and P. CHAMBON :
Overexpression of Stra13, a novel retinoic acid-inducible gene of the basic helix-loop-helix family, inhibits mesodermal, and promotes neuronal differentiation of P19 cells.
Gene Develop. (1997) **11**, 2052-2065.

11-H5 M. OULAD-ABDELGHANI, C. CHAZAUD, P. BOUILLET, V. SAPIN, P. CHAMBON, and
1962 P. DOLLE :
Meis2, a novel mouse *Pbx*-related homeobox gene induced by retinoic acid during differentiation of P19 embryonal carcinoma cells.
Develop. Dynam. (1997) **210**, 173-183.

11-I5 V. VIVAT, C. ZECHEL, J.M. WURTZ, W. BOURGUET, H. KAGECHIKA, H.
1955 UMEMIYA, K. SHUDO, D. MORAS, H. GRONEMEYER, and P. CHAMBON :
A mutation mimicking the ligand-induced transconformation yields a constitutive RXR that senses allosteric effect in heterodimers.
EMBO J. (1997) **16**, 5697-5709.

11-K5 V. SAPIN, P. DOLLE, C. HINDELANG, P. KASTNER, and P. CHAMBON :
1977 Defects of the choriollantoic placenta in mouse RXRα null fetuses.
Develop. Biol. (1997) **191**, 29-41.

11-L5 C. SUMI-ICHINOSE, H. ICHINOSE, D. METZGER, and P. CHAMBON :
1988 SNF2β/BRG1 is essential for the viability of F9 murine embryonal carcinoma cells.
Mol. Cell. Biol. (1997) **17**, 5976-5986.

11-M5 R. TANEJA, C. ROCHETTE-EGLY, J.L. PLASSAT, L.PENNA, M.P. GAUB, and P.
1990 CHAMBON :
Phosphorylation of activation functions AF-1 and AF-2 of RARα and RARγ is indispensable for differentiation of F9 cells upon retinoic acid and cAMP treatment.
EMBO J., (1997) **16**, 6452-6565.

11-N5 H. CHIBA, J. CLIFFORD, D. METZGER, and P. CHAMBON :
1996 Specific and redundant functions of retinoid X receptor/retinoid acid receptor heterodimers in differentiation, proliferation and apoptosis of F9 embryonal carcinoma cells.
J. Cell Biol.(1997) **139**, 735-747.

11-O5 M. OULAD-ABDELGHANI, C. CHAZAUD, P. BOUILLET, M.G. MATTEI, P. DOLLE,
2009 and P. CHAMBON :
Stra3/*lefty*, a retinoic acid-inducible novel member of the transforming growth factor-β superfamily.
Int. J. Dev. Biol. (1998) **42**, 23-32.

11-P5 **2015** P. KASTNER, N. MESSADDEQ, M. MARK, O. WENDLING, J.M. GRONDONA, S. WARD, N. GHYSELINCK, and P. CHAMBON :
Vitamin A deficiency and mutations of RXRα, RXRβ and RARα lead to early differentiation of embryonic ventricular cardiomyocytes.
Development (1997) **124**, 4749-4758.

11-Q5 **2030** Z.P. CHEN, J. IYER, W. BOURGUET, P. HELD, C. MIOSKOWSKI, L. LEBEAU, N. NOY, P. CHAMBON, and H. GRONEMEYER :
Ligand-and DNA-induced dissociation of RXR tetramers.
J. Mol. Biol. (1998) **275**, 55-65.

11-R5 **2041** J.J. VOEGEL, M.J.S. HEINE, M. TINI, P. CHAMBON, and H.GRONEMEYER:
The coactivator TIF2 contains three nuclear receptor binding motifs and mediates transactivation through CBP binding-dependent and -independent pathways.
EMBO J. (1998) **17**, 507-512.

11-S5 **2011** T.A. SAMAD, W. KREZEL, P. CHAMBON, E. BORRELLI :
Regulation of dopaminergic pathways by retinoids:activation of the D2 receptor promoter by members of the retinoic acid receptor-retinoid X family.
Proc. Natl. Acad. Sci. (1997) **94**, 14349-14354.

11-T5 **2060** W. KREZEL, N. GHYSELINCK, T. ABDEL-SAMAD, V. DUPE, P. KASTNER, E. BORRELLI, and P. CHAMBON :
Impaired locomotion and dopamine signaling in retinoid receptor mutant mice.
Science (1998) **279**, 863-867

11-U5 **2075** B.P. KLAHOLZ, J.P. RENAUD, A. MITSCHLER, C. ZUSI*, P. CHAMBON, H. GRONEMEYER, and D. MORAS :
Conformational adaptation of agonists to the human nuclear receptor RARγ.
Nature Struct. Biology (1998) **5**, 199-201.

11-V5 **2082** S.S. ABU-ABED*, B.R. BECKETT*, H. CHIBA, J.V. CHITHALEN*, G. JONES*, D. METZGER, P. CHAMBON, and M. PETKOVICH :
Mouse p450rai (CYP26) expression and retinoic acid-incucible retinoic acid metabolism in F9 cells are regulated by RARγ and RXRα.
J. Biol. Chem. (1998) **273**, 2409-2415.

11-W5 **2084** E. VOM BAUR, M. HARBERS, S-J UM, A. BENECKE, P. CHAMBON, and R. LOSSON:
The yeast ADA complex mediates the ligand-dependent activation function AF-2 of retinoid x and estrogen receptors.
Gene Develop. (1998) **12**, 1278-1289.

11-X5 **2110** N.B. GHYSELINCK, O. WENDLING, N. MESSADDEQ, A. DIERICH, C. LAMPRON, D. DECIMO, S. VIVILLE, P. CHAMBON, and M. MARK :
Contribution of retinoic acid receptor β isoforms to the formation of the conotruncal septum of the embryonic heart.
Develop. Biol. (1998) **198**, 303-318.

11-Y5 **2120** S. BLANCHET, B. FAVIER, G. CHEVALIER, P. KASTNER, J.J. MICHAILLE, P. CHAMBON, and D. DHOUAILLY :
Both retinoic acid receptors α (RARα) and γ (RARγ) are able to initiate mouse upper-lip skin glandular metaplasia.
J. Invest. Dermatol. (1998) **111**, 206-212.

11-Z5 **2121** K. NIEDERREITHER, M. HARBERS, P. CHAMBON, and P. DOLLE :
Expression of T:G mismatch-specific thymidine-DNA glycolsylase and DNA methyl transferase genes during development and tumorigenesis.
Oncogene (1998) **17**, 1477-1585.

11-A6 **2129** N.HUANG, E. VOM BAUR, J.M. GARNIER, T. LEROUGE, J.L. VONESCH, Y. LUTZ, P. CHAMBON, R. LOSSON :
Two distinct nuclear receptor interaction domains in NSD1, a novel SET protein that exhibits characteristics of both corepressors and coactivators.
EMBO J. (1998) **17**, 3398-3412.

11-B6 **2139** R.A. FRASER, D.J. HEARD, S. ADAM, A.C. LAVIGNE, B. LE DOUARIN, L. TORA, R. LOSSON, C. ROCHETTE-EGLY, and P. CHAMBON :
The putative factor TIFα is a protein kinase which is hyperphosphorylated upon interaction with liganded nuclear receptors.
J. Biol. Chem. (1998) **273**, 16199-16204.

11-C6 **2140** S. UM, M. HARBERS, A. BENECKE, B. PIERRAT, R. LOSSON, and P. CHAMBON :
Retinoic acid receptors interact physically and functionally with the T:G mismatch-specific thymine-DNA glycosylase.
J. Biol. Chem. (1998) **273**, 20728-20736.

11-D6 **2150** W. KREZEL, P. KASTNER, and P. CHAMBON :
Differential expression of retinoid receptors in the adult mouse central nervous system.
Neuroscience (1999) **89**, 1291-1300.

11-E6 **2167** M.P. GAUB, Y. LUTZ, N.B. GHYSELINCK, I. SCHEUER, V. PFISTER, P. CHAMBON, and C. ROCHETTE-EGLY :
Nuclear detection of cellular retinoic acid binding proteins I and II with new antibodies.
J. Histochem. Cytochem. (1998) **46**, 1103-111.

11-F6 **2069** B. LE DOUARIN, J. YOU, L. NIELSEN, P. CHAMBON, and R. LOSSON :
TF1α: a possible link between KRAB zink finger proteins and nuclear receptors.
J. Steroid Biochem. Mol. Biol. (1998) **65**, 43-50.

11-G6 **2191** J. LABRECQUE, D. ALLAN, P. CHAMBON, N.N. ISCOVE, D. LOHNES, and T. HOANG :
Impaired granulocytic differentiation in vitro in hematopoietic cells lacking retinoic acid receptors α1 and γ.
Blood (1998) **92**, 607-615.

11-H6 **2203** B. MASCREZ, M. MARK, A. DIERICH, N. GHYSELINCK, P. KASTNER, and P. CHAMBON :
The RXRα ligand-dependent activation function 2 (AF-2) is important for mouse development.
Development (1998) **125**, 4691-4707.

11-I6 **2216** W. DI*, X.Y. LI*, S. DATTA*, A. ASTROM*, G.J. FISHER, P. CHAMBON, J.J. VOORHEES*, and J.H. XIAO* :
Keratinocyte-specific retinoid regulation of human cellular retinoic acid binding protein II (hCRABP-II) gene promoter requires an evolutionarily conserved DR1 retinoic acid-responsive element.
J. Invest. Dermatol. (1998) **111**, 1109-1115.

11-J6 **2220** A. CAMPOS BARROS*, L.C. ERWAY*, W. KREZEL, T. CURRAN*, P. KASTNER, P. CHAMBON, and D. FORREST* :
Absence of thyroid hormone receptor β-retinoid X receptor interactions in auditory function and in the pituitary-thyroid axis.
Neuroreport (1998) **9**, 2933-2937.

11-K6 **2242** O. WENDLING, P. CHAMBON, and M. MARK :
RXRs are essential for early mouse development and placentogenesis.
Proc. Natl. Acad. Sci. (1999) **96**, 547-551.

11-L6 **2262** F.J. DILWORTH, C. FROMENTAL-RAMAIN, E. REMBOUTSIKA, A. BENECKE, and P. CHAMBON :
Ligand-dependent activation of transcription *in vitro* by retinoic acid receptorα/retinoid X receptor α heterodimers that mimics transactivation by retinoids in vivo.
Proc. Natl. Acad. (1999) **96**, 1995-2000.

11-M6 **2270** J.H. XIAO, X. FENG, W. DI, Z.H. PENG, L.A. LI, P. CHAMBON, and J.J. VOORHEES :
Identification of heparin-binding EGF-like growth factor as a target in intercellular regulation of epidermal basal cell growth by suprabasal retinoic acid receptors.
EMBO J. (1999) **18**, 1539-1548.

11-N6 **2271** L. VENTURINI, J. YOU, M. STADLER, R. GALIEN, V. LALLEMAND, M.H.M. KOKEN, M.G. MATTEI, A. GANSER, P. CHAMBON, R. LOSSON, and H. DE THE :
TIF1γ, a novel member of the transcriptional intermediary factor 1 family.
Oncogene (1999) **18**, 1209-1217.

11-06 **2272** V. DUPE, N. GHYSELINCK, L. NAGY*, P.J.A. DAVIES*, P. CHAMBON, and M. MARK :
Esential roles of retinoic acid signaling in interdigital apoptosis and control of BMP-7 expression in mouse autopods.
Develop. Biol. (1999) **208**, 30-43.

11-P6 **2288** K. NIEDERREITHER, V. SUBBARAYAN, P. DOLLE, and P. CHAMBON :
Embryonic retinoic acid synthesis is essential for mouse early post-implantation development.
Nature Genetics (1999) **21**, 444-448.

11-Q6 C. GAUDON, P. CHAMBON, and R. LOSSON :
2294 Role of the essential yeast protein PSU1 in transcriptional enhancement by the ligand-dependent activation function AF-2 of nuclear receptors.
EMBO J. (1999) **18**, 2229-2240.

11-R6 E. REMBOUTSIKA, Y. LUTZ, A. GANSMULLER, J.L. VONESCH, R. LOSSON, and P.
2299 CHAMBON :
The putative nuclear receptor mediator TIF1α is tightly associated with euchromatin.
J. Cell. Sci. (1999) **112**, 1671-1683.

11-S6 S. ADAM-STITAH, L. PENNA, P. CHAMBON, and C. ROCHETTE-EGLY :
2315 Hyperphosphorylation of the retinoid X receptor α (RXRα) by activated c-jun NH2-terminal kinases.
J. Biol. Chem. (1999) **274**, 18932-18941.

11-T6 C. CHAZAUD, P. CHAMBON, and P. DOLLE :
2326 Retinoic acid is required in the mouse embryo for left-right asymmetry determination and heart morphogenesis.
Development (1999) **126**, 2589-2596.

11-U6 M. GEHIN, V. VIVAT, J.M. WURTZ, R. LOSSON, P. CHAMBON, D. MORAS, and H.
2340 GRONEMEYER.
Structural basis for engineering of retinoic acid receptor isotype-selective agonists and antagonists.
Chem. Biol. (1999) **6**, 519-529.

11-V6 L. DELVA, J.N. BATIE, C. ROCHETTE-EGLY, R. KRAIBA, N. BALITRAND, F.
2350 GUIDEZ, P. CHAMBON, AND C. CHOMIENNE :
Physical and functional interactions between the cellular retinoic acid binding protein II and the retinoid nuclear receptors.
Mol. Cell. Biol. **19**, 7158-7167.

11-W6 N.B. GHYSELINCK, C. BAVIK, V. SAPIN, M. MARK, D. BONNIER, C. HINDELANG,
2353 A. DIERICH, C.B. NILSON, H. HAKANSSON, P. SAUVANT, V. AZAIS-BRAESCO, M. FRASSON, S. PICAUD, and P. CHAMBON :
Cellular retinol binding protein I is essential for vitamin A homeostasis.
EMBO J. (1999) **18**, 4903-4914.

11-X6 V. DUPE, N.G. GHYSELINCK, O. WENDLING, P. CHAMBON, and M. MARK :
2389 Key roles of retinoic acid receptors alpha and beta in the patterning of the caudal hindbrain, pharyngeal arches and otocyst in the mouse.
Development (1999) **126**, 5051-5059.

11-Y6 K. NIEDERREITHER, J. VERMOT, B. SCHUHBAUR, P. CHAMBON, and P. DOLLE :
2401 Retinoic acid synthesis and hindbrain patterning in the mouse embryo.
Development (2000) **127**, 75-85.

11-Z6 T.N. FARIA*, C. MENDELSOHN, P. CHAMBON, and L.J. GUDAS* :
2420 The targeted disruption of both alleles of RARβ$_2$ in F9 cells results in the loss of retinoic acid-associated growth arrest.
J. Biol. Chem. (1999) **17**, 26783-26788.

11-A7 **2393** A.L NIELSEN, J.A. ORTIZ, J. YOU, M. OULAD-ABDELGHANI, R. KHECHUMIAN, A. GANSMULLER, P. CHAMBON, and R. LOSSON :
Interaction with members of the heterochromatin protein 1 (HP1) family and histone deacetylation are differentially involved in transcriptional silencing by members of the TIF1 family.
EMBO J. (1999) **18**, 6385-6395.

11-B7 **2436** V. SAPIN, P. BOUILLET, M. OULAD-ABDELGHANI, B. DASTUGUE, P. CHAMBON, and P. DOLLE :
Differential expression of retinoic acid-inducible (Stra) genes during mouse placentation.
Mech. Develop. (2000) **92**, 295-299.

11-C7 **2437** V. SUBBARAYAN, M. MARK, N. MESSADEQ, P. RUSTIN*, P. CHAMBON, and P. KASTNER :
RXRα over-expression in cardiomyocytes causes dilated cardiomiopathy, but fails to rescue myocardial hypoplasia in RXRα null fetuses.
J. Clin. Invest. (2000) **105**, 387-394.

11-D7 **2461** O. WENDLING, C. DENNEFELD, P. CHAMBON, and M. MARK :
Retinoid signaling is essential for patterning the endoderm of the third and fourth pharyngeal arches.
Development (2000) **127**, 1553-1562.

11-E7 **2468** R. MOLLARD, S. VIVILLE, S.J. WARD, D. DECIMO, P. CHAMBON, and P. DOLLE
Tissue-specific expression of retinoic acid receptor isoform transcripts in the mouse embryo.
Mech. Develop. (2000) **94**, 223-232.

11-F7 **2472** W. BOURGUET, V. VIVAT, J.M. WURTZ, P. CHAMBON, H. GRONEMEYER, and D. MORAS :
Crystal structure of a heterodimeric complex of RAR and RXR ligand-binding domains.
Mol. Cell (2000) **5**, 289-298.

11-G7 **2475** S.MCGOWAN, S.K. JACKSON, M. JENKIS-MOORE, P. CHAMBON, and J.M. SNYDER :
Mice bearing targeted deletions of retinoic acid receptor demonstrate reduced in lung elastin and alveoolar numbers.
Amer. J. Respir. Cell. Molec. Biol. (2000) **23**, 162-167J.

11-H7 **2483** J. STIEN, S. ADAM-STITAH, T. RIEDL, J.M. EGLY, P. CHAMBON, and C. ROCHETTE-EGLY :
TFIIH interacts with the retinoic acid receptor gamma (RARγ) and phosphorylates its AF-1 activating domain through cdk7.
J. Biol. Chem., (2000) **275**, 21896-21904.

11-I7 **2489** F. CAMMAS, M. MARK, P. DOLLE, A. DIERICH, P. CHAMBON, and R. LOSSON :
Mice lacking the transcriptional corepressor TIF1β are defective in early postimplantation development.
Development (2000) **127**, 2955-2963.

11-J7 J. GUIBOURDENCHE, I. LAURENDEAU, C. ROCHETTE-EGLY, P. CHAMBON,
2495 M. VIDAUD, and D. EVAIN-BRION :
Retinoids stimulate leptin synthesis and secretion in human syncytiotrophoblast.
J. Clin. Endocrinol. Metab. (2000) **85**, 2550-2555.

11-K7 W. BOURGUET, V. ANDRY, C. ILTIS, B. KLAHOTZ, N. POTIER,
2497 A. VAN DORSSELAER, P. CHAMBON, H. GRONEMEYER, and D. MORAS :
Heterodimeric complex of RAR and RXR nuclear receptor ligand-bindingdomains: purification, crystallization and preliminary X-ray diffraction analysis.
Protein Express. (2000) **19**, 284-288.

11-L7 R. MOLLARD, N.G. GHYSELINCK, O. WENDLING, P.CHAMBON, and M. MARK :
2498 Stage-dependent responses of the developing lung to retinoic acid signaling.
Int. J. Develop. Biol. (2000) **44**, 457-462.

11-M7 R. ROMAND*, V. SAPIN*, N. GHYSELINCK, P. AVAN*, S. LE CALVEZ, P. DOLLE,
2499 M. MARK, and P. CHAMBON :
Spatio-temporal distribution of cellular retinoid binding protein gene transcripts in the developing and the adult cochlea. Morphological and functional consequences from CRABP- and CRBPI-null mutant mice.
Eur. J. Neurosci. (2000) **12**, 2793-2804.

11-N7 N.S.BROWN, A. SMART, V. SHARMA, M.L. BRINKMEIER*, L. GREENLEE,
2507 S.A. CAMPER, D.J. JENSEN, R.H. ECKEL, W. KREZEL, P. CHAMBON, and B.R. HAUGEN :
Thyroid hormone resistance and increased metabolic rate in the RXRγ deficient mouse.
J. Clin. Invest. (2000) **106**, 73-79.

11-O7 P.F. EGEA, A. MITSCHLER, N. ROCHEL, M. RUFF, P. CHAMBON, and D. MORAS :
2515 Crystal structure of the human RXRα ligand-binding domain bound to 9-cis retinoic acid.
EMBO J. (2000) **19**, 2592-2601.

11-P7 F. CAMMAS, J.M. GARNIER, P. CHAMBON, and R. LOSSON :
2517 Correlation of the exon/intron organization to the conserved domains of the mouse transcritional corepressor TIFβ.
Gene (2000) **253**, 231-235.

11-Q7 J.L. PLASSAT, L. PENNA, P. CHAMBON, and C. ROCHETTE-EGLY :
2518 The conserved amphipatic α-helicase core motif of RARγ and RARα activating domains, is indispensable for RA-induced differentiation of F9 cells.
J. Cell. Sci. (2000) **113**, 2887-2895.

11-R7 C. ROCHETTE-EGLY, J.L. PLASSAT, R. TANEJA, and P. CHAMBON :
2524 The AF-1 and AF-2 activating domains of retinoic acid receptor-α (RARα) and their phosphorylation are differentially involved in parietal endodermal differentiation of F9 cells and retinoid-induced expression of target genes.
Mol. Endocrinol. (2000) **14**, 1398-1410.

11-S7 E. KOPF, J.L. PLASSAT, H. DE THE, P. CHAMBON, and C. ROCHETTE-EGLY :
2531 Dimerization with retinoid X receptors and phosphorylation modulate the retinoic acid-induced degradation of retinoic acid receptor α and retinoic acid receptor γ through the ubiquitin-proteasome pathway.
J. Biol. Chem.(2000) **275**, 33280-33288.

11-T7 W. BOURGUET, V. ANDRY, C. ILTIS, B. KLAHOTZ, N. POTIER, A. VAN
2497 DORSSELAER, P. CHAMBON, H. GRONEMEYER, and D. MORAS :
Heterodimeric complex of RAR and RXR nuclear receptor ligand-binding domains: purification, crystallization and preliminaryX-ray diffraction analysis.
Protein Express. Purif. (2000) **19**, 284-288.

11-U7 H. CHIBA, P. CHAMBON, and D. METZGER :
2555 F9 embryonal carcinoma cells engineered for tamoxifen-dependent Cre-mediated site-directed mutagenesis and doxycycline-inducible gene expression.
Exp. Cell. Res. (2000) **260**, 334-339.

11-W7 F.J. DILWORTH, C. FROMENTAL-RAMAIN, K. YAMAMOTO, and P. CHAMBON :
2565 ATP-driven chromatin remodeling activity and histone acetyltransferases act sequentially during transactivation by RAR/RXR in vitro.
Mol. Cell (2000) **6**, 1049-1058.

11-X7 G. DE CARLO MASSARO, D. MASSARO, W.Y CHAN, L.B. CLERCH, N. GHYSELINCK,
2567 P. CHAMBON, and R.AS. CHANDRARATNA :
Retinoic acid receptor-β: an endogenous inhibitor of the perinatal formation of pulmonary alveoli.
Physiol. Genomics (2000) **4**, 51-57.

11-Y7 R. MOLLARD, N.G. GHYSELINCK, O. WENDLING, P.CHAMBON, and M. MARK :
2498 Stage-dependent responses of the developing lung to retinoic acid signaling.
Int. J. Dev. Biol. (2000) **44**, 457-462.

11-Z7 P. KASTNER, H.J. LAWRENCE, C. WALTZINGER, N. GHYSELINCK, P. CHAMBON,
2594 and S. CHAN :
Positive and negative regulation of granulopoiesis by endogenous RARα: implications for acute promyelocytic leukemia.
Blood (2001) **97**, 1314-1320.

11-A8 S. KERSTEN, S. MANDARD, N. SOON TAN, P. ESCHER, D. METZGER, P. CHAMBON,
2597 F.J. GONZALEZ, B. DESVERGNE, and W. WAHLI :
Characterization of the fasting-induced adipose factor FIAF, a novel peroxisome proliferator-activated receptor target gene.
J. Biol. Chem. (2000) **275**, 28488-28493.

11-B8 S. ABU-ABED, P. DOLLE, D. METZGER, B. BECKETT, P. CHAMBON, and
2617 M. PETKOVICH :
The retinoic acid-metabolizing enzyme, CYP26A1, is essential for normal hindbrain patterning, vertebral identity, and development of posterior structures.
Gene Develop. (2001) **15**, 226-240.

11-C8 M. ABRINK, J.A. ORTIZ, C. MARK, C. SANCHEZ, C. LOOMAN, L. HELLMAN,

2622 P. CHAMBON, and R. LOSSON :
Conserved interaction between distinct Krüppel-associated box domains and the transcriptional intermediary factor 1β.
Proc. Natl. Acad. Sci. (2001) **98**, 1422-1426.

11-D8 **2633** K. NIEDERREITHER, J. VERMOT, N. MESSADDEQ, B. SCHUHBAUR, P. CHAMBON, and P. DOLLE :
Embryonic retinoic acid synthesis is essential for heart morphogenesis in the mouse.
Development (2001) 128, 1019-1031.

11-E8 **2641** P.O. ANGRAND, F. APIOU, A.F. STEWART, B. DUTRILLAUX, R. LOSSON, and P. CHAMBON :
NSD3, a new SET domain-containing gene, maps to 8p12 and is amplified in human breast cancer cell lines.
Genomics (2001) **74**, 79-88.

11-G8 **2646** M. MORI, N. GHYSELINCK, P. CHAMBON, and M. MARK :
Systematic immunolocalization of retinoid receptors in developing and adult mouse eyes.
Invest. Ophtalmol. Visual. Sci. (2001) **42**, 1312-1318.

11-H8 **2661** J-S. SEELER, A. MARCHIO, R. LOSSON, J.M.P. DESTERRO, R.T. HAY, P. CHAMBON, and A. DEJEAN :
Common properties of the nuclear body protein SP100 and the TIF1α chromatin factors : the role of SUMO modification.
Mol. Cell. Biol. (2001) **21**, 3314-3324.

11-I8 **2663** P. DESREUMEAUX, L. DUBUQUOY, S. NUTTEN, M. PEUCHMAUR, W. ENGLARO, K. SCHOOJANS, B. DERIJARD, B. DESVERGNES, W. WAHLI, P. CHAMBON, M.D. LEIBOWITZ, J.F. COLOMBEL, and J. AUWERX :
Attenuation of colon inflammation activators of the retinoid X receptor (RXR)/peroxisome proliferator-activated receptor γ (PPARγ) heterodimer : a basis for new therapeutic strategies.
J. Exp. Med. (2001) **193**, 827-838.

11-J8 **2671** B. MASCREZ, M. MARK, W. KREZEL, V. DUPE, M. LEMEUR, N.B. GHYSELINCK, and P. CHAMBON :
Differential contributions of AF-1 and AF-2 activities to the developmental functions of RXRα.
Development (2001) **128**, 2049-2062.

11-L8 **2674** O. WENDLING, N.G. GHYSELINCK, P. CHAMBON, and M. MARK :
Roles of retinoic acid receptors in early embryonic morphogenesis and hindbrain patterning.
Development (2001) **128**, 2031-2038.

11-M8 **2718** R. BECKSTEAD, J.A. ORTIZ, C. SANCHEZ, S.N. PROKOPENKO, P. CHAMBON, R. LOSSON, and H.J. BELLEN :
Bonus, a Drosophila homomog of TIF1 proteins, interacts with nuclear receptors, and can inhibit βFTZ-F1-dependent transcription.
Mol. Cell. (2001) **4**, 753-765.

11-N8) **2708** R. ROMAND*, E. ALBUISSON*, K. NIEDERREITHER, V. FRAULOB, P. CHAMBON, and P. DOLLE :
Specific expression of the retinoic acid-synthesizing enzyme RALDH2 during mouse inner ear development.
Mech. Develop. (2001) **106**, 185-189.

11-O8 **2728** G. MACLEAN, S. ABU-ABED, P. DOLLE, A. TAHAYATO, P. CHAMBON and M. PETKOVICH
Cloning of a novel retinoic-acid metabolizing cytochrome P450, Cyp26B1, and comparative expression analysis with Cyp26A1 during early murine development.
Mech. Develop. (2001) **107**, 195-201.

11-P8 **2745** L. MICHALIK*, B. DESVERGNE*, S. BASU-MODAK*, P. ESCHER*, J. RIEUSSET*, N. SOON TAN*, J.M. PETERS*, G. KAYA*, F.J. GONZALEZ*, J. ZAKANY*, D. METZGER, P. CHAMBON, D. DUBOULE*, AND W. WAHLI* :
Impaired skin wound healing in PPARα and PPARβ mutant mice.
J. Cell Biol. (2001) **154**, 799-814.

12. ISOLATION OF A GENE WHOSE EXPRESSION IS SPECIFIC TO ESTROGEN-DEPENDENT BREAST CANCER AND OF A GENE SPECIFICALLY EXPRESSED IN INVASIVE BREAST CANCERS AND STOMACH CANCERS.

12-A **206** P. MASIAKOWSKI, R. BREATHNACH, J. BLOCH, F. GANNON, A. KRUST, and P. CHAMBON :
Cloning of cDNA sequences of hormone-regulated genes from the MCF-7 human breast cancer cell line.
Nucl. Acids Res. (1982) **10**, 7895-7903.

12-B **266** S.B. JAKOWLEV, R. BREATHNACH, J.M. JELTSCH, P. MASIAKOWSKI, and P. CHAMBON :
Sequence of the pS2 mRNA induced by estrogen in the human breast cancer cell line MCF-7.
Nucl. Acids Res. (1984), **12**, 2861-28-78.

12-C **261** P. CHAMBON, A. DIERICH, M.P. GAUB, S. JAKOWLEV, J. JONGSTRA, A. KRUST,J.P. LePENNEC, P. OUDET, and T. REUDELHUBER :
Promoter elements of genes coding for proteins and modulation of transcription by oestrogens and progesterone.
"Recent Progress of Hormone Research", Proceedings of the Laurentian Hormone Conference, (1984)(Ed. R.O. Greep)
Academic Press, Vol. **40**, pp. 1-42.

12-D **274** A.M.C. BROWN, J.M. JELTSCH, M. ROBERTS, and P. CHAMBON :
Activation of pS2 gene transcription is a primary response to estrogen in the human breast cancer cell line MCF-7.
Proc. Natl. Acad. Science, USA (1984) **81**, 12915-12924.

12-E **467** J.M. JELTSCH, M. ROBERTS, C. SCHATZ, J.M. GARNIER, A.M.C. BROWN, and P. CHAMBON :
Structure of the human oestrogen-responsive gene pS2.
Nucl. Acids Res. (1987) **15**, 1401-1414.

12-F **484** A.M. NUNEZ, S. JAKOWLEV, J.P. BRIAND, M. GAIRE, A. KRUST, M.C. RIO, and P. CHAMBON :
Characterization of the oestrogen-induced pS2 protein secreted by the human breast cancer cell line MCF-7.
Endocrinology (1987) **121**, 1759-1765.

12-G **533** M.C. RIO, J.P. BELLOCQ, B. GAIRARD, U.B. RASMUSSEN, A. KRUST, C. KOEHL, H. CALDEROLI, V. SCHIFF, R. RENAUD, and P. CHAMBON :
Specific expression of the pS2 gene in subclasses of breast cancers in

comparison with expression of the oestrogen and progesterone receptors and the oncogene erbB-2.
Proc. Natl. Acad. Sci. USA (1987) **84**, 9243-9247.

12-H **604** M.C. RIO, J.P. BELLOCQ, J.Y. DANIEL, C. TOMASETTO, R. LATHE, M.P. CHENARD, A. BETZENSCHLAGZER, and P. CHAMBON :
Breast cancer estrogen-induced pS2 protein is synthesize and secreted by normal stomach mucosa.
Science (1988) **241**, 705-707.

12-I **644** M.C. RIO, P. LEPAGE, P. DIEMUNSCHE, C. ROITSCH, and P. CHAMBON :
Sructure primaire de la protéine humaine pS2.
Comptes Rendus de l'Académie des Sciences (1988) **307**, 825-831.

12-J **649** M. BERRY, A.M. NUNEZ, and P. CHAMBON :
The estrogen-responsive element of the human pS2 gene is an imperfectly palindromic sequence.
Proc. Natl. Acad. Sci. USA (1989) **86**, 1218-1222.

12-K **652** A.M. NUNEZ, M. BERRY, J.L. IMLER, and P. CHAMBON :
The 5' flanking region of the pS2 gene contains a complex enhancer region responsive to oestrogens, epidermal growth factor, a tumor promoter (TPA), the c-Ha-ras oncoprotein and the c-jun protein.
EMBO J. (1989) **8**, 823-829.

12-L **747** Y. LUQMANI, C. BENNETT, I. PATERSON, C.M. CORBISHLEY, M.C. RIO, P. CHAMBON, and G. RYALL :
Expression of the pS2 gene in normal, benign and neoplastic human stomach.
Int. J. Cancer (1989) **44**, 806-812.

12-M **700** C. TOMASETTO, C. WOLF, M.C. RIO, M. MEHTALI, M. LEMEUR, P. GERLINGER, P. CHAMBON, and R. LATHE :
Breast cancer PS2 protein synthesis in mammary gland of transgenic mice and secretion into milk.
Mol. Endocrinol. (1989) **3**, 1579-1584.

12-N **763** C. TOMASETTO, M.C. RIO, C. GAUTIER, C. WOLF, M. HAREUVENI,P. CHAMBON, and R. LATHE :
hSP, the domain-duplicated homolog of pS2 protein, is coexpressed with pS2 in stomach but not in breast carcinoma.
EMBO J. (1990) **9**, 407-414.

12-O **782** J.A. FOEKENS, M.C. RIO, P. SEGUIN, W.L.J. VAN PUTTEN, J. FAUQUE, M. NAP, J.G.M. KLIJN, and P. CHAMBON :
Prediction of relapse and survival in breast cancer patients by pS2 protein status.
Cancer Res. (1990) **50**, 3832-3837.

12-P **828** M.C. RIO, M.P. CHENARD, C. WOLF, L. MARCELLIN, C. TOMASETTO, R. LATHE, J.P. BELLOCQ, and P. CHAMBON :
The induction of pS2 ad hsp genes as markers of mucosal ulceration of human the digestive tract.
Gastroenterology (1991) **100**, 375-379.

12-Q **873** P. BASSET, J.P. BELLOCQ, C. WOLF, I. STOLL, P. HUTIN, J.M. LIMACHER, O.L. PODHAJCER, M.P. CHENARD, M.C. RIO, and P. CHAMBON :
A novel metalloproteinase gene specifically expressed in stromal cells of breast carcinomas.
Nature (1990) **348**, 699-704.

12-R **881** L.H. SCHWARTZ, F.C. KOERNER, S.M. EDGERTON, K. CONVERY, J.M. SAWICKA, M.C. RIO, J.P. BELLOCQ, P. CHAMBON, and A.D. THOR :
pS2 expression correlates with response to hormonal therapy in patients with advanced breast cancer.
Cancer Res. (1991) **51**, 624-628.

12-S **886** N.A. WRIGHT, R. POULSOM, G.W.H. STAMP, P.A. HALL, R.E. JEFFERY, J.M. LONGCROFT, M-C. RIO, and P. CHAMBON :
Epidermal growth factor (EGF/URO) induces expression of regulatory peptides in damaged human gastrointestinal tissues.
J. Pathology. (1990) **162**, 279-284.

12-T **980** B. THEISINGER, C. WELTER, G. SEITZ, M.C. RIO, R. LATHE, P. CHAMBON, and N. BLIN :
Expression of the breast cancer associated of the pS2 gene and the pancreatic spasmolytic polypeptide gene (hSP) in diffuse type of stomach carcinoma.
Eur. J. Cancer (1991) **6**, 770-773.

12-U **1016** G. SEITZ, B. THELSINGER, G. TOMASETTO, M.C. RIO, P. CHAMBON, N. BLIN, and G. WELTER :
Breast cancer-associated protein pS2 expression in tumors of the biliary tract.
Amer. J. Gastroenterol. (1991) **86**, 1491-1494.

12-V **1072** N.A. WRIGHT, R. POULSOM, G. STAMP, S.V. NORDEN, C. SARRAF, G. ELIA, D. AHNEN, R. JEFFERY, J. LONGCROFT, C. PIKE, M.C. RIO, and P. CHAMBON :
Trefoil peptide gene expression in gastrointestinal epithelial cells in inflammatory bowel disease.
Gastroenterology (1993) **104**, 12-20.

12-W **1094** C. WOLF, M.P. CHENARD, P. DURAND DE GROSSOUVRE, J.P.BELLOCQ, P. CHAMBON, and P. BASSET :
Breast cancer-associated stromelysin-3 gene is expressed in basal cell carcinoma and during cutaneous wound healing.
J. Invest. Dermatol. (1992) **99**, 870-872.

12-X **1120** D. MULLER, C. WOLF, J. ABECASSIS, R. MILLON, A. ENGELMANN, G. BRONNER, N. ROUYER, M.C. RIO, M. EBER, G. METHLIN, P. CHAMBON, and P.BASSET :
Increased stromelysin-3 gene expression is associated with increased local invasiveness in head and neck squamous cell carcinomas.
Cancer Res. (1993) **53**, 165-169.

12-Y **1169** C. WOLF, N. ROUYER, Y. LUTZ, C. ADIDA, M. LORIOT, J.P. BELLOCQ, P. CHAMBON, and P. BASSET :
Stromelysin-3 belongs to a subgroup of proteinases expressed in breast carcinoma fibroblastic cells and possibly implicated in tumor progression.
Proc. Natl. Acad. Sci. USA (1993) **90**, 1843-1847.

12-Z **1204** G. MURPHY, J.P. SEGAIN, M. O'SHEA, M. COCKETT, C. IOANNOU, O. LEFEBVRE, P. CHAMBON, and P. BASSET :
The 28 kDa N-terminal domain of stromelysin-3 has the general properties of a weak metalloproteinase.
J. Biol. Chem. (1993) **268**, 15435-15441.

12-A1 **1182** C. WELTER, B. THEISINGER, G. SEITZ, M.C RIO, C. TOMASETTO, P.CHAMBON, and N. BLIN :
Association of the human spasmolytic polypeptide and an estrogen-induced breast cancer protein (pS2) with human pancreatic carcinoma.
Lab. Investigation (1992) **66**, 187-192.

12-B1 **1220** O. LEFEBVRE, C. WOLF, M. KEDINGER, M.P. CHENARD, C. TOMASETTO, P. CHAMBON, and M.C. RIO :

The mouse one P-domain (pS2) and two P-domain (mSP) genes exhibit distinct patterns of expression.
J. Cell. Biol. (1993) **122**, 191-198.

12-C1 **1239** U.B. RASMUSSEN, C. WOLF, M.G. MATTEI, M.P. CHENARD, J.P.BELLOCQ, P. CHAMBON, M.C. RIO, and P. BASSET :
Identifcation of a new interferon-α inducible gene (p27) on human chromosome 14q32 and its expression in breast carcinoma.
Cancer Res. (1993) **53**, 4096-4101.

12-D1 **1327** F. SPYRATOS, C. ANDRIEU, K. HACENE, P. CHAMBON, and M.C. RIO :
PS2 and response to adjuvant hormone therapy in primary breast cancer.
British J. Cancer (1994) **69**, 394-397.

12-E1 **1463** O.L. PODHAJCER, C. WOLF, O. LEFEBVRE, J.P. SEGAIN, N. ROUYER, I. STOLL, M.C. RIO, P. CHAMBON, and P. BASSET :
Comparative expression of the SPARC and stromelysin-3 genes in mammary tumours.
The Breast (1996) **5**, 13-20

12-F1 **1438** H. PORTE, E. CHASTRE, S. PREVOT, B. NORDLINGER, S. EMPEREUR, P. BASSET, P. CHAMBON, and C. DESPACH :
Neoplastic progression of human colorectal cancers is associated with overexpression of the ST3 and BM-40/SPARC genes.
Int. J. Cancer (1995) **64**, 70-75.

12-G1 **1456** D.J. AHNEN, R. POULSOM, G.W.H STAMP, G. ELIA, C. PIKE, R. JEFFERY, J. LONGCROFT, M.C. RIO, P. CHAMBON, and N. WRIGHT:
The ulceration-associated cell lineage (UACL) reiterates the Brunner's gland differentiation programme but acquires the proliferative organization of the gastric gland.
J. Pathol. (1994) **173**, 317-326.

12-H1 **1469** A. OKADA, J.P. BELLOCQ, N. ROUYER, M.P. CHENARD, M.C. RIO, P. CHAMBON, and P. BASSET :
Membrane-type matrix metalloproteinase (MT-MMP) gene is expressed in stromal cells of human colon, breast, and head and neck carcinomas.
Proc. Natl. Acad. Sci. (1995) **92**, 2730-2734.

12-I1 O. LEFEBVRE, C. REGNIER, M.P. CHENARD, C. WENDLING, P. CHAMBON, P. **1487** BASSET, and M.C. RIO :
Developmental expression of mouse stromelysin-3 mRNA.
Development (1995) **121**, 947-955.

12-J1 **1771** O. LEFEBVRE, M.P. CHENARD*, R. MASSON, J. LINARES, A. DIERICH, M. LEMEUR, C. WENDLING, C. TOMASETTO, P. CHAMBON, and M.C. RIO :
Gastric mucosa abnormalities and tumorigenesis in mice lacking the pS2 trefoil protein.
Science (1996) **274**, 259-262.

13. ANTI-TUMOR VACCINE

13-A **431** R. LATHE, M.P. KIENY, P. GERLINGER, P. CLERTANT, I. GUIZANI, F.CUZIN, and P. CHAMBON :
Tumor prevention and rejection with recombinant vaccinia.
Nature (1987) **326**, 878-880.

13-B R. LATHE, M.P. KIENY, P. GERLINGER, I. GUIZANI, P. CLERTANT, F.CUZIN

439 and P. CHAMBON :
Polyoma tumor antigens expressed from vaccinia virus: a model for tumor immunity.
Vaccines 87", F. Brown, Ed., Cold Spring Harbor Lab. (1987), pp 425-430.

13-C **737** G. MENEGUZZI, M.P. KIENY, J.P. LECOCQ, P. CHAMBON, F. CUZIN, and R. LATHE :
Vaccinia recombinants expressing early bovine papilloma virus (BPV1) proteins : retardation of BPV1 tumor development.
Vaccine (1990) **8**, 199-204.

13-D **868** M. HAREUVENI, C. GAUTIER, M-P. KIENY, D. WRESCHNER, P. CHAMBON, and R. LATHE :
Vaccination against tumor cells expressing breast cancer epithelial tumor antigen.
Proc. Natl. Acad. Sci. USA (1990) **87**, 9498-9502.

13-E **931** M. HAREUNEVI, D WRESCHNER, M-P. KIENY, K.DOTT, C. GAUTIER, C. TOMASETTO, I. KEYDAR, P. CHAMBON, and R. LATHE :
Secreted and transmembrane forms of breast cancer-associated epithelial tumor antigen (ETA) expressed from recombinant vaccinia.
Vaccine (1991) **9**, 618-626.

14. ROLE OF HOMEOGENES IN EMBRYOGENESIS

14-A **970** T. LUFKIN, A. DIERICH, M. LEMEUR, M. MARK, and P. CHAMBON :
Disruption of the Hox-1.6 homeobox gene results in defects in a region corresponding to its rostral domain of expression.
Cell (1991) **66**, 1105-1119.

14-B **1127** T. LUFKIN, M. MARK, C.P. HART, P. DOLLE, M. LEMEUR, and P. CHAMBON :
Homeotic transformation of the occipital bones of the skull by ectopic expression of a homeobox gene.
Nature (1992) **359**, 835-841.

14-C **1215** P. DOLLE, T. LUFKIN, R. KRUMLAUF, M. MARK, D. DUBOULE, and P. CHAMBON :
Local alterations of *Krox-20* and *Hox* gene expression in the hindbrain suggest loss of rhombomeres 4 and 5 in homozygote null Hoxa-1.6 (Hox-1.6) mutant embryos.
Proc. Natl. Acad. Sci., (1993) **90**, 7666-7670

14-D **1251** M. MARK, T. LUFKIN, J.L. VONESCH, E. RUBERTE, J.C. OLIVO, P. DOLLE, P. GORRY, A. LUMSDEN, and P. CHAMBON :
Two rhombomeres are altered in *Hoxa-1* mutant mice.
Development (1993) **119**, 319-338..

14-E **1268** P. DOLLE, A. DIERICH, M. LEMEUR, T. SCHIMMANG, B. SCHUHBAUR, P.CHAMBON, and D. DUBOULE :
Disruption of the *Hoxd-13* genes induces localized heterochrony leading to mice with neotenic limbs.
Cell (1993) **75**, 431-441.

14-F **1294** F.M. RIJLI, M. MARK, S. LAKKARAJU, A. DIERICH, P. DOLLE, and P.CHAMBON:
A homeotic transformation is generated in the rostral branchial region of the head by disruption of Hoxa-2, which acts as a selector gene.
Cell (1993) **75**, 1333-1349.

14-G **1375** M. MARK, F.M. RIJLI, T. LUFKIN, P. DOLLE, P. GORRY, and P. CHAMBON :
Hox gene function and the development of the head.
In"Neural Cell Specification: Molecular Mechanisms and Neurotherapeutic Implications" B. Juurlinck, W. Kulyk, P. Krone, R. Doucette, eds. Plenum Press, New-York.(1995) pp.3-16.

14-H **1405** F.M. RIJLI, P. DOLLE, V. FRAULOB, M. LEMEUR, and P. CHAMBON :
Insertion of a targeting construct in a *Hoxd-10* allele results in abnormal *Hoxd-9* expression pattern.
Dev. Dynamics (1994) **201**, 366-377.

14-I **1433** B. FAVIER, M. LEMEUR, P. CHAMBON, and P. DOLLE :
Axial skeleton homeosis and forelimb malformations in *Hoxd-11* mutant mice.
Proc. Natl. Acad. Sci. (1995) **92**, 310-314.

14-J **1528** D. METZGER, J. CLIFFORD, H. CHIBA, and P. CHAMBON :
Conditional site-specific recombination in mammalian cells using a ligand-dependent chimeric Cre recombinase.
Proc. Natl. Acad. Sci. (1995) **92**, 6991-6995.

14-K **1564** F. RIJLI, R. MATYAS, M. PELLEGRINI, A. DIERICH, P. GRUSS, P. DOLLE, and P. CHAMBON :
Cryptorchidism and homeotic transformations of spinal nerves and vertebrae in Hoxa-10 mutant mice.
Proc. Natl. Acad. Sci. (1995) **92**, 8185-8189.

14-L **1628** B. FAVIER, F.M. RIJLI, C. FROMENTAL-RAMAIN, V. FRAULOB, P. CHAMBON, and P. DOLLE :
Functional cooperation between the non-paralogous genes Hoxa-10 and Hoxa-11 inthe developing forelimb and axial skeleton.
Development (1996) **122**, 449-460.

14-M **1629** C. FROMENTAL-RAMAIN, X. WAROT, S. LAKKARAJU, B. FAVIER, H. HAACK, C. BIRLING, A. DIERICH, P. DOLLE, and P. CHAMBON :
Specific and redundant functions of the paralogous *Hoxa-9* and *Hoxd-9* genes in forelimb and axial skeleton patterning.
Development (1996) **122**, 461-472.

14-N **1706** R. TANEJA, B. THISSE, F. RIJLI, C. THISSE, P. BOUILLET, P. DOLLE, and P. CHAMBON :
The expression pattern of the mouse receptor tyrosine kinase gene MDK1 is conserved through evolution and requires Hoxa-2 for rhombomere-specific expression in mouse embryos.
Develop. Biol. (1996) **177**, 397-412.

14-O **1735** M. GERARD, J-Y CHEN, H. GRONEMEYER, P. CHAMBON, D. DUBOULE, and J. ZAKANY :
In vivo targeted mutagenesis of a regulatory element required for positioning the *Hoxd-11* and *Hoxd-10* expression boundaries.
Gene Develop. (1966) **10**, 2326-2334.

14-P **1745** C. FROMENTAL-RAMAIN, X. WAROT, N. MESSADEQ, M. LEMEUR, P. DOLLE, and P. CHAMBON :
Hoxa-13 and *Hoxd-13* play a crucial role in the patterning of the limb autopod.
Development (1996) **122**, 2997-3011.

14-Q **1978** A. GAVALAS, M. DAVENNE, A. LUMSDEN, P. CHAMBON, and P. RIJLI :
Role of *Hoxa-2* in axon pathfinding and rostral hindbrain patterning.
Development (1997) **124**, 3693-3702.

14-R **2010** X. WAROT, C. FROMENTAL-RAMAIN, V. FRAULOB, P. CHAMBON, and P. DOLLE :
Gene dosage-dependent effects of the *Hoxa-13* and *Hoxd-13* mutations on morphogenesis of the terminal parts of the digestive and urogenital tracts.
Development (1997) **124**, 4781-4791.

14-S **2062** A. GAVALAS, M. STUDER, A. LUMSDEN, F.M. RIJLI, R. KRUMLAUF, and P. CHAMBON :
Hoxa1 and *Hoxb1* synergize in patterning the hindbrain, cranial nerves and second pharyngeal arch.
Development (1998) **125**, 1123-1136.

14-T **2063** M. STUDER, A. GAVALAS, H. MARSHALL, L. ARIZA-MCNAUGHTON, F.M. RIJLI, P. CHAMBON, and R. KRUMLAUF :
Genetic interactions between Hoxa1 and Hoxb1 reveal new roles in regulation of early hindbrain patterning.
Development (1998) **125**, 1025-1036.

14-U **2021** P.M. RIJLI, A. GAVALAS, and P. CHAMBON :
Segmentation and specification in the branchial region of the head: the role of the *HOX* selector gene.
Int. J. Dev. Biol. (1998) **42**, 398-401.

14-V **2246** F. HELMBACHER, C. PUJADES, C. DESMARQUET, M. FRAIN, P.M. RIJLI, P. CHAMBON, and P. CHARNAY :
Hoxa1 and *Krox-20* synergize to control the development of rhombomere 3.
Development (1998) **125**, 4739-4748.

14-W **2289** M. DAVENNE, M.K. MACONOCHIE*, R. NEUN, A. PATTYN, P. CHAMBON, R. KRUMLAUF and F.M RIJLI.
Hoxa2 and *Hoxb2* control dorsoventral patterns of neuronal development in the rostral hindbrain.
Neuron (1999) **22**, 677-691.

14-X **2681** E. VAN DEN AKKER, C. FROMENTAL-RAMAIN, H. LE MOUELLIC, P. BRULET, P. CHAMBON, AND J. DESCHAMPS :
Axial skeletal patterning in mice lacking all paralogous group 8 Hox genes.
Development (2001) **128**, 1911-1921.

15. SITE-DIRECTED SPATIO-TEMPORALLY-CONTROLLED SOMATIC MUTAGENESIS

15-A **1528** D. METZGER, J. CLIFFORD, H. CHIBA, and P. CHAMBON :
Conditional site-specific recombination in mammalian cells using a ligand-dependent chimeric Cre recombinase.
Proc. Natl. Acad. Sci. (1995) **92**, 6991-6995.

15-B **1744** R. FEIL, J. BROCARD, B. MASCREZ, M. LEMEUR, D. METZGER, and P. CHAMBON:
Ligand-actived site-specific recombination in mice.
Proc. Natl. Acad. Sci. (1996) **98**, 10887-10890.

15-C **1963** R. FEIL, J. WAGNER, D. METZGER, and P. CHAMBON :
Regulation of Cre recombinase activity by mutated oestrogen receptor ligand-binding domains.
Biochem. Biophys. Res. Commun. (1997) **237**, 752-757.

15-D **2042** J. BROCARD, X. WAROT, O. WENDLING, N. MESSADDEQ, J.L. VONESCH, P. CHAMBON, and D. METZGER :
Spatio-temporally controlled site-specific somatic mutagenesis in the mouse.
Proc. Natl. Acad. Sci. (1997) **94**, 14559-14563.

15-E **2111** P. CHAMBON, J. BROCARD, N. MESSADDEQ, D. METZGER, J.L. VONESCH, X. WAROT, and O. WENDLING :
Engineering spatio-temporally-controlled somatic mutations in the mouse skin.
In "Excerpta Medica International Congress Series". Symposium on skin:interface of a living system.
Elsevier Science H. Tagami, J.A. Parrish, T. Ozawa, eds. (1998) PP.11-19.

15-F P. CHAMBON :

2059 The new mouse genetics: progress in engineering spatio-temporally-controlled somatic mutations.
Mechanism of control of transcription by nuclear receptors.
In " International Bone Forum" Yokohama Meeting (1997) PP.6-11.

15-G J. BROCARD, R. FEIL, P. CHAMBON, and D. METZGER :
2166 A chimeric Cre recombinase inducible by synthetic, but not by natural ligands of the glucocorticoid receptor.
Nucl. Acids Res., (1998) **26**, 4086-4090.

15-H P. CHAMBON :
2232 Mutagenèse somatique sous contrôle spatio-temporel chez la souris.
6ème Symposium de Génétique Humaine à Paris les 15 et 16 mai 1998.
Path. Biol. (1998) **46**, 671-673.

15-I A.K. INDRA, X. WAROT, J. BROCARD, J.M. BORNERT, J.H. XIAO, P. CHAMBON,
2399 and D. METZGER :
Temporally-controlled site-specific mutagenesis in the basal layer of the epidermis: comparison of the recombinase activity of the tamoxifen-inducible Cre-ER^{T} and Cre-ER^{T2} recombinases.
Nucl. Acid. Res. (1999) **27**, 4324-4327.

15-J T. IMAI, P. CHAMBON, and D. METZGER :
2404 Inducible site-specific somatic mutagenesis in mouse hepatocytes.
Genesis (2000) **26**, 147-148.

15-K D. METZGER, and P.CHAMBON :
2506 Site-and time-specific gene targeting in the mouse.
Methods (2001) **24**, 71-80.

15-L M. LI, A.K. INDRA, X. WAROT, J. BROCARD, N. MESSADDEQ, S. KATO,
2543 D. METZGER, and P. CHAMBON :
Skin abnormalities generated by temporally-controlled RXRα mutations in adult mouse epidermis.
Nature (2000) **407**, 633-636.

15-M T. IMAI, M. JIANG, P. CHAMBON, and D. METZGER :
2595 Impaired adipogenesis and lipolysis in the mouse upon selective ablation of the retinoid X receptor α mediated by a tamoxifen-inducible chimeric Cre recombinase (Cre-ER^{T2}) in adipocytes.
Proc. Natl. Acad. Sci. (2001) **98**, 224-228.

15-N S. KÜHBANDNER, S. BRUMMER, D. METZGER, P. CHAMBON, F. HOFMANN, and
2593 R. FEIL :
Temporally controlled somatic mutagenesis in smooth muscle.
Genesis (2000) **28**, 15-22.

15-O S. BULTMAN*, T. GEBUHR*, D. YEE*, C. LA MANTIA*, J. NICHOLSON*,
2608 A.C. GILLIAM*, F. RANDAZZO*, D. METZGER, P. CHAMBON, G. CRABTREE*, and T. MAGNUSON* :
A *Brg1* null mutation in the mouse reveals functional differences among mammalian SWI/SNF complexes.
Mol. Cell. (2000) **6**, 1287-1295.

15-P **2621** M. LI, H. CHIBA, X. WAROT, N. MESSADDEQ, C. GERARD, P. CHAMBON, and D. METZGER :
RXRα ablation in skin keratinocytes result in alopecia and epidermal alterations.
Development (2001) **128**, 675-688.

15-Q **2623** L. VALLIER, J. MANCIP, S. MARKOSSIAN*, A. LUKASZEWICZ, C. DEHAY, D. METZGER, P. CHAMBON, J. SAMARUT, and P.SAVATIER :
An efficient system for conditional gene expression in embryonic stem cells and in their *in vitro* and *in vivo* differentiated derivatives.
Proc. Natl. Acad. Sci. (2001) **98**, 2467-2472

15-R **2672** T. IMAI, M. JIANG, P. KASTNER, P. CHAMBON, and D. METZGER :
Selective ablation of retinoid X receptor α in hepatocytes impairs their lifespan and regenerative capacity.
Proc. Natl. Acad. Sci. (2001) **98**, 4581-4586.

15-S **2707** A. RANGARAJAN, C. TALORA, R. OKUYAMA, M. NICOLAS, C. MAMMUCARI, H. OH, J. C. ASTER, S. KRISHNA, D. METZGER, P. CHAMBON, L. MIELE, M. AGUET, F. RADTKE, and G. P. DOTTO :
Notch signaling is a direct determinant of keratinocyte growth arrest and entry into differentiation.
EMBO (2001) **13**, 3427-3436.

15-T **2638** A.K. INDRA, M. LI, X. WAROT, J. BROCARD, J.M. BORNERT, C. GERARD, N. MESSADDEQ, P. CHAMBON, and D. METZGER :
Targeted somatic mutagenesis in mouse epidermis.
Hormone Res. (2001), in press.

Pierre CHAMBON

REVIEW ARTICLES

R52 STRUCTURAL AND FUNCTIONAL PROPERTIES OF THREE MAMMALIAN NUCLEAR DNA- DEPENDENT RNA POLYMERASES.
5th Karolinska Symposium, Stockholm, Sweden
Acta Endocrinol. Vol. **168**, 1972, pp. 222-246.
(in collaboration with: F. Gissinger, C. Kédinger, J.L. Mandel, M. Meilhac and P. Nuret)

R66 EUKARYOTIC RNA POLYMERASES.
"The Enzymes", Vol. **X**, 1974, pp. 261-331.
Ed. P.D. Boyer, Academic Press, New York.

R70 ANIMAL NUCLEAR DNA-DEPENDENT RNA POLYMERASES.
"The Cell Nucleus", Vol. **III**, 1974, pp. 269-308.
Ed. H. Busch, Academic Press, New York.

R74 EUKARYOTIC RNA POLYMERASES.
"Annual Review of Biochemistry", Vol. **44**, 1975, pp. 613-633.
Eds. Ann. Rev. Inc., Palo Alto, California, USA.

R108 CHROMATIN 1977: STRUCTURE AND FUNCTION.
Molecular Biology of eukaryotic genome is coming of age :
Summary of the 42nd Cold Spring Harbor Symp. on Quantitative Biology.
CSHSQB, Vol. **42**, 1977, pp. 1209-1234.
Ed. Cold Spring Harbor Laboratory, New York.

R111 THE OVALBUMIN GENE : AN AMAZING GENE IN 8 PIECES.
Trends in Biochemical Sciences, Vol. **3**, 1978, pp. 244-247.
(in collaboration with: P. Kourilsky)

R131 STRUCTURE OF TRANSCRIBING CHROMATIN.
"Progress in Nucleic Acids Res. and Molecular Biology", Vol **24**
1980, pp. 1-55. Ed. W. Cohn, Academic Press, New York.

R158 ORGANIZATION AND EXPRESSION OF EUKARYOTIC PROTEIN-CODING NUCLEAR SPLIT GENES.
"Annual Review of Biochemistry", Vol. **50**, 1981, pp. 349-383.
Eds. Ann. Rev. Inc., Palo Alto, California, USA.

R165a SPLIT GENES.
"Scientific American", Vol. **244**, 1981, pp 60-71.

R165b LES GENES EN MOSAIQUE.
"Pour la Science" (1981), **45**, pp 68-81.

R261 PROMOTER ELEMENTS OF GENES CODING FOR PROTEINS AND MODULATION OF TRANSCRIPTION BY OESTROGENS AND PROGESTERONE.
"Recent Progress in Hormone Research - Proceeding of the Laurentian Hormone Conference", Vol. **40** (Ed. R.O. Greep) 1984, Acad. Press, pp. 1-42.

R406 CHEMICAL SYNTHESIS OF OLIGONUCLEOTIDES: THE SEGMENTED PAPER METHOD: DNA SYNTHESIS AND MUTAGENESIS BY RAPID MICROSCALE "SHOTGUN GENE SYNTHESIS".
"Methods in Enzymology - Recombinant DNA", R. Wu, Ed., Academic Press, N.Y., 1987, Vol. **154**, pp. 250-287.
(in collaboration with H. Matthes and A. Staub)

R446 THE SV40 EARLY PROMOTER.
"Molecular Aspects of the Papovavirus", Y. Aloni Ed., Martinus

Nijhoff, Pays-Bas, 1987, pp. 53-83.
(in collaboration with M. Zenke and A. Wildeman)

R449 LA REVOLUTION GENETIQUE.
"Recherche Médicale, Santé, Société", Colloque organisé à l'occasion du XXème anniversaire de l'INSERM, Paris-Sorbonne, 1984. Edition de l'INSERM, pp. 41-49.

R466 A SUPERFAMILY OF POTENTIALLY ONCOGENIC HORMONE RECEPTORS.
Nature, 1986 **324**, 615-617.
(in collaboration with S. Green)

R469 STRUCTURE AND FUNCTION OF STEROID HORMONE RECEPTORS.
"Oncogenes and Hormones in Breast Cancer", M. Sluyser, Ed., E.Horwood Ltd. Publishers, 1987, pp. 7-28.
(in collaboration with S. Green and H. Gronemeyer)

R483 FUNCTIONAL ANALYSIS OF THE HUMAN ESTROGEN RECEPTOR.
Proceedings of the UCLA Symposium on Growth Regulation of Cancer and on Steroid Hormone Action, Alan R. Liss, Inc. (1988) Vol. **75**, pp. 237-246.
(in collaboration with V. Kumar, S. Green, M. Berry and G. Stack)

R503 STRUCTURE AND FUNCTION OF THE pS2 GENE AND ESTROGEN RECEPTOR IN HUMAN BREAST CANCER CELLS.
"Breast Cancer: Cellular and Molecular Biology" (Cancer Treatment and Research Series), Ed. M. Lippman, Martinus Nijhoff Publishing Co., Boston,USA, (1988) pp. 185-206.
(in collaboration with G. Stack, V. Kumar, M. Ponglikitmongkol, M. Berry, M.C. Rio, A.M. Nunez, M. Roberts, C. Koehl, P. Bellocq, B. Gairard, R. Renaud).

R504 THE OESTROGEN RECEPTOR : STRUCTURE AND FUNCTION.
Molecular Mechanism of Steroid Hormone Action : Recent Advances II,V.K. Moudgil, Ed., Walter de Gruyter, Berlin, (1987), pp. 161-183.
(in collaboration with S. Green, V. Kumar and A. Krust).

R522 STRUCTURE AND FUNCTION OF THE OESTROGEN RECEPTOR AND OTHER MEMBERS OF THE NUCLEAR RECEPTOR FAMILY.
Steroid Receptors and Disorders : Cancer, Bone and Circulatory Discorders, Sheridan, Blum,Trachtenberg, Eds., Marcel Dekker Inc., New York, (1988), pp. 153-189 (in collaboration with H. Gronemeyer, S. Green, V. Kumar and J.M. Jeltsch).

R535 STRUCTURE AND FUNCTION OF THE OESTROGEN AND PROGESTERONE RECEPTORS.
Progress in Cancer Research and Therapy, 3rd International Congress on Hormones and Cancer. Hamburg sept. 87. Raven Press, N.Y. Eds. J.P. Renaud, F. Presciani, R.J.B. King and M.E. Lippman. (1988) Vol. **35**, pp. 34-38.
(in collaboration with H. Gronemeyer, M. Berry, M.T. Bocquel, J. Eul, S. Green, J.M. Jeltsch, Z. Krozowski, A. Krust, V. Kumar, M.E. Meyer, G. Stack, C. Stricker and B. Turcotte)

R563 THE NUCLEAR RECEPTOR FAMILY : CLONING, STRUCTURE AND FUNCTION.
In "Affinity Labelling and cloning of steroid and thyroid hormone receptors : techniques, application and functional analysis", H. Gronemeyer (Ed.), Ellis Horwood Publ. (1988), pp. 252-297.
(in collaboration with H. Gronemeyer, S. Green, J.M. Jeltsch, V. Kumar, and A. Krust)

R595 THE USE OF CHIMERIC PROTEINS TO STUDY TRANSCRIPTIONAL REGULATORY FACTORS.
Proceedings of the UCLA Symposium on DNA-Protein Interactions in Transcription, Alan R. Liss, Inc. (1989) **95**, pp. 125-150.

(in collaboration with S. Green, N. Webster, J.R. Jin).

R615 NUCLEAR RECEPTORS ENHANCE OUR UNDERSTANDING OF TRANSCRIPTION REGULATION.
Trends in Genetics (1988), **4**, 309-314.
(in collaboration with S. Green).

R645 FUNCTIONAL DOMAINS OF STEROID HORMONE RECEPTORS.
In "Molecular Mechanisms and Consequences of Activation of Hormone and Growth Factor Receptors". M.N. Alexis and C.E. Sekeris (Eds.), Kluwer Academic Publ. (1990) **295**, 203-211.
(in collaboration with H. Gronemeyer, V. Kumar, S. Green, M.T. Bocquel, L. Tora, M.E. Meyer, J. Eul).

R646 FUNCTIONAL DOMAINS OF STEROID HORMONE RECEPTORS.
In "The Steroid/Thyroid Hormone Receptor Family and Gene Regulation". Proceedings of the 2nd International CBT Symposium. Stockholm, Sweden, Nov. 4-5, 1988. J. Carlstedt-Duke, H. Eriksson, J.A. Gustafsson (Eds.), (1989) 55-67.
(in collaboration with H. Gronemeyer, V. Kumar, S. Green, M.T. Bocquel, L. Tora, M.E. Meyer, J. Eul).

R671 TOWARDS A BREAST CANCER VACCINE ?
Proc. Internatl. Assoc. Breast Cancer Res. Symp. (Tel-Aviv, March 1989). In "Breast Cancer: Progress in Biology, Clinical Management and Prevention" (M.A. Rich, I.C. Hager and I. Keydar, Eds), 1989, pp. 215-222.
(in collaboration with C. Tomasetto, C. Gautier, M. Hareuveni, D.H. Wreschner, M.P. Kieny, M.C. Rio, R. Lathe).

R714 THE HUMAN ESTROGEN RECEPTOR : A MODULAR TRANSCRIPTIONAL ACTIVATOR CONTAINING TWO INDEPENDANT AND DIFFERENT ACTIVATION FUNCTIONS WHOSE PROPERTIES ARE DISTINCT FROM ACIDIC DOMAINS.
Proceedings of the 5th FAOB Congress, Seoul (Korea)
Recent Advances in Biochemistry (1991) 135 - 153
(in collaboration with J. White, L. Tora, C. Brou, D. Tasset, N. Webster and E. Scheer)

R822 THE OESTROGEN RECEPTOR: FROM PERCEPTION TO MECHANISM.
Nuclear Hormone Receptors", Malcom Parker (ed), Academic Press, (1991) pp. 15-33.
(in collaboration with S. Green)

R826 THE pS2 GENE, mRNA, AND PROTEIN: A POTENTIAL MARKER FOR HUMAN BREAST CANCER.
Cancer Cells (1990) **2**, 269-274.
(in collaboration with M-C. Rio).

R884 THE FAMILY OF RETINOIC ACID NUCLEAR RECEPTORS.
In "Retinoids: 10 years on", ed. Saurat J-H., Karger Basel, (1991) pp. 10-27
(in collaboration with A. Zelent, M. Petkovich, C. Mendelsohn, P. Leroy, A. Krust, P. Kastner and N. Brand)

R888 RETINOIC ACID NUCLEAR RECEPTORS.
Developmental Patterning of the Vertebrate Limb", eds.J.R. Hinchliffe, J. Hurle and D. Summerbell, NATO ASI Series, Plenum Publishing Corporation (1991), 75-88.
(in collaboration with P. Kastner, N. Brand, A. Krust, P. Leroy, C. Mendelsohn, M.Petkovich, and A. Zelent)

R916 RETINOIC ACID RECEPTORS IN THE EMBRYO.
Seminars in Developmental Biology. (1991) **2**, 153-159.
(in collaboration with E. Ruberte, P. Kastner, P. Dollé, A. Krust, P.

Leroy, C. Mendelsohn and A. Zelent)

R930 STEROIDS, RETINOIDS, AND THEIR MODE OF ACTION.
Monographs', U.Veronesi (serie ed.), M. Sporn (ed),Springer -Verlag (1991) pp. 1-12.
(in collaboration with H. Gronemeyer)

R953 RETINOIC ACID RECEPTORS AND BINDING PROTEINS IN MOUSE LIMB DEVELOPMENT.
Retinoids in normal development and teratogenesis.
Oxford University Press (1992) 99-111.
(in collaboration with E. Ruberte, H. Nakshatri, and P. Kastner)

R954 RETINOIC ACID RECEPTORS
Retinoids in normal development and teratogenesis.
Oxford University Press (1992) 7-25.
(in collaboration with P. Leroy, A. Krust, P. Kastner, C. Mendelsohn, and A. Zelent)

R958 APPORT DE LA BIOLOGIE MOLECULAIRE A L'ETUDE DU CANCER DU SEIN
Cahiers de la Fondation Jeantet (1991) **6**, 15-24.

R1026 PROTEINES DE FUSION ENTRE PML AND RAR-α DANS LES LEUCEMIES AIGÜES A PROMYELOCYTES.
Société de Biologie, Collège de France. Journée Claude Bernard "Recepteurs des hormones stéroides et des rétinoides" novembre 1991
C. R. Soc. Biol.(1991) **185**, 391-401.
(en collaboration avec P. Kastner, A. Perez, Y. Lutz, C. Rochette-Egly and M.P. Gaub)

R1027 A COMPARISON OF THE EXPRESSION DOMAINS OF THE MURINE HOX-4, RAR AND CRABP GENES SUGGESTS POSSIBLE FUNCTIONAL RELATIONSCHIP DURING PATTERNING OF THE VERTEBRATE LIMB.
In "Developmental Patterning of the Vertebrate Limb".Eds J.R. Hinchliffe et al., Plenum Press (1991), pp.65-73
(in collaboration with P. Dollé, E. Ruberte, J.C. Izpisua-Belmonte, H. Falkenstein and D. Duboule)

R1029 LE RECEPTEUR DES OESTROGENES: DE SA STRUCTURE A SA FONCTION.
In "Annales de l'Institut Pasteur/actualités (1992)" Elsevier, Paris (1992) **1**, pp. 51-61.

R1037 RETINOIDS IN VERTEBRATE LIMB DEVELOPMENT
In "Developmental Biology" (1992) **152**, 50-61.
(in collaboration with C. Mendelsohn, and E. Ruberte)

R1044 INACTIVATION DU GENE HOX-1.6 CHEZ LA SOURIS: VERS LE DECODAGE DES RESEAUX D'HOMEOGENES DE MAMMIFERES.
Médecine et Sciences (1992) **8**, 334-339.
(in collaboration with M. Mark, T. Lufkin, A. Dierich and M. LeMeur)

R1078 ALL-TRANS AND 9-CIS RETINOIC INDUCTION OF CRAPBII TRANSCRIPTION IS MEDIATED BY RAR/RXR RETINOIC ACID RECEPTOR HETERODIMERS.
In "The Parthenon Publishing Group" 18th World Congress of Dermatology, June 12-18 (1992). W.H.C. Burgdorf, S.I. Katz, eds. pp.14-28.
(in collaboration with B. Durand, M. Saunders, P. Leroy and M. Leid).

R1103 MULTIPLICITY GENERATES DIVERSITY IN THE RETINOIC ACID SIGNALLING PATHWAYS
Trends in Biochemical Sciences (1992) **17**, 427-433.

(in collaboration with M. Leid and P. Kastner)

R1113 EXPRESSION OF THE STROMELYSIN-3 GENE IN FIBROBLASTIC CELLS OF INVASIVE CARCINOMAS OF THE BREAST AND OTHER HUMAN TISSUES.
In "Breast Cancer Research and Treatment" (1993) **24**, 185-193.
(in collaboration with P. Basset and C. Wolf)

R1121 THE ROLE OF NUCLEAR RETINOIC ACID RECEPTORS IN THE REGULATION OF GENE EXPRESSION.
Vitamin A in Health and Disease, ed. R. Blomhoff, Marcel Dekker N.Y. (1994) pp. 189-238.
(in collaboration with P. Kastner and M. Leid)

R1156 RETINOID RECEPTORS AND BINDING PROTEIN.
In "Frontiers in Biomedical Research" The Proceedings of the 2nd Roche Symposium Kamakura, September 1992.D. Hartmann, Y. Furuichi, J. Drews, eds. (1993) pp. 157-171.
(in collaboration with D. Lohnes)

R1164 RETINOID RECEPTORS AND BINDING PROTEINS.
J. Cell Science (1992) **16**, 69-76.
(in collaboration with D. Lohnes, A. Dierich, N. Ghyselinck, P. Kastner, C. Lampron, M. LeMeur, T. Lufkin, C. Mendelsohn, and H. Nakshatri)

R1181 STROMELYSIN-3 IN STROMAL TISSUE AS A CONTROL FACTOR IN BREAST CANCER BEHAVIOUR.
In Cancer Supp. (1994) **74**, 1045-1049.
(in collaboration with P. Basset, C. Wolf, N. Rouyer, J.P. Bellocq, and M.C. Rio)

R1203 STROMELYSIN-3 GENE EXPRESSION IN INVASIVE AND PREINVASIVE BREAST CARCINOMAS.
In Challenges of Modern Medicine. Precancerous Lesions: A Multidisciplinary Approach.Montreux en mars 93. Ares-Serono Symposia). P.A. Marks H. Türler, and R. Weil, eds.(1993) **1**, 151-158.
(in collaboration with P. Basset, C. Wolf, N. Rouyer, M.P. Chenard, M.C. Rio, and J.P. Bellocq)

R1232 THE MOLECULAR AND GENETIC DISSECTION OF THE RETINOID SIGNALLING PATHWAY.
Cogene symposium "From the double helix to the human genome: 40 years of molecular genetics."
In Gene (special issue) (1993) **135**, 223-228.

R1254 FONCTIONS DES GENES HOX AU COURS DE DEVELOPPEMENT DES MAMMIFERES: APPORT DE LA TRANSGENESE.ROLES OF HOX GENES : WHAT WE LEARNT FROM GAIN OF FUNCTION AND LOSS OF FUNCTION MUTATIONS IN THE MOUSE.
In "Comptes Rendus Acad. Sci.(1993) **316**, 995-1001.
(in collaboration with M. Mark, T. Lufkin, P. Dollé, A. Dierich, and M. LeMeur)

R1300 THE MOLECULAR AND GENETIC DISSECTION OF THE RETINOID SIGNALLING PATHWAY.
In "Recent Progress in Hormone Research". C. Wayne Bardin, ed., (1995) **50**, 317-333.

R1309 PROTEASES D'ORIGINE STROMALE ET PROGRESSION TUMORALE. STROMAL PROTEINASES AND TUMOR PROGRESSION.
Médecine/Sciences (1994) **10**, 507-515.
(in collaboration with C. Wolf, O. Lefebvre, N. Rouyer, M.P. Chenard, J.P. Bellocq, M.C. Rio, and P. Basset).

R1324 STROMELYSIN-3 GENE EXPRESSION IN BREAST AND OTHER HUMAN CARCINOMAS.
International Symposium Prospects in Diagnosis and Treatment of Breast Cancer.
In "Excerpta Medica International Congress Series", Elsevier (1994) pp. 89-97
(in collaboration with J.P. Bellocq, M.P. Chenard-Neu, N. Rouyer, C. Wolf, and P. Basset)

R1336 THE RETINOID SIGNALING PATHWAY: MOLECULAR AND GENETIC ANALYSES.
In "Seminars in Cell Biology: Nuclear Hormone Receptors". G Richards, ed.(1994) **5**, 115-125.

R1375 HOX GENE FUNCTION AND THE DEVELOPMENT OF THE HEAD.
In "Neural Cell Specification: Molecular Mechanisms and Neurotherapeutic Implications" B. Juurlinck, W. Kulyk, P. Krone, R. Doucette, eds. Plenum Press, New-York.(1995) pp.3-16.
(in collaboration with M. Mark, F.M. Rijli, T. Lufkin, P. Dollé, P. Gorry)

R1382 STROMELYSIN-3 GENE EXPRESSION IN HUMAN CANCER: AN OVERVIEW.
In "Invasion/Metastasis" (1994) **14**, 269-275.
(in collaboration with N. Rouyer, C. Wolf, M.P. Chenard, M.C. Rio, J.P. Bellocq, and P. Basset)

R1432 L'AGE DE LA GENETIQUE.
C. R. Acad. Sci. (1994) **317**, 709-720.

R1467 DEVELOPMENTAL ROLES OF THE RETINOIC ACID RECEPTOR.
In J. Steroid Biochem. Molec. Biol. (1995) **53**, 475-486.
(in collaboration with D. Lohnes, M. Mark, C. Mendelsohn, P. Dollé, D. Décimo, M. LeMeur, A. Dierich, and P. Gorry)

R1476 ALTERATION OF HOX GENE EXPRESSION IN THE BRANCHIAL REGION OF THE HEAD CAUSES HOMEOTIC TRANSFORMATIONS, HINDBRAIN SEGMENTATION DEFECTS AND ATAVISTIC CHANGES.
Seminars in Developmental Biol.(1995) **6**, 275-284.
(in collaboration with M. Mark, and F.M. Rijli)

R1482 ROLES OF RETINOIC ACID RECEPTORS AND OF HOX GENES IN THE PATTERNING OF THE TEETH AND OF THE JAW SKELETON.
Int. J. Dev. Biol. (1995) **39**, 111-121.
(in collaboration with M. Mark, D. Lohnes, C. Mendelsohn, V. Dupé, J.L. Vonesch, P. Kastner, F. Rijli, and A. Bloch-Zupan)

R1626 LIGAND-DEPENDENT INTERACTION OF NUCLEAR RECEPTORS WITH POTENTIAL TRANSCRIPTIONAL INTERMEDIARY FACTORS (MEDIATORS).
In "Phil. Trans. R. Soc. Lond. B". P.D. Wall, ed. (1996) **351**, 569-578.
(in collaboration with B. Le Douarin, E. Vom Baur, C. Zechel, D. Heery, M. Heine, V. Vivat, H. Gronemeyer, R. Losson)

R1635 NONSTEROID NUCLEAR RECEPTORS: WHAT ARE GENETIC STUDIES TELLING US ABOUT THEIR ROLE IN REAL LIFE ?
Cell review, (1995) **83**, 859-869.
(in collaboration with P. Kastner, and M. Mark)

R1664 THE NUCLEAR RECEPTOR SUPERFAMILY: THE SECOND DECADE.
Cell (1995) **83**, 835-839.
(in collaboration with D.J. Mangelsdorf, C. Thummel, M. Beato, P. Herrlich, G. Schütz, K. Umesono, B. Blumberg, P. Kastner, M. Mark, and R.M. Evans)

R1677 A DECADE OF MOLECULAR BIOLOGY OF RETINOIC ACID RECEPTORS.
In "the retinoid revolution". W.J. Whelan, ed. (1996) FASEB J. **10,** 940-954.

R1698 SUR LA GENETIQUE MOLECULAIRE (Texte leçon inaugurale Collège de France juin 1994)
In Commentaire. Plon, ed. (1996) **73**, 5-21.

R1823 CONTROLE GENETIQUE DU DEVELOPPMENT PAR L'ACIDE RËTINOIQUE.
GENETIC CONTROL OF DEVELOPMENT BY RETINOIC ACID.
IN: C.R. Soc. Biol. (1997) **191**, 77-90.
(in collaboration with M. Mark, P. Kastner, N.B. Ghyselinck, W. Krezel, V. Dupé)

R1857 RECEPTEURS DE L'ACIDE RETINOÏQUE ET MORPHOGENESE.
(in collaboration with M. Mark)

R1869 THE BROMODOMAIN REVISITED.
In: Trends Biochem. Sci. (1997) **22**, 151-153.
(in collaboration with F. Jeanmougin, J.M. Wurtz, B. Le Douarin, R. Losson)

R1919 HOMEOBOX GENES IN EMBRYOGENESIS AND PATHOGENESIS.
Pediat. Res. (1997) **42**, 421-429.
(in collaboration with M. Mark and F. Rijli)

R1953 GENETIC INTERACTIONS OF *HOX* GENES IN LIMB DEVELOPMENT: LEARNING FROM COMPOUND MUTANTS.
Curr. Opin. Genet. Develop. (1997) **7**, 481-487.
(in collaboration with F. Rijli)

R2000 RETINOIDS AND MOUSE PLACENTATION
In "The Trophoblast Research". A. Carter, V. Dantzer, T. Jansson Eds. (1998) **12**, 57-76.
(in collaboration with V. Sapin, R.J. Bègue, B. Dastugue, P. Chambon and P. Dollé)

R2007 MESECTODERM IS A MAJOR TARGET OF RETINOIC ACID ACTION.
Eur. J. Oral Sci. (1998) **106**, 24-31.
(in collaboration with M. Mark, N.B. Ghyselinck, P. Kastner, V. Dupé, O. Wendling, W. Krezel, and B. Mascrez).

R2021 SEGMENTATION AND SPECIFICATION IN THE BRANCHIAL REGION OF THE HEAD: THE ROLE OF THE HOX SELECTOR GENE.
Int. J. Dev. Biol. (1998) **42**, 398-401.
(in collaboration with F. Rijli and A. Gavalas)

R2059 THE NEW MOUSE GENETICS: PROGRESS IN ENGINEERING SPATIO-TEMPORALLY-CONTROLLED SOMATIC MUTATIONS.
IBF Yokohama Meeting (1997) 6-11.

R2111 ENGINEERING SPATIO-TEMPORALLY-CONTROLLED SOMATIC MUTATIONS IN THE MOUSE SKIN.
In "Excerpta Medica International Congress Series". Symposium on skin:interface of a living system held in Tokyo on 5 July 1997. Elsevier Science H. Tagami, J.A. Parrish, T. Ozawa, eds. pp.11-19.(1998).
(in collaboration with J. Brocard, N. Messaddeq, D. Metzger, J.L. Vonesch, X. Warot, and O. Wendling).

R2205 CONTROL OF TRANSCRIPTION AND NEUROLOGICAL DISEASES.
Mol. Psychiatry (News & Views) (1999) **4**, 112-114.
(in collaboration with E. Borrelli)

R2232 MUTAGENESE SOMATIQUE SOUS CONTROLE SPATIO-TEMPOREL CHEZ LA SOURIS.
6ème Symposium de Génétique Humaine à Paris les 15 et 16 mai 1998.
Path. Biol. (1998) **46**, 671-673.

R2274 A GENETIC DISSECTION OF THE RETINOID SIGNALING PATHWAY IN THE MOUSE.
Proc. Nutr. Soc.(1999) **58**, 609-613
(in collaboration with M. Mark, N. Ghyselinck, O. Wendling, V. Dupé, B. Mascrez, P. Kastner)

R2333 UN RÔLE ESSENTIEL DES RECEPTEURS DE RETINOIDES AU COURS DU DEVELOPPEMENT EMBRYONNAIRE PRECOCE ET DE LA PLACENTOGENESE.
Medecine/Sciences (1999) **15**, 885-887.
(in collaboration with O. Wendling and M. Mark)

R2506 SITE-AND TIME-SPECIFIC GENE TARGETING IN THE MOUSE.
Methods (2001) **24**, 71-80.
(in collaboration with D. Metzger)

R2637 NUCLEAR RECEPTORS COORDINATE THE ACTIVITIES OF CHROMATIN REMODELING COMPLEXES AND COACTIVATORS TO FACILITATE INITIATION OF TRANSCRIPTION.
Oncogene reviews (2001) **20**, 3047-3054.
(in collaboration with F.J. Dilworth)

R2747 F9 EMBRYOCARCINOMA CELLS: A CELL AUTONOMOUS MODEL TO STUDY THE FUNCTIONAL SELECTIVITY OF RARS AND RXRS IN RETINOID SIGNALING.
Histology and Histopathology (2001) **16**, 909-922.
(in collaboration with C. Rochette-Egly)