

Bibliographie Arne Holmgren depuis 2013

1. Lu, J., Vlamis-Gardikas, A., Kandasamy, K.A., Zhao, R., Gustafsson, T.N., Engstrand, L., Hoffner, S., Engman, L. and Holmgren, A.: Inhibition of bacterial thioredoxin reductase: an antibiotic mechanism targeting bacteria lacking glutathione. *FASEB J.*, 27, 1304-1403, 2013.
2. Sengupta, R. and Holmgren, A.: Thioredoxin and thioredoxin reductase in relation to reversible S-nitrosylation. *Antioxid. Redox Signal.* , 18, 259-269, 2013.
3. Aguilar-Melero, P., Pietro-Alamo, M.J., Jurado, J., Holmgren, A. and Pueyo, C.: Proteomics in HepG2 hepatocarcinoma cells with stably silenced expression of PRDX1 *J. Proteomics*, 79, 161-171, 2013.
4. Bräutigam, L., Johansson, C., Kubsch, B., McDonough, M.A., Bill, E., Holmgren, A. and Berndt, C.: An unusual mode of iron-sulfur-cluster coordination in a teleost glutaredoxin. *Biochem. Biophys. Res. Commun.*, 436, 491-496, 2013.
5. Lu, J., Vodnola, S.K., Gustafsson, A.L, Gustafsson, T.N., Sjöberg, B., Johansson, H.A., Kumar, S., Tjernberg, A., Engman, L., Rottenberg, M.E. and Holmgren, A.: Ebsulfur is a benzisothiazolone cytoidal inhibitor targeting the trypanothione reductase of *Trypanosoma brucei*. *J. Biol. Chem.* 288, 27456-27462, 2013.
6. Du, Y., Zhang, H., Zhang, X., Lu, J. and Holmgren, A.: Thioredoxin 1 is inactivated due to oxidation induced by peroxiredoxin under oxidative stress and reactivated by the glutaredoxin system. *J. Biol. Chem.* 288, 32241-32247, 2013.
7. Bräutigam, L., Dahl Ejby Jensen, L., Poschmann, G., Nyström, S., Bannenberg, S., Dreij, K., Lepka, K., Prozorovski, T., Montano, S.J., Aktas, O., Uhlén, P., Stühler, K., Cao, Y., Holmgren, A. and Berndt, C.: Glutaredoxin regulates vascular development by reversible glutathionylation of sirtuin 1. *Proc. Natl. Acad. Sci. USA.* 110, 32241-32247, 2013.
8. Montano S.J., Lu, J., Gustafsson, T.N. and Holmgren A.: Activity assays of mammalian thioredoxin and thioredoxin reductase: Fluorescent disulfide substrates, mechanisms and use with tissue samples. *Anal. Biochem.* 449, 139-146, 2014
9. Lu, J. and Holmgren, A. : The thioredoxin superfamily in oxidative protein folding. *Antioxid. Redox Signal.* 21, 457-470, 2014
10. Lu, J. and Holmgren, A.: The thioredoxin antioxidant system. *Free Radic. Biol. Med.* 66, 75-87, 2014.
11. Du, Y., Zhang, H., Montano, S., Hegestam, J., Ekberg, N.R., Holmgren, A., Brismar, K. and Ungerstedt, J.S.: Plasma glutaredoxin activity in healthy subjects and patients with abnormal glucose levels or overt type 2 diabetes. *Acta Diabetol.* 51, 225-232, 2014.
12. Zhang, H, Du, Y., Zhang, X. Lu, J., and Holmgren, A.: Glutaredoxin2 reduces both thioredoxin 2 and thioredoxin1 and protects cells from apoptosis induced by auranofin and 4-hydroxynonenal. *Antioxid. Redox Signal.* 21, 669-681, 2014.

13. Sengupta R. and Holmgren A.: Thioredoxin and glutaredoxin-mediated redox regulation of ribonucleotide reductase. *World Journal of Biological Chemistry*, 5: 68-74, 2014.
14. Pader, I., Sengupta, R., Cebula, M., Xu, J, Lundberg, J., Holmgren, A., Johansson, K. and Arnér, E.S.J.: Thioredoxin related protein of 14 kDa is an efficient L-cystine reductase and S-denitrosylase. *Proc. Natl. Acad. Sci. USA* 111,6964-6969, 2014
15. Branco, V., Godinho-Santos, A., Goncalves, J., Lu, J., Holmgren, A., and Carvalho, C.M.L.: Mitochondrial thioredoxin reductase inhibition, selenium status and Nrf-2 activation are determinant factors modulating the toxicity of mercury compounds. *Free Radic. Biol. Med.* 73, 95-105, 2014.
16. Berndt, C. Poschmann, G., Stuhler, K., Holmgren, A., and Bräutigam, L.: Zebrafish heart development is regulated via glutaredoxin 2- dependent migration and survival of neural crest cells. *Redox Biology* 2, 673-678, 2014.
17. Rodrigues, J., Branco, V., Lu, J., Holmgren, A., and Carvalho, C. : Toxicological effects of thiomersal and ethylmercury: Inhibition of the thioredoxin system and NADP⁺- dependent dehydrogenases of the pentose phosphate pathway. *Toxicol. Appl. Pharmacol* 286, 216-223, 2015.
18. Montano, S.J., Nair, D., Tekle, M., Fernandes, A.P., Hua, X., Holmgren, A., Brimsmar, K., Ungerstedt, J.S. and Gruntler, J.: Glutaredoxin meditaed redox effects of coenzyme Q10 treatment in type 1 and type 2 diabetes patients. *BBA clinical*, in press Dec.2015
19. Shela, S.B., Kamiska, K.K., Reddy, S.A., Kumar, D.Tan,C-T., Yu, V.C., Lu, J., Holmgren, A., Hagen,T., Chew, E-H: Thioredoxin-dependent regulation of AIF mediated DNA damage. *Free radical Biol.*87, 125-136, 2015.
20. Zhang, X., Lu, J., Ren, X., Du, Y., Zheng, Y., Ioannou, P.V., And Holmgren, A.: Oxidation of structural cysteinne residues in thioredoxin1 by aromatic arsenicals enhances cancer cell cytotoxicity caused by the inhibition of thioredoxin reductase 1. *Free Rad. Biol. Med.* 89, 192-200, 2015.
21. Liang, W., Fernandes, AP., Holmgren, A., Li, X., and Zhong, L. : Bacterial thioredoxin and thioredoxin reductase as mediators for epigallocatechin 3- gallate-induced antimicrobial action. *FEBS J.* in press 2015.
22. Lei, X. G., Zhu, J-H., Cheng, W-H., Bao, Y., Ho,Y-S. Reddi, AR., Holmgren, A. and Arner ES: Paradoxical roles of antioxidant enzymes: basic mechanisms and health implications. *Physiological reviews* 96, 307-364, 2016
23. Olivera G.C., Reb, X. Vodnola, S.K., Lu,J., Coppo, L. leepiyasakulchai, C., Holmgren, A., Kristensson, K., Rottenberg, M.E. Nitric oxide protects against infection-induced neuroinflammation by preserving the stability of the blood-brain barrier. *PLOS pathogens* in press 2016.
24. Coppo, L., Montano, S.J., Padilla, A., and Holmgren, A.: Determination of glutaredoxin enzyme activity and protein S- glutathionylation using fluorescent eosin-glutathione. *Analytical Biochem* In press 2016.