

Ritlisti 2019 - Bibliography 2019

Ágústa Guðmundsdóttir, professor emeritus

A4. Tímaritsgreinar - Peer-reviewed scientific publications (ISI)

1. Sandholt, GB, Stefánsson, B. and Guðmundsdóttir, Á. (2019). Biochemical characterization of a native group III trypsin ZT from Atlantic cod (*Gadus morhua*). International Journal of Biological Macromolecules 125 (2019) 847–855. <https://doi.org/10.1016/j.ijbiomac.2018.12.099>
2. Stefansson B, Sandholt GB, Guðmundsdóttir Á (2017) Elucidation of different cold-adapted Atlantic cod (*Gadus morhua*) trypsin X isoenzymes. Biochim Biophys Acta Proteins Proteomics 1865:11–19. <https://doi.org/10.1016/j.bbapap.2016.10.005>
3. Guðmundsdóttir Á, Hilmarsson H, Stefansson B (2013) Potential use of Atlantic cod trypsin in Biomedicine. Biomed Res Int. <https://doi.org/10.1155/2013/749078>
4. Nguyen, M. V., Thorarinsdóttir, K. A., Thorkelsson, G., Guðmundsdóttir, A., & Arason, S. (2012). Influences of potassium ferrocyanide on lipid oxidation of salted cod (*Gadus morhua*) during processing, storage and rehydration. *Food Chemistry*.131(4), 1322-1331
5. Nguyen, M. V., Jonsson, J. O., Thorkelsson, G., Arason, S., Guðmundsdóttir, A., & Thorarinsdóttir, K. A. (2012). Quantitative and qualitative changes in added phosphates in cod (*Gadus morhua*) during salting, storage and rehydration. *LWT-Food Science and Technology*. 47, 126-132.
6. Nguyen, M. V., Arason, S., Thorkelsson, G., Guðmundsdóttir, A., Thorarinsdóttir, K. A. Vu, B. N. (2012). Effects of added phosphates on lipid stability during salt curing and rehydration of cod (*Gadus morhua*). *Journal of the American Oil Chemists' Society*, DOI 10.1007/s11746-012-2175-y (ISSN 0003021X, Published online).
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8. Holmfrídur Sveinsdóttir and Ágústa Guðmundsdóttir (2011). Proteome analysis of abundant proteins in early Atlantic cod (*Gadus morhua*) larvae. *Icel. Agric. Sci.* 24 (2011), 23-31
9. Stefansson, B., Helgadóttir, L., Olafsdóttir, S., Guðmundsdóttir, Á. and Bjarnason, J.B. (2010). Characterization of cold-adapted Atlantic cod (*Gadus morhua*) trypsin I — Kinetic parameters, autolysis and thermal stability *Comparative Biochemistry and Physiology, Part B*, 186-194.
10. Sveinsdóttir, H. & Guðmundsdóttir, Á. (2010). Proteome profile comparison of two differently fed groups of Atlantic cod (*Gadus morhua*) larvae. *Aquaculture Nutrition*, Volume 16, Issue 6, 662–670.
11. Van Nguyen, M., Arason, S., Thorarinsdóttir, K.A., Thorkelsson, G. and Guðmundsdóttir, Á. (2010). Influence of salt concentration on the salting kinetics of cod loin (*Gadus morhua*) during brine salting. *Journal of Food Engineering*, 100, 225-231.

12. Sveinsdóttir, H., Steinarsson, A. and Gudmundsdóttir, Á. (2009). Differential protein expression in early Atlantic cod larvae (*Gadus morhua*) in response to treatment with probiotic bacteria. *Comparative Biochemistry and Physiology, Part D*, 249–254.
13. Pálsdóttir, H.M. and Gudmundsdóttir, Á. (2008). The novel trypsin Y from Atlantic cod (*Gadus morhua*) - isolation, purification and characterization. *Food Chemistry*.111, 408-414.
14. Sveinsdóttir, H., Vilhelmsson, O. and Gudmundsdóttir, Á. (2008). Proteome analysis of abundant proteins in two age groups of early Atlantic cod (*Gadus morhua*) larvae. *Comparative Biochemistry and Physiology:Genomics and Proteomics. Part D* 3, 243-250.
15. Pálsdóttir, H.M. and Gudmundsdóttir, Á. (2007). Expression and purification of a cold-adapted group III trypsin in *Escherichia coli*. *Prot. Expr. and Purif.* 51, 243-252.
16. Pálsdóttir, H.M. and Gudmundsdóttir, Á. (2007). Development of a qRT-PCR assay to determine the relative mRNA expression of two different trypsins in Atlantic cod (*Gadus morhua*). *Comp. Biochem and Biophys.* 146, 26-34.
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19. Guðrún Jónsdóttir, Jón Bragi Bjarnason and Ágústa Gudmundsdóttir (2004). Recombinant cold-adapted trypsin I from Atlantic cod – expression, purification and identification. *Prot. Expr. and Purif.* 33, 110-122.
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21. Gudmundsdóttir, Á. (2002). Cold-Adapted and Mesophilic Brachyurins. *Biological Chemistry* 383, 1125-1131.
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A3. Bókarkafar - Book Chapters (peer reviewed)

A3.1.

1. Gudmundsdóttir, Á, Stefánsson, B. and Bjarnason, J.B. (2013). Trypsin I in Fish. In: (Ed. Neil D. Rawlings and Guy S. Salvesen), *Handbook of Proteolytic Enzymes*, 3rd ed. Oxford: Academic Press, 2013, pp. 2621-2624. Release date December 3. 2012.

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3. Guðmundsdóttir, Á. and Bjarnason, J.B. (2007). Enzyme purification and determination of structure. In: In (Ed. Bob Rastall), *Novel enzyme technology for food applications*, pp. 205-214. Woodhead Publishing Limited, Cambridge, UK.
4. J.B. Bjarnason, M.M. Kristjánsson, S. Ólafsdóttir, B. Benediktsson, E. Guðmundsdóttir, Á. Guðmundsdóttir (1997), Characteristics and Application of Cryotin, a Mixture of Psychrophilic Marine Proteases. In: (Ed. V.K. Hopsu-Havu et al.), *Proteolysis in Cell Functions*, IOS Press 1997, pp. 104-111.
5. Guðbjarnason, S., Guðmundsdóttir, A., Benediktsdóttir, V.E. (1985), Alteration in fatty acid composition of phospholipids in heart muscle induced by various forms of stress. In: (Ed. R.E. Beamish, V. Panagia and N.S. Dhalla.), *Pathogenesis of Stress-Induced Heart Disease* Martinus Nijhoff Publishing, Boston, p. 355-368.
6. Sigmundur Guðbjarnason, Aðalsteinn Emilsson and Ágústa Guðmundsdóttir (1983), Fatty Acid Composition of Phospholipids of Heart Muscle in relation to Age, Dietary Fat and Stress. In: (Ed. H. Peeters, G.A. Gersham og R. Paoletti), *Arterial Pollution*, Plenum Publ. Corp. 115-124.
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A3.2.

1. Stefánsson, B., Jakobsdóttir, G.B. og Guðmundsdóttir, Á. (2012) Samanburður á trypsíni úr íslenskum og færeyskum þorski. Í: Frændafundur 7. Fyrirlestrar frá íslensk-færeyskri ráðstefnu í Reykjavík 21.-22. Ágúst 2010. Snædal, M. og Sigurðardóttir, t., ritstj. (Hugvísindastofnun 2012, Leturprent, Reykjavík) bls. 197-206.
2. Guðmundsdóttir, Á. og Sveinsdóttir, H. (2006) (in Icelandic). Rýnt í próteinmengi þorsklirfa. Í bókinni "Vísindin heilla" sem tileinkuð er Sigmundi Guðbjarnasyni sjötugum. Útgefandi Háskólaútgáfan, bls.110-114.
3. Sveinsdóttir, H., Benediktsdóttir, E. og Guðmundsdóttir, Á. (2006). Fjölómettaðar fitusýrur í hrognum sjávarfiska. Tímarit um raunvísindi og stærðfræði 2, 50-57.
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Patents pending (2015-2019)

1. Guðmundsdóttir A, Asgeirsson A, Stefansson B (2017) Novel trypsin isoforms and their use. WO2017017012A1
2. Guðmundsdóttir A, Scheving R (2017) Combination therapies. WO2017017027A1
3. Guðmundsdóttir A, Stefansson B, Scheving R (2015) Use of marine serine proteases for removal, prevention and inhibition of formation and growth of biofilms. EP3120866A1