

A catalase-related hemoprotein in coral is specialized for synthesis of short-chain aldehydes : discovery of P450-type hydroperoxide lyase activity in a catalase

Teder, Tarvi; Lõhela, Helike; Boeglin, William E.; Calcutt, Wade M.; Brash, Alan R.; **Samel, Nigulas** Journal of biological chemistry 2015 / p. 19823-19832 : ill <https://doi.org/10.1074/jbc.M115.660282> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Control of prostaglandin stereochemistry at the 15-carbon by cyclooxygenases-1 and -2. A critical role for serine 530 and valine 349

Schneider, Claus; Boeglin, William E.; Prusakiewicz, J.J.; Rowlinson, S.W.; Marnett, L.J.; **Samel, Nigulas;** Brash, Alan R. Journal of biological chemistry 2002 / p. 478-485

A critical role of non-active site residues on cyclooxygenase helices 5 and 6 in the control of prostaglandin stereochemistry at carbon 15

Valmsen, Karin; Boeglin, William E.; **Järving, Reet; Järving, Ivar; Varvas, Külliki;** Brash, Alan R.; **Samel, Nigulas** The journal of biological chemistry 2007 / 38, p. 28157-28163 <https://www.sciencedirect.com/science/article/pii/S0021925820587127>

A fungal catalase reacts selectively with the 13S fatty acid hydroperoxide products of the adjacent lipoxygenase gene and exhibits 13S-hydroperoxide-dependent peroxidase activity

Teder, Tarvi; Boeglin, William E.; Schneider, Claus; Brash, Alan R. Biochimica et Biophysica Acta (BBA) - molecular and cell biology of lipids 2017 / p. 706-715 : ill <https://doi.org/10.1016/j.bbalip.2017.03.011> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Lipoxygenase-catalyzed transformation of epoxy fatty acids to hydroxy-endoperoxides : a potential P450 and lipoxygenase interaction

Teder, Tarvi; Boeglin, William E.; Brash, Alan R. Journal of lipid research 2014 / p. 2587-2596 : ill <https://doi.org/10.1194/jlr.M054072> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Oxidation of C18 hydroxylpolyunsaturated fatty acids to epoxide or ketone by catalase-related hemoproteins activated with iodosylbenzene

Teder, Tarvi; Boeglin, William E.; Brash, Alan R. Lipids 2017 / p. 587-597 : ill <https://doi.org/10.1007/s11745-017-4271-0> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Structural and functional comparison of 15S- and 15R-specific cyclooxygenases from the coral Plexaura homomalla

Valmsen, Karin; Boeglin, William E.; **Järving, Ivar;** Schneider, Claus; **Varvas, Külliki;** Brash, Alan R.; **Samel, Nigulas** Eur. J. Biochem. 2004 / p. 3533-3538 : ill <https://febs.onlinelibrary.wiley.com/doi/full/10.1111/j.0014-2956.2004.04289.x>

Structural features of R- and S-lipoxygenases revealed by enzyme purification and molecular cloning

Brash, Alan R.; Jisaka, M.; Boeglin, William E.; **Koljak, Reet;** Chang, M.S.; Shieh, Bih-Hwa Prostaglandins, leukotrienes and essential fatty acids 1996 / p. 142

The basis of prostaglandin synthesis in coral : molecular cloning and expression of a cyclooxygenase from the arctic soft coral Gersemia fruticosa

Koljak, Reet; Järving, Ivar; Kurg, Reet; Boeglin, William E.; **Varvas, Külliki; Valmsen, Karin;** Ustav, Mart; Brash, Alan R.; **Samel, Nigulas** Journal of biological chemistry 2001 / 10, p. 7033-7040 : ill

The origin of 15R-prostaglandins in the Caribbean coral Plexaura homomalla : molecular cloning and expression of a novel cyclooxygenase

Valmsen, Karin; Järving, Ivar; Boeglin, William E.; **Varvas, Külliki; Koljak, Reet; Pehk, Tõnis;** Brash, Alan R.; **Samel, Nigulas** Proceedings of the National Academy of Sciences of the United States of America 2001 / 14, p. 7700-7705 <https://www.pnas.org/doi/full/10.1073/pnas.131022398>