

An NMR spectroscopic investigation of functional group selectivity of lipase-catalysed reactions of 11-acetyl prostaglandins E1 and E2

Villo, Ly; Tamp, Sven; Vallikivi, Imre; Järving, Ivar; Pehk, Tõnis; Parve, Omar Proceedings of the 9th International Symposium on Biocatalysis and Biotransformations - (Biotrans 2009) Held in Bern, Switzerland 5-9 July 2009 2010 / p. 66

Angiopoietin-like protein 4 converts lipoprotein lipase to inactive monomers and modulates lipase activity in adipose tissue

Sukonina, V.; **Löökene, Aivar**; Olivecrona, T.; Olivecrona, G. Proceedings of the National Academy of Sciences of the United States of America 2006 / 46, p. 17450-17455 <https://pubmed.ncbi.nlm.nih.gov/17088546/>

Apolipoprotein C-II : the re-emergence of a forgotten factor

Wolska, Anna; **Reimund, Mart**; Remaley, Alan T. Current opinion in lipidology 2020 / p. 147-153

<https://doi.org/10.1097/MOL.0000000000000680> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Apolipoproteins C-I and C-III inhibit lipoprotein lipase activity by displacement of the enzyme from lipid droplets

Larsson, Mikael; Vorrsjö, Evelina; Talmund, Philippa; **Löökene, Aivar**; Olivecrona, Gunilla Journal of biological chemistry 2013 / p.

33997-34008 : ill <https://doi.org/10.1074/jbc.M113.495366> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

1,1'-bis(anilino)-4,4'-bis(naphtalene)-8,8'-disulfonate acts as an inhibitor of lipoprotein lipase and competes for binding with apolipoprotein CII

Löökene, Aivar; Zhang, L.; Tõugu, Vello; Olivecrona, G. Journal of biological chemistry 2003 / p. 37183-37194

<https://doi.org/10.1074/jbc.M303894200>

Calcium triggers folding of lipoprotein lipase into active dimers

Zhang, L.; **Löökene, Aivar**; Wu, G.; Olivecrona, G. Journal of biological chemistry 2005 / 52, p. 42580-42591

<https://pubmed.ncbi.nlm.nih.gov/16179346/>

Calorimetric approach for comparison of Angiopoietin-like protein 4 with other pancreatic lipase inhibitors

Villo, Ly; Risti, Robert; Reimund, Mart; Kuk, Kaia; Samel, Nigulas; Löökene, Aivar Biochimica et Biophysica Acta (BBA) -

Molecular and Cell Biology of Lipids 2020 / art. 158553, 12 p. : ill <https://doi.org/10.1016/j.bbalip.2019.158553> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Calorimetric assay reveals the importance of substrate choice for determination of lipoprotein lipase activity

Risti, Robert; Villo, Ly; Löökene, Aivar Atherosclerosis 2021 / p. e122 <https://doi.org/10.1016/j.atherosclerosis.2021.06.361> [Journal](#)

[metrics at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Calreticulin promotes folding/dimerization of human lipoprotein lipase expressed in insect cells (sf21)

Zhang, L.; Wu, G.; Tate, C.G.; **Löökene, Aivar**; Olivecrona, G. Journal of biological chemistry 2003 / 31, 29344-29351

<https://www.sciencedirect.com/science/article/pii/S002192582084438X>

Chemical versus enzymatic acetylation of [alfa]-bromo-[omega]-hydroxyaldehydes : decyclization of hemiacetals by lipase

Villo, Ly; Metsala, Andrus; Parve, Omar; Pehk, Tõnis Tetrahedron letters 2002 / p. 3203-3207

https://www.academia.edu/17112413/Chemical_versus_enzymatic_acetylation_of_%CE%B1_bromo_%CF%89_hydroxyaldehydes_decyclization_of_hemiacetals_by_lipase

A chemoenzymatic synthesis of a deoxy sugar ester of N-Boc-protected L-tyrosine

Villo, Ly; Kreen, Malle; Kudrjašova, Marina; Metsala, Andrus; Tamp, Sven; Lille, Ülo; Pehk, Tõnis; Parve, Omar Practical

methods for biocatalysis and biotransformations. 2 2012 / p. 335-339

<https://www.sciencedirect.com/science/article/pii/S1381117710002511>

Extending traditional area of lipases' application for prostanoid and hemiacetal chemistry

Parve, Omar; Metsala, Andrus; Tamp, Sven; Villo, Ly BIT's 1st Annual World Congress of Catalytic Asymmetric Synthesis :

Beijing, China, 19.-21.05.2010 2010

Fatty acids bind tightly to the N-terminal domain of angiopoietin-like protein 4 and modulate its interaction with lipoprotein lipase

Robal, Terje; Larsson, Mikael; **Martin, Miina**; Olivecrona, Gunilla; **Löökene, Aivar** The journal of biological chemistry 2012 / p.

29739-29752 : ill <https://pubmed.ncbi.nlm.nih.gov/22773878/>

Functional analyses of human apolipoprotein CII by site-directed mutagenesis : identification of residues important for activation of lipoprotein lipase

Shen, Y.; **Löökene, Aivar**; Nilsson, S.; Olivecrona, G. Journal of biological chemistry 2002 / 6, p. 4334-4342

<https://pubmed.ncbi.nlm.nih.gov/11719505/>

Homokiraalsete struktuurielementide saamine ensümaatilise hüdroolüüsi teel

Parve, Omar; Sikk, Peeter; **Lille, Ülo** XVI Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid = 16th Estonian chemistry days : abstracts of scientific conference 1995 / lk. 105-106

Inhibition of *Candida rugosa* lipase by saponins, flavonoids and alkaloids

Ruiz, Cristian; Falcocchio, Serena; Xoxi, Entela; **Villo, Ly**; Nicolosi, Giovanni; Pastor, Javier F.I.; Diaz, Pilar; Saso, Luciano Journal of molecular catalysis B : enzymatic 2006 / p. 138-143 <https://www.sciencedirect.com/science/article/pii/S1381117706000798>

Isolation and characterization of low sulfated heparan sulfate sequences with affinity for lipoprotein lipase

Spillmann, Dorothe; **Lõokene, Aivar**; Olivecrona, Gunilla Journal of biological chemistry 2006 / 33, p. 23405-23413 : ill <https://www.sciencedirect.com/science/article/pii/S0021925819463783>

Lipase action on some non-triglyceride substrates

Vallikivi, Imre; Lille, Ülo; Lõokene, Aivar; Metsala, Andrus; Sikk, Peeter; Tõugu, Vello; Vija, Heiki; **Villo, Ly; Parve, Omar** Journal of molecular catalysis B : enzymatic 2003 / 5/6, p. 279-298 : ill <https://www.sciencedirect.com/science/article/abs/pii/S1381117703000432>

Lipase-catalysed acyl transfer in deoxysugars : a computational study

Kaevand, Toomas; Villo, Ly; Metsala, Andrus; Parve, Omar; Lille, Ülo International journal of engineering and applied sciences (EAAS) 2015 / p. 1-7 : ill

Lipase-catalysed acylation of prostanoids

Parve, Omar; **Järving, Ivar; Martin, Ivar; Metsala, Andrus; Vallikivi, Imre; Aidnik, Madis; Pehk, Tõnis**; Samel, Nigulas Bioorganic & medicinal chemistry letters 1999 / p. 1853-1858: ill

Lipase-catalysed derivatisation of prostanoids

Parve, Omar; **Vallikivi, Imre**; Martin, Ivar; Järving, Ivar; Samel, Nigulas 11th European Symposium on Organic Chemistry : Göteborg, Sweden, July 23-28, 1999 : programme and abstracts 1999 / p. P179

Lipase-catalysed enantioselective hydrolysis : interpretation of the kinetic results in terms of frontier orbital localisation

Parve, Omar; **Vallikivi, Imre**; Metsala, Andrus; **Lille, Ülo**; Tõugu, Vello; Sikk, Peeter; **Käämbre, Tuuli**; Vija, Heiki; **Pehk, Tõnis** Tetrahedron 1997 / 13, p. 4889-4900

Lipase-catalysed enantioselective hydrolysis of bicyclo[3.2.0]heptanol esters in supercritical carbon dioxide

Parve, Omar; **Vallikivi, Imre**; Lahe, Lilja; Metsala, Andrus; **Lille, Ülo**; Tõugu, Vello; Vija, Heiki; **Pehk, Tõnis** Bioorganic & medicinal chemistry letters 1997 / 7, p. 811-816

Lipase-catalysed reactions of prostaglandins

Vallikivi, Imre 2004 https://www.ester.ee/record=b1990575*est

Lipase-catalysed regioselective acylation/deacylation of prostanoids

Vallikivi, Imre; Järving, Ivar; Metsala, Andrus; **Pehk, Tõnis**; Parve, Omar International Conference on Organic Synthesis : Vilnius, 2000, June 26-29 : program and abstracts 2000 / p. [82]

Lipase-catalyzed stereoresolution of long-chain 1,2-alkanediols: a screening of preferable reaction conditions

Parve, Jaan; Reile, Indrek; **Aid, Tiina; Kudrjašova, Marina; Müürisepp, Aleksander-Mati**; Vallikivi, Imre; **Villo, Ly; Aav, Riina**; Pehk, Tõnis; Vares, Lauri; **Parve, Omar** Journal of molecular catalysis B : enzymatic 2015 / p. 60-69 : ill <https://doi.org/10.1016/j.molcatb.2015.03.006> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Lipoprotein lipase activity does not differ in the serum environment of vegans and omnivores

Seeba, Natjan-Naatan; Risti, Robert; Lõokene, Aivar Nutrients 2023 / art. 2755 <https://doi.org/10.3390/nu15122755> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

New aspects in stabilization and activation mechanisms of lipoprotein lipase = Uudsed aspektid lipoproteiinlipaasi stabiilsuse ja aktiivsuse regulatsioonis

Reimund, Mart 2019 <https://digikogu.taltech.ee/et/Item/e172019a-13cb-449f-bbe5-a471316ecfbb>

NMR monitoring of lipase-catalyzed reactions of prostaglandins : preliminary estimation of reaction velocities

Vallikivi, Imre; Järving, Ivar; Pehk, Tõnis; Samel, Nigulas; Tõugu, Vello; **Parve, Omar** Journal of molecular catalysis B : enzymatic 2004 / p. 15-19 : ill

Prostanoidide reaktsioonid ja molekulaarmodelleerimine *Candida antarctica* lipaas B aktiivsentsis

Vallikivi, Imre; Pehk, Tõnis; Fransson, Linda; Hult, Karl; Parve, Omar XXVI Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid = 26th Estonian Chemistry Days : abstracts of scientific conference 2000 / lk. 155-156

Rapid subunit exchange in dimeric lipoprotein lipase and properties of the inactive monomer

Löökene, Aivar; Zhang, L.; Hultin, M.; Olivecrona, G. Journal of biological chemistry 2004 / 48, p. 49964-49972
<https://www.sciencedirect.com/science/article/pii/S0021925820677857>

Sapihapete ja prostaglandiinide derivaatide ja konjugaatide süntees ning nende mõju candida rugosa lipaasi aktiivsusele
Veskilt, Eva; Villo, Ly; Kudrjašova, Marina; Parve, Omar XXXII Eesti Keemiapäevad : teaduskonverentsi teesid 2011 / lk. 108 : ill

Scalable lipase-catalyzed synthesis of (R)-4-(Acyloxy)pentanoic acids from racemic γ -valerolactone
Parve, Jaan; Kudrjašova, Marina; Shalima, Tatsiana; Villo, Ly; Liblikas, Ilme; Reile, Indrek; Pehk, Tõnis; Gathergood, Nicholas; Aav, Riina; Vares, Lauri; Parve, Omar ACS sustainable chemistry & engineering 2021 / p. 1494–1499
<https://doi.org/10.1021/acssuschemeng.0c07918> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Stereoselective chemoenzymatic synthesis of deoxy sugar esters involving Candida antarctica lipase B = Desoksüsuhkru estrite stereoselektiivne kemoensümaatilise süntees kasutades Candida antarctica lipaasi B
Villo, Ly 2008 https://www.ester.ee/record=b2393878*est

Switched enantiopreference of Humicola lipase for 2-phenoxyalkanoic acid ester homologs can be rationalized by different substrate binding modes

Berglund, P.; **Vallikivi, Imre**; Fransson, Linda; Dannacher, H.; Holmquist, M.; Martinelle, M.; Björklund, F.; Parve, Omar; Hunt, K. Tetrahedron : asymmetry 1999 / p. 4191-4202 <https://www.sciencedirect.com/science/article/pii/S0957416699004383>

Synthesis of 3,4-dideoxy ribose esters: a novel chemoenzymatic approach to synthesis of activated, extended-chain glycoconjugates

Villo, Ly; Danilas, Kady; Metsala, Andrus; Pehk, Tõnis; Parve, Omar International Conference on Organic Synthesis : Tallinn, Estonia, June 25-29, 2006 : program and abstracts 2006 / p. 164

The modelling and kinetic investigation of the lipase-catalysed acetylation of stereoisomeric prostaglandins

Vallikivi, Imre; Fransson, Linda; Hult, Karl; Järving, Ivar; Pehk, Tõnis; Samel, Nigulas; Tõugu, Vello; Villo, Ly; Parve, Omar Journal of molecular catalysis B : enzymatic 2005 / p. 62-69 : ill

Transesterification of monosaccharides with Candida antarctica lipase-B and their use in the synthesis of human milk oligosaccharides = Monosahhariidide ümberesterdamine Candida antarctica lipaas-B abil ja nende kasutamine rinnapiima oligosahhariidide sünteesis

Hunt, Kaarel Erik 2025 https://www.ester.ee/record=b5750735*est <https://digikogu.taltech.ee/et/Item/27bed832-f63e-4d97-ba29-f816dbe16e43> <https://doi.org/10.23658/taltech.45/2025>

Triacylglycerol-rich lipoproteins protect lipoprotein lipase from inactivation by ANGPTL3 and ANGPTL4

Nilsson, Stefan K.; **Löökene, Aivar** Biochimica et biophysica acta : molecular and Cell biology of lipids 2012 / p. 1370-1378 : ill
<https://pubmed.ncbi.nlm.nih.gov/22732211/>

Uudne meetod aitab leida liigkõrgele vererasva tasemele kiiremini ravi

Seeba, Natjan-Naatan err.ee 2025 [meetod aitab leida liigkõrgele vererasva tasemele kiiremini ravi](#) [Uudne meetod aitab leida liigkõrgele vererasva tasemele kiiremini ravi](#)

Uudsed mehhanismid lipoproteiinlipaasi aktiivsuse ja stabiilsuse regulatsioonis

Robal, Terje; Lillepruun, Miina; Reimund, Mart; Löökene, Aivar XXXII Eesti Keemiapäevad : teaduskonverentsi teesid 2011 / lk. 87