

Activation of 11R-lipoxygenase is fully Ca²⁺-dependent and controlled by the phospholipid composition of the target membrane

Järving, Reet; Lõokene, Aivar; Kurg, Reet; Siimon, Liina; Järving, Ivar; Samel, Nigulas Biochemistry 2012 / p. 3310-3320 : ill <https://pubs.acs.org/doi/10.1021/bi201690z>

Albumin affects the stability, oligomerization and ligand interactions of lipoprotein lipase

Risti, Robert; Gunn, Kathryn H.; Hiis-Hommuk, Kristofer; Seeba, Natjan-Naatan; Villo, Ly; Vendelin, Marko; Neher, Saskia B.; Lõokene, Aivar Atherosclerosis 2022 / p. 68 <https://doi.org/10.1016/j.atherosclerosis.2022.06.428>

Albumin and heparin together or separately - different outcome on lipoprotein lipase oligomerization and stability

Risti, Robert; Gunn, K.; Villo, Ly; Hiis-Hommuk, Kristofer; Seeba, Natjan-Naatan; Karimi, Hamed; Vendelin, Marko; Neher, Saskia B.; Lõokene, Aivar FEBS Open Bio 2023 / p. 223 <https://doi.org/10.1002/2211-5463.13646>

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

Sukonina, V.; Lõokene, 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 A-V interaction with members of the low density lipoprotein receptor gene family

Nilsson, Stefan; Lõokene, Aivar; Beckstead, Jennifer; Gliemann, Jorgen; Ryan, Robert; Olivecrona, Gunilla Biochemistry 2007 / 12, p. 3896-3904 : ill <https://pubs.acs.org/doi/10.1021/bi7000533#:~:text=Experiments%20using%20surface%20plasmon%20resonance,low%20density%20lipoprotein%20receptor%20family.>

Apolipoprotein A-V-heparin interactions : implications for plasma lipoprotein metabolism

Lõokene, Aivar; Beckstead, Jennifer; Nilsson, S.; Olivecrona, G.; Ryan, R.O. Journal of biological chemistry 2005 / 27, p. 25383-25387 <https://pubmed.ncbi.nlm.nih.gov/15878877/>

Apolipoprotein C-II mimetic peptide is an efficient activator of lipoprotein lipase in human plasma as studied by a calorimetric approach

Reimund, Mart; Wolska, Anna; Risti, Robert; Wilson, Sierra; Sviridov, Denis O.; Remaley, Alan T.; Lõokene, Aivar Biochemical and biophysical research communications 2019 / p. 67-72 <https://doi.org/10.1016/j.bbrc.2019.08.130> [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; Vorrjö, Evelina; Talmund, Philippa; Lõokene, 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

Lõokene, 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.; Lõokene, 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; Lõokene, 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; Lõokene, 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](#)

Calorimetry as a tool for mechanistic studies of lipolytic enzymes under in vivo like conditions = Kalorimeetria rakendamise lipolüütiliste ensüümide mehhanismide uurimiseks

Risti, Robert 2023 <https://doi.org/10.23658/taltech.19/2023> <https://digikogu.taltech.ee/et/Item/40f4a8ba-7a1a-4612-a455-00b1cc0d62d7> https://www.ester.ee/record=b5560479*est

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

Zhang, L.; Wu, G.; Tate, C.G.; Lõokene, Aivar; Olivecrona, G. Journal of biological chemistry 2003 / 31, 29344-29351 <https://www.sciencedirect.com/science/article/pii/S002192582084438X>

Chiral hemicucurbit[8]uril as an anion receptor : selectivity to size, shape and charge distribution

Kaabel, Sandra; Adamson, Jasper; Topic, Filip; **Öeren, Mario**; Reimund, Mart; Prigorchenko, Elena; Löökene, Aivar; Aav, Riina Chemical science 2017 / p. 2184-2190 : ill <https://doi.org/10.1039/C6SC05058A> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Combined action of albumin and heparin regulates lipoprotein lipase oligomerization, stability, and ligand interactions

Risti, Robert; Gunn, Kathryn H.; Hiis-Hommuk, Kristofer; Seeba, Natjan-Naatan; Karimi, Hamed; Villo, Ly; Vendelin, Marko; Neher, Saskia B.; Löökene, Aivar PLoS ONE 2023 / art. e0283358, 24 p. : ill <https://doi.org/10.1371/journal.pone.0283358> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Cyclohexanohemicucurbit[8]uril - a neutral host for anionic guests

Kaabel, Sandra; Adamson, Jasper; Kalenius, Elina; Topic, Filip; **Öeren, Mario**; Löökene, Aivar; Rissanen, Kari; Aav, Riina Balticum Organicum Syntheticum : 3-6 July 2016, Riga, Latvia : program and abstracts 2016 / p. 80 : ill http://www.boschem.eu/public/BOS2016/BOS-2016_Anstract-Book_Final.pdf

Cyclohexanohemicucurbit[8]uril - a neutral host for anionic guests

Kaabel, Sandra; Adamson, Jasper; Kalenius, Elina; Topic, Filip; **Öeren, Mario**; Löökene, Aivar; Rissanen, Kari; Aav, Riina 11th International Symposium on Macrocyclic and Supramolecular Chemistry : ISMSC-2016 : Seoul, Korea, 10-14 July 2016 2016 / p. PA051

Dual ELISA using SARS-CoV-2 N protein produced in E. coli and CHO cells reveals epitope masking by N-glycosylation

Rump, Airi; Risti, Robert; Kristal, Mai-Ly; Reut, Jekaterina; Sõrtski, Vitali; Löökene, Aivar; Rüütel Boudinot, Sirje Biochemical and biophysical research communications 2021 / p. 457-460 <https://doi.org/10.1016/j.bbrc.2020.11.060> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effects of six APOA5 varianta, identified in patients with severe hyperglyceridemia, on in vitro lipoprotein lipase activity and receptor binding

Dorfmeister, B.; Zeng, W.W.; Löökene, Aivar Arteriosclerosis, thrombosis and vascular biology 2008 / 10, p. 1866-1871 <https://pubmed.ncbi.nlm.nih.gov/18635818/>

Evidence for two distinct binding sites for lipoprotein lipase on glycosylphosphatidylinositol-anchored high density lipoprotein-binding protein 1 (GPIHBP1)

Reimund, Mart; Larsson, Mikael; Kovrov, Oleg; Kasvandik, Sergo; Olivecrona, Gunilla; Löökene, Aivar Journal of biological chemistry 2015 / p. 13919-13934 : ill <https://doi.org/10.1074/jbc.M114.634626> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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/>

Glükogeeni ainevahetus ja pentoosfosfaadirada : 11. osa

Biokeemia : lühikursus : õpik kõrgkoolidele 2016 / lk. 389-428 : ill

Glükosüülfosfatidüülinositol ankurdatud kõrge tihedusega lipoproteiine siduva valk ühe N-terminaalse domääni roll interaktsioonis lipoproteiinlipaasiga

Reimund, Mart; Robal, Terje; Lillepruun, Miina; Löökene, Aivar XXXII Eesti Keemiapäevad : teaduskonverentsi teesid 2011 / lk. 84

Immunodetection of Streptococcus uberis pathogen in raw milk

Mihklepp, Kaisa; **Kivirand, Kairi**; Juronen, Delia; Löökene, Aivar; Rinken, Toonika Enzyme and microbial technology 2019 / art. 109360, 6 p. : ill <https://doi.org/10.1016/j.enzmictec.2019.109360> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

Leptin acutely increases hepatic triglyceride secretion in patients with lipodystrophy

Beghini, Marianna; Metz, Matthäus; Baumgartner, Clemens; Wolf, Peter; Bastian, Magdalena; Hackl, Martina; Baumgartner-Parzer, Sabina; Marculescu, Rodrig; **Risti, Robert**; Löökene, Aivar Metabolism 2025 / art. 156261 <https://doi.org/10.1016/j.metabol.2025.156261>

Leptin increases hepatic triglyceride export via a vagal mechanism in humans

Metz, Matthäus; Beghini, Marianna; Wolf, Peter; Pfleger, Lorenz; Hackl, Martina; Bastian, Magdalena; Freudenthaler, Angelika; Harreiter, Jürgen; **Risti, Robert; Lõokene, Aivar** Cell Metabolism 2022 / p. 1719-1731 <https://doi.org/10.1016/j.cmet.2022.09.020>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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>

Lipoproteiinlipaasi aktiivsuse regulatsioon angiopoietini-sarnase valgu 4 kaudu ning seda mõjutavad tegurid

Robal, Terje; Lillepruun, Miina; Lõokene, Aivar XXXI Eesti keemiapäevad : [28. aprill 2010, Tallinn] : teaduskonverentsi teesid = 31st Estonian Chemistry Days : abstracts of scientific conference 2010 / lk. 69

Lipoprotein lipase activity and interactions studied in human plasma by isothermal titration calorimetry

Reimund, Mart; Kovrov, Oleg; Olivecrona, Gunilla; **Lõokene, Aivar** Journal of lipid research 2017 / p. 279-288 : ill <https://doi.org/10.1194/jlr.D071787> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metric 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](#)

A negatively charged cluster in the disordered acidic domain of GPIHBP1 provides selectivity in the interaction with lipoprotein lipase

Risti, Robert; Reimund, Mart; Seeba, Natjan-Naatan; Lõokene, Aivar Scientific reports 2024 / art. 19639 <https://doi.org/10.1038/s41598-024-70468-6>

40. ptk. Valgubiokeemia meetodid

Biokeemia : lühikursus : õpik kõrgkoolidele 2016 / lk. 669-692 : ill

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>

Purification, characterization and specificity studies of metalloproteinases from Vipera lebetina snake venom

Trummal, Katrin 2007

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

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

Structural and functional analysis of APOA5 mutations identified in patients with severe hypertriglyceridemia

Mendoza-Barbera, Elena; **Lõokene, Aivar** Journal of lipid research 2013 / p. 649-661 <https://doi.org/10.1194/jlr.M031195> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Surface plasmon resonance studies of lipoprotein interactions

Lõokene, Aivar The 1st International Conference of Biomedical Spectroscopy : from Molecules to Man 2002 / ? p

The GD1a glycan is a cellular receptor for adenoviruses causing epidemic keratoconjunctivitis

Nilsson, Emma C.; Storm, Rickard J.; Bauer, Johannes; Johansson, Susanne M.; **Lõokene, Aivar** Nature medicine 2011 / p. 105-110 : ill

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

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

Triglütseriinide metabolismis osalev angiopoietini-sarnane valk 4-struktuur ja oligomerisatsioon

Lillepruun, Miina; Robal, Terje; Lõokene, Aivar XXXII Eesti Keemiapäevad : teaduskonverentsi teesid 2011 / lk. 55

Uudsed mehhanismid lipoproteiinlipaasi aktiivsuse ja stabiilsuse regulatsioonis

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