

Antioxidative CXXC peptide motif from mesencephalic astrocyte-derived neurotrophic factor antagonizes programmed cell death

Božok, Valentina; Yu, Li-Ying; Palgi, Jaan; Arumäe, Urmas Frontiers in cell and developmental biology 2018 / 15 p. : ill
<https://doi.org/10.3389/fcell.2018.00106> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

AP-1 transcription factors mediate BDNF-positive feedback loop in cortical neurons

Tuvikene, Jürgen; Pruunsild, Priit; Orav, Ester; Esvald, Eli-Eelika; Timmusk, Tõnis Journal of neuroscience 2016 / p. 1290-1305 : ill <https://doi.org/10.1523/JNEUROSCI.3360-15.2016>

BAC-based cellular model for screening regulators of BDNF gene transcription

Jaanson, Kaur; Sepp, Mari; Aid-Pavlidis, Tamara; Timmusk, Tõnis BMC neuroscience 2014 / p. 1-12 : ill

Brain-derived neurotrophic factor expression in vivo is under the control of neuron-restrictive silencer element

Timmusk, Tõnis; Palm, Kaia; Lendahl, U.; Metsis, Madis Journal of biological chemistry 1999 / p. 1078-1084

Characterization of symmetric complexes of nerve growth factor and the ectodomain of the pan-neurotrophin receptor, p75NTR

Aurikko, J.P.; Ruotolo, B.T.; Grossmann, J.G.; Moncrieffe, M.C.; Stephens, E.; Leppänen, V.M.; Robinson, C.V.; Saarma, Mart; Bradshaw, R.A.; Blundell, T.L. Journal of biological chemistry 2005 / 39, p. 33453-33460 <https://pubmed.ncbi.nlm.nih.gov/16009712/>

Corticosterone actions on the hippocampal brain-derived neurotrophic factor expression are mediated by exon IV promoter

Hansson, Anita C.; Sommer, Wolfgang; Metsis, Madis; Stromberg, Ingrid; Agnati, Luigi Francesco; Fuxe, Kjell Journal of neuroendocrinology 2006 / 2, p. 104-114 <http://dx.doi.org/10.1111/j.1365-2826.2005.01390.x>

CREB family transcription factors are major mediators of BDNF transcriptional autoregulation in cortical neurons

Esvald, Eli-Eelika; Tuvikene, Jürgen; Sirp, Alex; Patil, Sudarshan; Bramham, Clive; Timmusk, Tõnis Journal of neuroscience 2020 / p. 1405-1426 : ill <https://doi.org/10.1523/JNEUROSCI.0367-19.2019> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

CXXC peptide motif from mesencephalic astrocyte-derived neurotrophic factor (MANF) antagonizes apoptotic and necroptotic death and has anti-oxidant activity

Bozok, V.; Palgi, Jaan; Arumäe, Urmas Neurodegenerative diseases 2015 / p. 1829 <http://dx.doi.org/10.1159/000381736>

Differential regulation of the BDNF gene in cortical and hippocampal neurons

Esvald, Eli-Eelika; Tuvikene, Jürgen; Moistus, Andra; Rannaste, Käthy; Kõomägi, Susann; Timmusk, Tõnis Journal of neuroscience 2022 / p. 9110-9128 <https://doi.org/10.1523/JNEUROSCI.2535-21.2022> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Dissecting stimulus-dependent transcription of brain-derived neurotrophic factor = Aju-päritolu neurotroofse teguri stiimulsõltuva transkriptsiooni uuringud

Esvald, Eli-Eelika 2023 <https://doi.org/10.23658/taltech.32/2023> <https://digikogu.taltech.ee/et/Item/6222c009-c82d-4efb-98c2-51bf2f148b52>
https://www.ester.ee/record=b5567508*est

Efficient use of a translation start codon in BDNF exon I

Koppel, Indrek; Tuvikene, Jürgen; Lekk, Ingrid; Timmusk, Tõnis Journal of neurochemistry 2015 / p. 1015-1025 : ill
<http://dx.doi.org/10.1111/jnc.13124>

An 840 kb distant upstream enhancer is a crucial regulator of catecholamine-dependent expression of the BDNF gene in astrocytes

Avarlaid, Annela; Esvald, Eli-Eelika; Koppel, Indrek; Parkman, Annabel; Zhuravskaya, Anna; Makeyev, Eugene V.; Tuvikene, Jürgen; Timmusk, Tõnis Glia 2023 <https://doi.org/10.1002/glia.24463>

Electrochemical sensor based on molecularly imprinted polymer for rapid quantitative detection of brain-derived neurotrophic factor

Ayankojo, Akinrinade George; Boroznjak, Roman; Reut, Jekaterina; Tuvikene, Jürgen; Timmusk, Tõnis; Sõritski, Vitali Sensors and Actuators B: Chemical 2023 / art. 134656 <https://doi.org/10.1016/j.snb.2023.134656>

Electrochemical sensor based on molecularly imprinted polymers for label-free detection of neurotrophic factor protein [Online resource]

Kidakova, Anna; Sõritski, Vitali; Reut, Jekaterina; Öpik, Andres Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [4.-5. veebr. 2019, Tartu : teesid] 2019 / 1 p <http://fntdk.ut.ee/teesid-2019/>

Environmental enrichment results in higher levels of nerve growth factor mRNA in the rat visual cortex and hippocampus

Torasdöter, M.; Metsis, Madis; Henriksson, B.G.; Winblad, B.; Mohammed, A.H. Behavioural brain research 1998 / p. 83-90

GDNF - a stranger in the TGF-beta superfamily

Saarma, Mart European journal of biochemistry 2000 / p. 6968-6971 <https://pubmed.ncbi.nlm.nih.gov/11106404/>

GDNF family : new promising growth factors

Saarma, Mart; Arumäe, Urmas Neuroscience news 1999 / p. 26-34

GDNF family ligands activate multiple events during axonal growth in mature sensory neurons

Paveliev, Mikhail; Airaksinen, Matti S.; **Saarma, Mart** Molecular and cellular neuroscience 2004 / 3, p. 453-459
<https://www.sciencedirect.com/science/article/pii/S1044743103003646>

GDNF family ligands and receptors are differentially regulated after brain insults in the rat

Kokaia, Zaal; Airaksinen, Matti S.; Nanobashvili, A.; Larsson, E.; Kujamäki, E.; Lindvall, O.; **Saarma, Mart** European journal of neuroscience 1999 / p. 1202-1216

GDNF family neurotrophic factor signalling : four masters, one servant?

Airaksinen, Matti S.; Titievsky, A.; **Saarma, Mart** Molecular and cellular neurosciences 1999 / p. 313-325

GDNF triggers a novel Ret-independent Src-kinase family-coupled signaling via a GPI-linked GDNF receptor α 1

Poteriaev, D.; Titievsky, A.D.; Sun, Yun-Fu; Thomas-Crusells, J.; Lindahl, Maria; Billaud, M.; Arumäe, Urmas; **Saarma, Mart** FEBS letters 1999 / p. 63-66

Glial cell line-derived neurotrophic factor is expressed in penis of adult rat and retrogradely transported in penile parasympathetic and sensory nerves

Laurikainen, A.; Hiltunen, J.O.; Vanhatalo, S.; Klinge, E.; **Saarma, Mart** Cell and tissue research 2000 / p. 321-329
<https://pubmed.ncbi.nlm.nih.gov/11151444/>

Human glial cell line-derived neurotrophic factor receptor α 4 is the receptor for persephin, and is predominantly expressed in normal and malignant thyroid medullary cells

Lindahl, Maria; Poteryaev, Dmitry; Yu, Liying; Arumäe, Urmas; Timmusk, Tõnis; Bongarzone, Italia; Aiello, Antonella; Pierotti, Marco A.; Airaksinen, Matti S.; **Saarma, Mart** Journal of biological chemistry 2001 / 12, p. 9344-9351 : ill
<https://doi.org/10.1074/jbc.M008279200>

Intronic enhancer region governs transcript-specific Bdnf expression in rodent neurons

Tuvikene, Jürgen; Esvald, Eli-Eelika; Rähni, Annika; Uustalu, Kaie; Zhuravskaya, Anna; Avarlaid, Annela; Makeyev, Eugene V.; Timmusk, Tõnis eLife 2021 / art. e65161 <https://doi.org/10.7554/eLife.65161> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Nerve growth factor from Vipera lebetina venom

Paalme, Viu; Trummal, Katrin; Samel, Mari; Tõnismägi, Külli; **Järvekülg, Lilian**; Vija, Heiki; Subbi, Juhan; Siigur, Jüri; Siigur, Ene Toxicon 2009 / 3, p. 329-336 : ill <https://www.sciencedirect.com/science/article/pii/S0041010109002438>

Neuronal activity-dependent transcription factors and regulation of human BDNF gene = Närvitalitlusest sõltuvad transkriptsioonifaktorid ja inimese BDNF geeni avaldumise regulatsioon

Pruunsild, Priit 2010 https://www.ester.ee/record=b2653637*est

Neurotroofsed tegurid

Timmusk, Tõnis; Koppel, Indrek; **Pruunsild, Priit**; Sepp, Mari; Tamme, Richard Eesti Arst 2007 / 9, lk. 614-621
<https://eestiartst.ee/neurotroofsed-tegurid/>

Neurotrophic factors - a key to understanding neuronal life and death - and memory and thinking : what are the neurotrophic factors and how do they regulate neurons?

Saarma, Mart; Arumäe, Urmas Estonia : member state of NATO and the EU : international business handbook 2007-2008 2007 / p. 191-207 : ill., portr https://www.ester.ee/record=b2288232*est

Neurotrophic factors in development and disease

Saarma, Mart The First Joint Conference of Scandinavian Neuropaediatric Society and Baltic Child Neurology Assotiation. The 7th International Conference of Baltic Neurology Association in cooperation with 4th Conference of Estonian Society of Human Genetics : May 27-31, 2003, Tallinn, Estonia : program and abstract book 2003 / p. 13-14

Neurotrophins : transcription and translation

West, A. E.; **Pruunsild, Priit**; **Timmusk, Tõnis** Neurotrophic factors 2014 / p. 67-100

Neurturin mRNA expression suggests roles in trigeminal innervation of the first branchial arch in tooth formation

Luukko, K.; **Saarma, Mart**; Thesleff, I. Developmental dynamics 1998 / p. 207-219

Luberg, Kristi; Park, Rahel; Aleksejeva, Elina; Timmusk, Tõnis BMC neuroscience 2015 / p. 1-21 : ill
<http://dx.doi.org/10.1186/s12868-015-0215-x>

Other neurotrophic factors : Glial cell line-derived neurotrophic factor
Saarma, Mart; Sariola, H. Microscopy research and technique 1999 / p. 292-302

Kidakova, Anna; Boroznjak, Roman; Reut, Jekaterina; Öpik, Andres; Sõritski, Vitali GSFMT Scientific Conference 2020 : Tallinn, February 4-5, 2020 : abstracts 2020 / p. 43 <http://fmdtk.ut.ee/wp-content/uploads/2020/01/GSFMT2020.pdf>

Pombo, P.M.; Baretino, D.; Espliquero, G.; **Metsis, Madis**; Iglesias, T.; Rodriguez-Pena, A. Journal of biological chemistry 2000 / p.

37510-37517 <https://pubmed.ncbi.nlm.nih.gov/10978336/>

Untranslated regions of brain-derived neurotrophic factor (Bdnf) mRNA control its translatability and subcellular localization

Lekk, Ingrid; Cabrera-Cabrera, Florencia; Turconi, Giorgio; **Tuvikene, Jürgen;** **Esvald, Eli-Eelika;** **Rähni, Annika;** Casserly, Laoise; Garton, Daniel R.; Andressoo, Jaan-Olle; **Timmusk, Tõnis;** **Koppel, Indrek** The journal of biological chemistry 2023 / art. 102897 <https://doi.org/10.1016/j.jbc.2023.102897>

Uued neurotroofilised faktorid MANF ja CDFN ning nende uudne toimemehhanism

Arumäe, Urmas Tallinna Tehnikaülikooli aastaraamat 2013 2014 / lk. 257-263 : ill