

## List of publications

### Dr. Krizbai István Adorján

1. **Krizbai I**, Deli M, Lengyel I, Maderspach K, Pákáski M, Joó F, Wolff JR. In situ hybridization with digoxigenin labeled oligonucleotide probes: detection of CAMK-II gene expression in primary cultures of cerebral endothelial cells. *Neurobiology* (Bp). 1993;1(3):235-40. PubMed PMID: 8111357. (IF: )
2. Deli MA, Joó F, **Krizbai I**, Lengyel I, Nunzi MG, Wolff JR. Calcium/calmodulin-stimulated protein kinase II is present in primary cultures of cerebral endothelial cells. *J Neurochem*. 1993 May;60(5):1960-3. PubMed PMID: 8386228. (IF1993: 4,223)
3. **Krizbai I**, Szabó G, Deli M, Maderspach K, Lehel C, Oláh Z, Wolff JR, Joó F. Expression of protein kinase C family members in the cerebral endothelial cells. *J Neurochem*. 1995 Jul;65(1):459-62. PubMed PMID: 7790892. (IF1995: 4,852)
4. Pestean A, **Krizbai I**, Böttcher H, Párducz A, Joó F, Wolff JR. Identification of the *Ulex europaeus* agglutinin-I-binding protein as a unique glycoform of the neural cell adhesion molecule in the olfactory sensory axons of adults rats. *Neurosci Lett*. 1995 Aug 4;195(2):117-20. PubMed PMID: 7478264. (IF1995: 2,318)
5. Szabó CA, **Krizbai I**, Deli MA, Abrahám CS, Joó F. Receptor-mediated regulation by histamine of the acid phosphatase activity in cultured cerebral endothelial cells. *Inflamm Res*. 1996 Mar;45 Suppl 1:S60-1. PubMed PMID: 8696933. (IF1996: 2,231)
6. Szabó CA, **Krizbai I**, Deli MA, Ábrahám CS, Joó F: Effects of histamine on the acid phosphatase activity of cultured cerebral endothelial cells. *Biology and Physiology of the blood-brain barrier*, Couraud PO and Sherman (eds), Plenum Press, pp. 241-243, 1996
7. **Krizbai I**, Joó F, Pestean A, Preil J, Bötcher H, Wolff JR. Localization and biochemical characterization of acid phosphatase isoforms in the olfactory system of adult rats. *Neuroscience*. 1997 Feb;76(3):799-807. PubMed PMID: 9135052. (IF1997: 3,594)
8. Németh L, Szabó CA, Deli MA, Kovács J, **Krizbai IA**, Abrahám CS, Joó F. Intracarotid histamine administration results in dose-dependent vasogenic brain oedema formation in new-born pigs. *Inflamm Res*. 1997 Mar;46 Suppl 1:S45-6. PubMed PMID: 9098758. (IF1997: 1,773)
9. Wolff JR, Liu WL, Böttcher H, **Krizbai I**, Jóo F, Saftig P, Párducz A. Non-conventional role of lysosomal acid phosphatase in olfactory receptor axons: co-localization with growth-associated phosphoprotein-43. *Neuroscience*. 1997 Aug;79(3):887-91. PubMed PMID: 9219951. (IF1997: 3,594)
10. C.A. Szabó, M.A. Deli, L. Németh, **I. Krizbai**, J. Kovács, C.S. Abrahám and F. Joó: Histamine-induced vasogenic brain oedema formation in newborn pigs. *Neurochemistry, Teelken and Korf* (eds), Plenum Press, pp. 479-483, 1997

11. Fábrián G, Szabó CA, Bozó B, Greenwood J, Adamson P, Deli MA, Joó F, **Krizbai IA**, Szucs M. Expression of G-protein subtypes in cultured cerebral endothelial cells. *Neurochem Int.* 1998 Aug;33(2):179-85. PubMed PMID: 9761462. (IF1998: 1,781)

12. **Krizbai IA**, Deli MA, Pestenác A, Siklós L, Szabó CA, András I, Joó F. Expression of glutamate receptors on cultured cerebral endothelial cells. *J Neurosci Res.* 1998 Dec 15;54(6):814-9. PubMed PMID: 9856865. (IF1998: 2,874)

13. Kis B, Szabó CA, Pataricza J, **Krizbai IA**, Mezei Z, Gecse A, Telegdy G, Papp JG, Deli MA. Vasoactive substances produced by cultured rat brain endothelial cells. *Eur J Pharmacol.* 1999 Feb 26;368(1):35-42. PubMed PMID: 10096767. (IF1999: 2,047)

Q1

14. Németh L, Szabó CA, Deli MA, Kovács J, **Krizbai IA**, Ábrahám CS. Cerebral microvascular acid phosphatase isoenzymes may contribute to the histamine-induced changes in the blood-brain barrier permeability in the newborn pig. *Neurosci. Res. Com.* 24:125-133 (1999) (IF1999: 0,989)

Q3

15. Bauer H, Stelzhammer W, Fuchs R, Weiger TM, Danninger C, Probst G, **Krizbai IA**. Astrocytes and neurons express the tight junction-specific protein occludin in vitro. *Exp Cell Res.* 1999 Aug 1;250(2):434-8. PubMed PMID: 10413597. (IF1999: 3,256)

Q1

16. **Krizbai IA**, Katarova Z, Szabó G, Párducz A, Wolff JR. Modulation of the truncated GAD25 by estrogen in the olfactory bulb of adult rats. *Neuroreport.* 2000 Mar 20;11(4):791-4. PubMed PMID: 10757521. (IF2000: 2,696)

Q1

17. Brust P, Friedrich A, **Krizbai IA**, Bergmann R, Roux F, Ganapathy V, Johannsen B. Functional expression of the serotonin transporter in immortalized rat brain microvessel endothelial cells. *J Neurochem.* 2000 Mar;74(3):1241-8. PubMed PMID: 10693957. (IF2000: 4,900)

D1

18. Pardutz A, **Krizbai I**, Multon S, Vecsei L, Schoenen J. Systemic nitroglycerin increases nNOS levels in rat trigeminal nucleus caudalis. *Neuroreport.* 2000 Sep 28;11(14):3071-5. PubMed PMID: 11043526. (IF2000: 2,696)

Q1

19. **Krizbai IA**, Bauer H, Amberger A, Hennig B, Szabó H, Fuchs R, Bauer HC. Growth factor-induced morphological, physiological and molecular characteristics in cerebral endothelial cells. *Eur J Cell Biol.* 2000 Sep;79(9):594-600. PubMed PMID: 11043400. (IF2000: 2,801)

D1

20. Webersinke G, Bauer HC, Danninger C, **Krizbai IA**, Schittny JC, Thalhamer J, Bauer H. Use of genetically modified glial cells overexpressing laminin alpha1-chain peptides in neurite

outgrowth studies. *Cell Mol Neurobiol*. 2000 Dec;20(6):605-21. PubMed PMID: 11100971. (IF2000: 2,093)

D1

21. Traweger A, Fang D, Liu YC, Stelzhammer W, **Krizbai IA**, Fresser F, Bauer HC, Bauer H. The tight junction-specific protein occludin is a functional target of the E3 ubiquitin-protein ligase itch. *J Biol Chem*. 2002 Mar 22;277(12):10201-8. Epub 2002 Jan 8. PubMed PMID: 11782481. (IF2002: 6,696)

D1

22. Traweger A, Fuchs R, **Krizbai IA**, Weiger TM, Bauer HC, Bauer H. The tight junction protein ZO-2 localizes to the nucleus and interacts with the heterogeneous nuclear ribonucleoprotein scaffold attachment factor-B. *J Biol Chem*. 2003 Jan 24;278(4):2692-700. Epub 2002 Oct 27. PubMed PMID: 12403786. (IF2003: 6,482)

D1

23. Bresgen N, Karlhuber G, **Krizbai I**, Bauer H, Bauer HC, Eckl PM. Oxidative stress in cultured cerebral endothelial cells induces chromosomal aberrations, micronuclei, and apoptosis. *J Neurosci Res*. 2003 May 1;72(3):327-33. PubMed PMID: 12692899. (IF2003: 3,374)

Q2

24. **Krizbai IA**, Deli MA. Signalling pathways regulating the tight junction permeability in the blood-brain barrier. *Cell Mol Biol (Noisy-le-grand)*. 2003 Feb;49(1):23-31. Review. PubMed PMID: 12839334. (IF2003: 1,153)

Q2

25. **Krizbai IA**, Bauer H, Bresgen N, Eckl PM, Farkas A, Szatmári E, Traweger A, Wejksza K, Bauer HC. Effect of oxidative stress on the junctional proteins of cultured cerebral endothelial cells. *Cell Mol Neurobiol*. 2005 Feb;25(1):129-39. PubMed PMID: 15962510. (IF2005: 2,022)

D1

26. Letoha T, Somlai C, Takacs T, Szabolcs A, Jarmay K, Rakonczay Z Jr, Hegyi P, Varga I, Kaszaki J, **Krizbai I**, Boros I, Duda E, Kusz E, Penke B. A nuclear import inhibitory peptide ameliorates the severity of cholecystokinin-induced acute pancreatitis. *World J Gastroenterol*. 2005 Feb 21;11(7):990-9. PubMed PMID: 15742402. (IF2003: 3,318)

Q2

27. Farkas A, Szatmári E, Orbók A, Wilhelm I, Wejksza K, Nagyoszi P, Hutamekalin P, Bauer H, Bauer HC, Traweger A, **Krizbai IA**. Hyperosmotic mannitol induces Src kinase-dependent phosphorylation of beta-catenin in cerebral endothelial cells. *J Neurosci Res*. 2005 Jun 15;80(6):855-61. PubMed PMID: 15898100. (IF2005: 3,239)

Q2

28. Szabó H, Novák Z, Bauer H, Szatmári E, Farkas A, Wejksza K, Orbók A, Wilhelm I, **Krizbai IA**. Regulation of proteolytic activity induced by inflammatory stimuli in lung epithelial cells. *Cell Mol Biol (Noisy-le-grand)*. 2005 Sep 2;51 Suppl:OL729-35. PubMed PMID: 16171572. (IF2005: 1,018)

Q2

29. **Krizbai IA**, Lenzser G, Szatmari E, Farkas AE, Wilhelm I, Fekete Z, Erdos B, Bauer H, Bauer HC, Sandor P, Komjati K. Blood-brain barrier changes during compensated and decompensated hemorrhagic shock. *Shock*. 2005 Nov;24(5):428-33. PubMed PMID: 16247328. (IF2005: 3,122)

D1

30 Bresgen N, Jaksch H, Bauer HC, Eckl P, **Krizbai I**, Tempfer H. Astrocytes are more resistant than cerebral endothelial cells toward geno- and cytotoxicity mediated by short-term oxidative stress. *J Neurosci Res*. 2006 Dec;84(8):1821-8. PubMed PMID: 16998903. (IF2006: 3,476)

Q2

31. Veszeka S, Pásztói M, Farkas AE, **Krizbai I**, Ngo TK, Niwa M, Abrahám CS, Deli MA. Pentosan polysulfate protects brain endothelial cells against bacterial lipopolysaccharide-induced damages. *Neurochem Int*. 2007 Jan;50(1):219-28. Epub 2006 Sep 25. PubMed PMID: 16997427. (IF2007: 2,975)

Q2

32. Bálint Z, **Krizbai IA**, Wilhelm I, Farkas AE, Párducz A, Szegletes Z, Váró G. Changes induced by hyperosmotic mannitol in cerebral endothelial cells: an atomic force microscopic study. *Eur Biophys J*. 2007 Feb;36(2):113-20. Epub 2006 Nov 8. PubMed PMID: 17115151. (IF2007: 2,238)

Q1

33. Wilhelm I, Farkas AE, Nagyoszi P, Váró G, Bálint Z, Végh GA, Couraud PO, Romero IA, Weksler B, **Krizbai IA**. Regulation of cerebral endothelial cell morphology by extracellular calcium. *Phys Med Biol*. 2007 Oct 21;52(20):6261-74. Epub 2007 Oct 2. PubMed PMID: 17921584. (IF2007: 2,528)

D1

34. Traweger A, Lehner C, Farkas A, **Krizbai IA**, Tempfer H, Klement E, Guenther B, Bauer HC, Bauer H. Nuclear Zonula occludens-2 alters gene expression and junctional stability in epithelial and endothelial cells. *Differentiation*. 2008 Jan;76(1):99-106. Epub 2007 Oct 31. PubMed PMID: 17973926. (IF2008: 3,180)

Q1

35. Hutamekalin P, Farkas AE, Orbók A, Wilhelm I, Nagyoszi P, Veszeka S, Deli MA, Buzás K, Hunyadi-Gulyás E, Medzihradsky KF, Meksuriyen D, **Krizbai IA**. Effect of nicotine and polyaromatic hydrocarbons on cerebral endothelial cells. *Cell Biol Int*. 2008 Feb;32(2):198-209. Epub 2007 Sep 7. PubMed PMID: 17920942. (IF2008: 1,619)

Q2

36. Vajda S, Bartha K, Wilhelm I, **Krizbai IA**, Adam-Vizi V. Identification of protease-activated receptor-4 (PAR-4) in puromycin-purified brain capillary endothelial cells cultured on Matrigel. *Neurochem Int*. 2008 May;52(6):1234-9. doi: 10.1016/j.neuint.2008.01.003. Epub 2008 Jan 12. PubMed PMID: 18294734. (IF2008: 3,228)

Q2

37. Wilhelm I, Nagyoszi P, Farkas AE, Couraud PO, Romero IA, Weksler B, Fazakas C, Dung NT, Bottka S, Bauer H, Bauer HC, **Krizbai IA**. Hyperosmotic stress induces Axl activation and cleavage in cerebral endothelial cells. *J Neurochem*. 2008 Oct;107(1):116-26. doi: 10.1111/j.1471-4159.2008.05590.x. Epub 2008 Jul 31. PubMed PMID: 18673450. (IF2008: 4,500)

Q1

38. Nagyoszi P, Wilhelm I, Farkas AE, Fazakas C, Dung NT, Haskó J, **Krizbai IA**. Expression and regulation of toll-like receptors in cerebral endothelial cells. *Neurochem Int*. 2010 Nov;57(5):556-64. doi: 10.1016/j.neuint.2010.07.002. Epub 2010 Jul 14. PubMed PMID: 20637248. (IF2010: 3.601)

Q2

39. Bauer HC, Traweger A, Zweimueller-Mayer J, Lehner C, Tempfer H, **Krizbai I**, Wilhelm I, Bauer H. New aspects of the molecular constituents of tissue barriers. *J Neural Transm*. 2011 Jan;118(1):7-21. doi: 10.1007/s00702-010-0484-6. Epub 2010 Sep 24. Review. PubMed PMID: 20865434. (IF2011: 2.730).

Q1

40. Végh AG, Fazakas C, Nagy K, Wilhelm I, **Krizbai IA**, Nagyoszi P, Szegletes Z, Váró G. Spatial and temporal dependence of the cerebral endothelial cells elasticity. *J Mol Recognit*. 2011 May-Jun;24(3):422-8. doi: 10.1002/jmr.1107. PubMed PMID: 21504019. (IF2011: 3,31)

Q2

41. Wilhelm I, Fazakas C, **Krizbai IA**. In vitro models of the blood-brain barrier. *Acta Neurobiol Exp (Wars)*. 2011;71(1):113-28. Review. PubMed PMID: 21499332. (IF2011: 2,11)

Q1

42. Lehner C, Gehwolf R, Tempfer H, **Krizbai I**, Hennig B, Bauer HC, Bauer H. Oxidative stress and blood-brain barrier dysfunction under particular consideration of matrix metalloproteinases. *Antioxid Redox Signal*. 2011 Sep 1;15(5):1305-23. doi: 10.1089/ars.2011.3923. Epub 2011 May 19. Review. PubMed PMID: 21294658. (IF2011: 8,456)

D1

43. Fazakas C, Wilhelm I, Nagyoszi P, Farkas AE, Haskó J, Molnár J, Bauer H, Bauer HC, Ayaydin F, Dung NT, Siklós L, **Krizbai IA**. Transmigration of melanoma cells through the blood-brain barrier: role of endothelial tight junctions and melanoma-released serine proteases. *PLoS One*. 2011;6(6):e20758. doi:10.1371/journal.pone.0020758. Epub 2011 Jun 2. PubMed PMID: 21674054; PubMed Central PMCID: PMC3107231. (IF2011: 4,092)

D1

44. Sziráki I, Erdo F, Beéry E, Molnár PM, Fazakas C, Wilhelm I, Makai I, Kis E, Herédi-Szabó K, Abonyi T, **Krizbai I**, Tóth GK, Krajcsi P. Quinidine as an ABCB1 probe for testing drug interactions at the blood-brain barrier: an in vitro in vivo correlation study. *J Biomol Screen*.

2011 Sep;16(8):886-94. doi: 10.1177/1087057111414896. Epub 2011 Aug 10. PubMed PMID: 21832259. (IF2011: 2,049)

Q1

45. Glavinas H, von Richter O, Vojnits K, Mehn D, Wilhelm I, Nagy T, Janossy J, **Krizbai I**, Couraud P, Krajcsi P. Calcein assay: a high-throughput method to assess P-gp inhibition. *Xenobiotica*. 2011 Aug;41(8):712-9. doi: 10.3109/00498254.2011.587033. Epub 2011 Jun 9. PubMed PMID: 21657832. (IF2011: 1,791)

Q1

46. Hornok V, Bujdosó T, Toldi J, Nagy K, Demeter I, Fazakas C, **Krizbai I**, Vécsei L, Dékány I. Preparation and properties of nanoscale containers for biomedical application in drug delivery: preliminary studies with kynurenic acid. *J Neural Transm*. 2012 Feb;119(2):115-21. doi: 10.1007/s00702-011-0726-2. Epub 2011 Nov 8. PubMed PMID: 22065206. (IF2012: 3,052)

Q1

47. Végh AG, Fazakas C, Nagy K, Wilhelm I, Molnár J, **Krizbai IA**, Szegletes Z, Váró G. Adhesion and stress relaxation forces between melanoma and cerebral endothelial cells. *Eur Biophys J*. 2012 Feb;41(2):139-45. doi: 10.1007/s00249-011-0765-5. Epub 2011 Oct 30. PubMed PMID: 22038122. (IF2012: 2,274)

Q1

48. Mallareddy JR, Tóth G, Fazakas C, Molnár J, Nagyősz P, Lipkowski AW, **Krizbai IA**, Wilhelm I. Transport characteristics of endomorphin-2 analogues in brain capillary endothelial cells. *Chem Biol Drug Des*. 2012 Apr;79(4):507-13. doi: 10.1111/j.1747-0285.2011.01306.x. PubMed PMID: 22181340. (IF2012: 2,469)

Q2

49. Ramirez SH, Haskó J, Skuba A, Fan S, Dykstra H, McCormick R, Reichenbach N, **Krizbai I**, Mahadevan A, Zhang M, Tuma R, Son YJ, Persidsky Y. Activation of cannabinoid receptor 2 attenuates leukocyte-endothelial cell interactions and blood-brain barrier dysfunction under inflammatory conditions. *J Neurosci*. 2012 Mar 21;32(12):4004-16. doi: 10.1523/JNEUROSCI.4628-11.2012. PubMed PMID: 22442067; PubMed Central PMCID: PMC3325902. (IF2012: 6,908)

D1

50. **Krizbai I**, Wilhelm I, Bauer HC, Bauer H. The role of glia in the formation and function of the blood-brain barrier. In: Neuroglia 3rd ed. (Editors: H. Kettenman, B.R. Ransom), Oxford University Press, pp. 417-429, 2013.

51. Sziráki I, Erdő F, Trampus P, Sike M, Molnár PM, Rajnai Z, Molnár J, Wilhelm I, Fazakas C, Kis E, **Krizbai I**, Krajcsi P. The use of microdialysis techniques in mice to study P-gp function at the blood-brain barrier. *J Biomol Screen*. 2013 Apr;18(4):430-40. doi: 10.1177/1087057112468156. Epub 2012 Nov 29. PubMed PMID: 23204072. (IF2013: 2,012)

Q1

52. Wilhelm I, Molnár J, Fazakas C, Haskó J, **Krizbai IA**. Role of the blood-brain barrier in the formation of brain metastases. *Int J Mol Sci*. 2013 Jan 11;14(1):1383-411. doi: 10.3390/ijms14011383. PubMed PMID: 23344048; PubMed Central PMCID: PMC3565326. (IF2013: 2.339)

Q2

53. Bálint Z, Zabini D, Konya V, Nagaraj C, Végh AG, Váró G, Wilhelm I, Fazakas C, **Krizbai IA**, Heinemann A, Olschewski H, Olschewski A. Double-stranded RNA attenuates the barrier function of human pulmonary artery endothelial cells. *PLoS One*. 2013 Jun 3;8(6):e63776. doi: 10.1371/journal.pone.0063776. Print 2013. PubMed PMID: 23755110; PubMed Central PMCID: PMC3670875. (IF2013:3,534)

D1

54. Traweger A, Toepfer S, Wagner RN, Zweimueller-Mayer J, Gehwolf R, Lehner C, Tempfer H, **Krizbai I**, Wilhelm I, Bauer HC, Bauer H. Beyond cell-cell adhesion: Emerging roles of the tight junction scaffold ZO-2. *Tissue Barriers*. 2013 Apr 1;1(2):e25039. doi: 10.4161/tisb.25039. Review. PubMed PMID: 24665396; PubMed Central PMCID: PMC3885625. (IF:)

55. Wilhelm I, Fazakas C, Molnár J, Haskó J, Végh AG, Cervenak L, Nagyósz P, Nyúl-Tóth A, Farkas AE, Bauer H, Guillemin GJ, Bauer HC, Váró G, **Krizbai IA**. Role of Rho/ROCK signaling in the interaction of melanoma cells with the blood-brain barrier. *Pigment Cell Melanoma Res*. 2014 Jan;27(1):113-23. doi: 10.1111/pcmr.12169. Epub 2013 Oct 23. PubMed PMID: 24148763. (IF2013: 5,641)

D1

56. Kosson A, **Krizbai I**, Lesniak A, Beresewicz M, Sacharczuk M, Kosson P, Nagyoszi P, Wilhelm I, Kleczkowska P, Lipkowski AW. Role of the blood-brain barrier in differential response to opioid peptides and morphine in mouse lines divergently bred for high and low swim stress-induced analgesia. *Acta Neurobiol Exp (Wars)*. 2014;74(1):26-32. PubMed PMID: 24718041. (IF2014: 1,286)

Q2

57. Wilhelm I, **Krizbai IA**. In vitro models of the blood-brain barrier for the study of drug delivery to the brain. *Mol Pharm*. 2014 Jul 7;11(7):1949-63. doi: 10.1021/mp500046f. Epub 2014 Apr 18. PubMed PMID: 24641309. (IF2014: 4,384)

D1

58. Haskó J, Fazakas C, Molnár J, Nyúl-Tóth Á, Herman H, Hermenean A, Wilhelm I, Persidsky Y, **Krizbai IA**. CB2 receptor activation inhibits melanoma cell transmigration through the blood-brain barrier. *Int J Mol Sci*. 2014 May 8;15(5):8063-74. doi: 10.3390/ijms15058063. PubMed PMID: 24815068; PubMed Central PMCID: PMC4057719. (IF2014: 2,862)

Q1

59. Wilhelm I, Fazakas C, Tamás A, Tóth G, Reglődi D, **Krizbai IA**. PACAP enhances barrier properties of cerebral microvessels. *J Mol Neurosci*. 2014 Nov;54(3):469-76. doi: 10.1007/s12031-014-0260-4. Epub 2014 Mar 11. PMID: 24614973 (IF2014: 2,343)

Q1

60. Hajdu Z, Haskó J, **Krizbai IA**, Wilhelm I, Jedlinszki N, Fazakas C, Molnár J, Forgo P, Hohmann J, Csupor D. Evaluation of lignans from *Heliopsis helianthoides* var. *scabra* for their potential antimetastatic effects in the brain. *J Nat Prod.* 2014 Dec 26;77(12):2641-50. doi: 10.1021/np500508y. Epub 2014 Dec 5. PMID: 25479041 (IF2014: 3,798)

D1

61. Bauer HC, Krizbai IA, Bauer H, Traweger A. "You Shall Not Pass"-tight junctions of the blood brain barrier. *Front Neurosci.* 2014 Dec 3;8:392. doi: 10.3389/fnins.2014.00392. eCollection 2014. PMID: 25520612 (IF2014: 3,656)

Q1

62. **Krizbai IA**, Gasparics Á, Nagyősz P, Fazakas C, Molnár J, Wilhelm I, Bencs R, Rosivall L, Sebe A. Endothelial-mesenchymal transition of brain endothelial cells: possible role during metastatic extravasation. *PLoS One.* 2015 Mar 5;10(3):e0119655. doi: 10.1371/journal.pone.0119655. eCollection 2015. (IF2015: 3,057)

Q1

63 Wilhelm I, **Krizbai IA**. Functional Characteristics of Brain Tumor Vascularization in: *Brain Mapping: An Encyclopedic Reference* (Ed AW Toga), vol. 3, pp. 1075-1079, Elsevier 2015

64. **Krizbai IA**, Fazakas C, Haskó J, Molnár J, Nyúl-Tóth Á, Farkas AE, Wilhelm I. Molecular structure and function of biological barriers. *Acta Biologica Szegediensis.* Volume 59(Suppl.1):39-50, 2015

65. Burkhart A, Thomsen LB, Thomsen MS, Lichota J, Fazakas C, Krizbai I, Moos T. Transfection of brain capillary endothelial cells in primary culture with defined blood-brain barrier properties. *Fluids Barriers CNS.* 2015 Aug 7;12:19. doi: 10.1186/s12987-015-0015-9. PMID: 26246240

D1

66. Nagyősz P, Nyúl-Tóth Á, Fazakas C, Wilhelm I, Kozma M, Molnár J, Haskó J, **Krizbai IA**. Regulation of NOD-like receptors and inflammasome activation in cerebral endothelial cells. *J Neurochem.* 2015 Nov;135(3):551-64. doi: 10.1111/jnc.13197. Epub 2015 Sep 3. (IF2015: 3,842)

Q1

67. Molnár J, Fazakas C, Haskó J, Sipos O, Nagy K, Nyúl-Tóth Á, Farkas AE, Végh AG, Váró G, Galajda P, **Krizbai IA**, Wilhelm I. Transmigration characteristics of breast cancer and melanoma cells through the brain endothelium: role of Rac and PI3K. *Cell Adh Migr.* 2016 May 3;10(3):269-81. doi: 10.1080/19336918.2015.1122156. Epub 2015 Dec 8. (IF2016:3,872)

Q2

68. Wilhelm I, Nyúl-Tóth A, Suciú M, Hermenean A **Krizbai IA**: Heterogeneity of the blood-brain barrier, *Tissue Barriers.* 2016 Jan 28;4(1):e1143544. doi: 10.1080/21688370.2016.1143544. eCollection 2016 Jan-Mar.

69. Varga N, Csapó E, Majláth Z, Ilisz I, **Krizbai IA**, Wilhelm I, Knapp L, Toldi J, Vécsei L, Dékány I. Targeting of the kynurenic acid across the blood-brain barrier by core-shell nanoparticles. *Eur J*

Pharm Sci. 2016 Apr 30;86:67-74. doi: 10.1016/j.ejps.2016.02.012. Epub 2016 Feb 23. (IF2016: 3,756)

D1

70. Imola Wilhelm and **Istvan A. Krizbai**. Effects of PACAP on Biological Barriers in: D. Reglodi, A. Tamas (eds.), Pituitary Adenylate Cyclase Activating Polypeptide — PACAP, Current Topics in Neurotoxicity 11, Springer International Publishing Switzerland 2016 p.433-447.DOI 10.1007/978-3-319-35135-3\_26

71. Gasparics Á, Rosivall L, **Krizbai IA**, Sebe A. When the endothelium scores an own goal: endothelial cells actively augment metastatic extravasation through endothelial-mesenchymal transition. Am J Physiol Heart Circ Physiol. 2016 May 1;310(9):H1055-63. doi: 10.1152/ajpheart.00042.2016. Epub 2016 Mar 18. [Epub ahead of print] (IF2016: 3,348).

Q1

72 Nyúl-Tóth Á, Suciu M, Molnár J, Fazakas C, Haskó J, Herman H, Farkas AE, Kaszaki J, Hermenean A, Wilhelm I, **Krizbai IA**. Differences in the molecular structure of the blood-brain barrier in the cerebral cortex and white matter: an in silico, in vitro and ex vivo study. Am J Physiol Heart Circ Physiol. 2016 Jun 1;310(11):H1702-14. doi: 10.1152/ajpheart.00774.2015. Epub 2016 Apr 8. [Epub ahead of print] IF2016: 3,348).

Q1

73. **Krizbai IA**, Nyúl-Tóth Á, Bauer HC, Farkas AE, Traweger A, Haskó J, Bauer H, Wilhelm I. Pharmaceutical Targeting of the Brain. Curr Pharm Des. 2016;22(35):5442-5462. (IF2016:2,611).

Q1

74. Hermenean A, Ghiozdan C, Gharbia S, **Krizbai IA**, Ardelean A. Plant-Derived Biomolecules and Drug Delivery Systems in the Treatment of Liver and Kidney Diseases. Curr Pharm Des. 2016;22(35):5415-5441. (IF2016:2,611).

Q1

75. Mendonça MC, Soares ES, de Jesus MB, Ceragioli HJ, Batista ÂG, Nyúl-Tóth Á, Molnár J, Wilhelm I, Maróstica MR Jr, **Krizbai I**, da Cruz-Höfling MA. PEGylation of Reduced Graphene Oxide Induces Toxicity in Cells of the Blood-Brain Barrier: An in Vitro and in Vivo Study. Mol Pharm. 2016 Nov 7;13(11):3913-3924. (IF2016: 4,44).

D1

76. Varga B, Fazakas C, Molnár J, Wilhelm I, Domokos RA, **Krizbai IA**, Szegletes Z, Váró G, Végh AG. Direct mapping of melanoma cell - endothelial cell interactions. J Mol Recognit. 2017 Jun;30(6). doi: 10.1002/jmr.2603. Epub 2016 Dec 23 (IF2016: 2,175).

Q3

77. Nyúl-Tóth Á, Kozma M, Nagyősz P, Nagy K, Fazakas C, Haskó J, Molnár K, Farkas AE, Végh AG, Váró G, Galajda P, Wilhelm I, **Krizbai IA**. Expression of pattern recognition receptors and activation of the non-canonical inflammasome pathway in brain pericytes. Brain Behav Immun. 2017 Aug;64:220-231. doi: 10.1016/j.bbi.2017.04.010. Epub 2017 Apr 18. (IF2017: 6,306).

D1

78 Wilhelm I, Nyúl-Tóth Á, Kozma M, Farkas AE, **Krizbai IA**. Role of pattern recognition receptors of the neurovascular unit in inflamm-aging. *Am J Physiol Heart Circ Physiol*. 2017 Nov 1;313(5):H1000-H1012. doi: 10.1152/ajpheart.00106.2017. Epub 2017 Aug 11. (IF2017: 3,569).

Q1

79. Wilhelm I, Fazakas C, Molnár K, Végh AG, Haskó J, **Krizbai IA**. Foe or friend? Janus-faces of the neurovascular unit in the formation of brain metastases. *J Cereb Blood Flow Metab*. 2018 Apr;38(4):563-587. doi: 10.1177/0271678X17732025. Epub 2017 Sep 18. (IF2018: 6,040).

D1

80. Varga B, Domokos RA, Fazakas C, Wilhelm I, **Krizbai IA**, Szegletes Z, Gergely C, Váró G, Végh AG. De-adhesion dynamics of melanoma cells from brain endothelial layer. *Biochim Biophys Acta*. 2018 Mar;1862(3):745-751. doi: 10.1016/j.bbagen.2017.10.013. Epub 2017 Oct 21. (IF2018: 3,681).

D1

81. Lajkó E, Tuka B, Fülöp F, **Krizbai I**, Toldi J, Magyar K, Vécsei L, Kőhidai L. Kynurenic acid and its derivatives are able to modulate the adhesion and locomotion of brain endothelial cells. *J Neural Transm (Vienna)*. 2018 Jun;125(6):899-912. doi: 10.1007/s00702-018-1839-7. Epub 2018 Jan 13. (IF2018: 2,903).

Q1

82. Fazakas C, Nagaraj C, Zabini D, Végh AG, Marsh LM, Wilhelm I, **Krizbai IA**, Olschewski H, Olschewski A, Bálint Z. Rho-Kinase Inhibition Ameliorates Dasatinib-Induced Endothelial Dysfunction and Pulmonary Hypertension. *Front Physiol*. 2018 May 15;9:537. doi: 10.3389/fphys.2018.00537. eCollection 2018. (IF2018: 3,201).

Q1

83. Menyhárt Á\*, Farkas AE\*, Varga DP, Frank R, Tóth R, Bálint AR, Makra P, Dreier JP, Bari F, **Krizbai IA**, Farkas E. Large-conductance Ca<sup>2+</sup>-activated potassium channels are potently involved in the inverse neurovascular response to spreading depolarization. *Neurobiol Dis*. 2018 Nov;119:41-52. doi: 10.1016/j.nbd.2018.07.026 (IF2018: 5,160).

\*társ első szerzők

D1

84. Hildegard Herman\*, Csilla Fazakas\*, János Haskó, Kinga Molnár, Ádám Mészáros, Ádám Nyúl-Tóth, Gábor Szabó, Ferenc Erdélyi, Aurel Ardelean, Anca Hermenean#, **István A. Krizbai**#, Imola Wilhelm#. Paracellular and transcellular migration of metastatic cells through the cerebral endothelium. *J Cell Mol Med*. 2019 Apr;23(4):2619-2631. doi: 10.1111/jcmm.14156 (IF2019: 4,486).

Q1

\*társ első szerzők, #levelező szerzők

85. Haskó J, Fazakas C, Molnár K, Mészáros Á, Patai R, Szabó G, Erdélyi F, Nyúl-Tóth Á, Győri F, Kozma M, Farkas AE, **Krizbai IA**\*, Wilhelm I\*. Response of the neurovascular unit to brain metastatic breast cancer cells. *Acta Neuropathol Commun*. 2019 Aug 19;7(1):133. doi: 10.1186/s40478-019-0788-1 (IF2019: 6.270). D1

\*levelező szerzők

86. Fabian E, Reglodi D, Horvath G, Opper B, Toth G, Fazakas C, Vegh AG, Wilhelm I, **Krizbai IA**. Pituitary adenylate cyclase activating polypeptide acts against neovascularization in retinal pigment epithelial cells. *Ann N Y Acad Sci*. 2019 Nov;1455(1):160-172. doi: 10.1111/nyas.14189 (IF2019: 4,728). D1

87. Costea L, Mészáros Á, Bauer H, Bauer HC, Traweger A, Wilhelm I, Farkas AE\*, **Krizbai IA\***. The Blood-Brain Barrier and Its Intercellular Junctions in Age-Related Brain Disorders. *Int J Mol Sci*. 2019 Nov 3;20(21):5472. doi: 10.3390/ijms20215472. (IF2019: 4,556). Q1

\*levelező szerzők

88. Sereno M\*, Haskó J\*, Molnár K, Medina SJ, Reisz Z, Malhó R, Videira M, Tizslavicz L, Booth SA, Wilhelm I, **Krizbai IA#**, Brito MA#. Downregulation of circulating miR 802-5p and miR 194-5p and upregulation of brain MEF2C along breast cancer brain metastasization. *Mol Oncol*. 2020 Mar;14(3):520-538. doi: 10.1002/1878-0261.12632. Epub 2020 Feb 5. (IF2020: 6,603). D1

\*társ első szerzők, #levelező szerzők

89. Varga DP, Szabó Í, Varga VÉ, Menhyárt Á, Tóth OM, Kozma M, Bálint AR, **Krizbai IA**, Bari F, Farkas E. The antagonism of prostaglandin FP receptors inhibits the evolution of spreading depolarization in an experimental model of global forebrain ischemia. *Neurobiol Dis*. 2020 Apr;137:104780. doi: 10.1016/j.nbd.2020.104780. Epub 2020 Jan 25 (IF2020: 5,996). D1

90. Molnár K, Mészáros Á, Fazakas C, Kozma M, Győri F, Reisz Z, Tizslavicz L, Farkas AE, Nyúl-Tóth Á, Haskó J, **Krizbai IA\***, Wilhelm I\*. Pericyte-secreted IGF2 promotes breast cancer brain metastasis formation. *Mol Oncol*. 2020 Jun 13. doi: 10.1002/1878-0261.12752. Online ahead of print. (IF2019: 6,603). D1

\*levelező szerzők

91. Vasas A, Lajter I, Kúsz N, Forgó P, Jakab G, Fazakas C, Wilhelm I, **Krizbai IA**, Hohmann J. Flavonoid, stilbene and diarylheptanoid constituents of *Persicaria maculosa* Gray and cytotoxic activity of the isolated compounds. *Fitoterapia*. 2020 Sep;145:104610. doi: 10.1016/j.fitote.2020.104610. Epub 2020 May 17. (IF2020: 2,882). Q2

92. Mészáros Á, Molnár K, Nógrádi B, Hernádi Z, Nyúl-Tóth Á, Wilhelm I, **Krizbai IA**. Neurovascular Inflammaging in Health and Disease. *Cells*. 2020 Jul 4;9(7):E1614. doi: 10.3390/cells9071614. (IF2020: 6,600).

93. Magnussen SN, Toraskar J, Wilhelm I, Haskó J, Figenschau SL, Molnar J, Seppola M, Steigen SE, Steigedal TS, Hadler-Olsen E, **Krizbai IA\***, Svineng G\*. Nephronectin promotes breast cancer brain metastatic colonization via its integrin-binding domains. *Sci Rep*. 2020 Jul 22;10(1):12237. doi: 10.1038/s41598-020-69242-1. (IF2020: 4,379). D1

\* társ utolsó szerzők

94. Sereno M, Videira M, Wilhelm I, **Krizbai IA**, Brito MA. miRNAs in Health and Disease: A Focus on the Breast Cancer Metastatic Cascade towards the Brain. *Cells*. 2020 Jul 28;9(8):E1790. doi: 10.3390/cells9081790. (IF2020: 6,600).

95. Stefkó D, Kúsz N, Barta A, Kele Z, Bakacsy L, Szepesi Á, Fazakas C, Wilhelm I, **Krizbai IA**, Hohmann J, Vasas A. Gerardiins A-L and Structurally Related Phenanthrenes from the Halophyte Plant *Juncus gerardii* and Their Cytotoxicity against Triple-Negative Breast Cancer Cells. *J Nat Prod*. 2020 Oct 14. doi: 10.1021/acs.jnatprod.0c00631 (IF2020: 4,05). D1

96. Nógrádi B\*, Nyúl-Tóth A\*, Kozma M, Molnár K, Patai R, Siklós L, Wilhelm I, **Krizbai IA**. Upregulation of NLRP3 in motoneurons following peripheral nerve injury in mice. *Front Pharmacol* 2020 Nov 26;11:584184. doi: 10.3389/fphar.2020.584184. eCollection 2020. (IF2020: 5,81) Q1  
\*társ első szerzők

97. Molnár K, Lőrinczi B, Fazakas C, Szatmári I, Fülöp F, Kmetykó N, Berkecz R, Ilisz I, Krizbai IA, Wilhelm I\*, Vécsei L\*. SZR-104, a Novel Kynurenic Acid Analogue with High Permeability through the Blood-Brain Barrier. *Pharmaceutics*. 2021 Jan 5;13(1):61. doi: 10.3390/pharmaceutics13010061 (IF2020: 6,321) Q1  
\*levelező szerzők

98. Nyúl-Tóth Á, Tarantini S, DelFavero J, Yan F, Balasubramanian P, Yabluchanskiy A, Ahire C, Kiss T, Csipo T, Lipecz A, Farkas AE, Wilhelm I, Krizbai IA, Tang Q, Csiszar A, Ungvari Z. Demonstration of age-related blood-brain barrier disruption and cerebromicrovascular rarefaction in mice by longitudinal intravital two-photon microscopy and optical coherence tomography. *Am J Physiol Heart Circ Physiol*. 2021 Apr 1;320(4):H1370-H1392. doi: 10.1152/ajpheart.00709.2020. (IF2020: 4,733) Q1

99. Figueira I, Galego S, Custódio-Santos T, Vicente R, Molnár K, Haskó J, Malhó R, Videira M, Wilhelm I, Krizbai I, Brito MA. Picturing Breast Cancer Brain Metastasis Development to Unravel Molecular Players and Cellular Crosstalk. *Cancers (Basel)*. 2021 Feb 22;13(4):910. doi: 10.3390/cancers13040910. (IF2020: 6,639) D1

100. Tóth R, Farkas AE, Krizbai IA, Makra P, Bari F, Farkas E, Menyhárt Á. Astrocyte Ca<sup>2+</sup> Waves and Subsequent Non-Synchronized Ca<sup>2+</sup> Oscillations Coincide with Arteriole Diameter Changes in Response to Spreading Depolarization. *Int J Mol Sci*. 2021 Mar 26;22(7):3442. doi: 10.3390/ijms22073442. (IF2020: 5,923) D1

101. Fazakas C, Kozma M, Molnár K, Kincses A, Dér A, Fejér A, Horváth B, Wilhelm I, Krizbai IA, Végh AG. Breast adenocarcinoma-derived exosomes lower first-contact de-adhesion strength of adenocarcinoma cells to brain endothelial layer. *Colloids Surf B Biointerfaces*. 2021 Apr 30;204:111810. doi: 10.1016/j.colsurfb.2021.111810. (IF2020: 5,268) Q1

102. Szabó Í, Varga VÉ, Dvoráckó S, Farkas AE, Körmöczi T, Berkecz R, Kecskés S, Menyhárt Á, Frank R, Hantosi D, Cozzi NV, Frecska E, Tömböly C, Krizbai IA, Bari F, Farkas E N,N-Dimethyltryptamine attenuates spreading depolarization and restrains neurodegeneration by sigma-1 receptor activation in the ischemic rat brain. *Neuropharmacology*. 2021 May 20:108612. doi: 10.1016/j.neuropharm.2021.108612. (IF2020: 5,25) D1

103. Inês Figueira, Joana Godinho-Pereira, Sofia Galego, Joana Maia, János Haskó, Kinga Molnár, Rui Malhó, Bruno Costa-Silva, Imola Wilhelm, István A. Krizbai, Maria Alexandra Brito \* MicroRNAs and extracellular vesicles as distinctive biomarkers of precocious and advanced stages of breast cancer

brain metastases development. *Int J Mol Sci.* 2021 May 14;22(10):5214. doi: 10.3390/ijms22105214. (IF2020: 5,923) D1

104. Kozma M, Mészáros Á, Nyúl-Tóth Á, Molnár K, Costea L, Hernádi Z, Fazakas C, Farkas AE, Wilhelm I, Krizbai IA. Cerebral Pericytes and Endothelial Cells Communicate through Inflammasome-Dependent Signals. *Int J Mol Sci.* 2021 Jun 6;22(11):6122. doi: 10.3390/ijms22116122. (IF2020: 5,923) D1

105. Menyhárt Á, Frank R, Farkas AE, Süle Z, Varga VÉ, Nyúl-Tóth Á, Meiller A, Ivánkovits-Kiss O, Lemale CL, Szabó Í, Tóth R, Zölei-Szénási D, Woitzik J, Marinesco S, Krizbai IA, Bari F, Dreier JP, Farkas E. Malignant astrocyte swelling and impaired glutamate clearance drive the expansion of injurious spreading depolarization foci. *J Cereb Blood Flow Metab.* 2021 Aug 24:271678X211040056. doi: 10.1177/0271678X211040056. (IF2020: 6,200) D1

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