

## Publikációk/Publications

2021.

### Közlemények ISSN kiadványban (cikkek)/Articles in periodicals

1. **ALEXA A, EMBER O, SZABÓ I, MO'ATH Y, PÓTI ÁL, REMÉNYI A, BÁNÓCZI Z.** Peptide Based Inhibitors of Protein Binding to the Mitogen-Activated Protein Kinase Docking Groove. *Front Mol Biosci.* 2021 Jul 1;8:690429. doi: 10.3389/fmolb.2021.690429.
2. **BARANYAI Z, BIRI-KOVÁCS B, KRÁTKY M, SZEDER B, DEBRECZENI ML, BUDAI J, KOVÁCS B, HORVÁTH L, PÁRI E, NÉMETH Z, CERVENAK L, ZSILA F, MÉHES E, KISS É, VINŠOVÁ J, BŐSZE S.** Cellular Internalization and Inhibition Capacity of New Anti-Glioma Peptide Conjugates: Physicochemical Characterization and Evaluation on Various Monolayer- and 3D-Spheroid-Based *in Vitro* Platforms. *J Med Chem.* 2021 Mar 25;64(6):2982-3005. doi: 10.1021/acs.jmedchem.0c01399.
3. **BARANYAI Z, SORIA-CARRERA H, ALLEVA M, MILLÁN-PLACER AC, AINHOA L, MARTÍN-RAPÚN R, AÍNSA JA, LA FUENTE JM.** Nanotechnology-Based Targeted Drug Delivery: An Emerging Tool to Overcome Tuberculosis. *Advanced Therapeutics* 2021 Jan;4(1) Paper: 2000113 (4 p). doi: 10.1002/adtp.202000113
4. **BEREK-NAGY PJ, TÓTH G, BŐSZE S, HORVÁTH LB, DARCSI A, CSÍKOS S, KNAPP DG, KOVÁCS GM, BOLDIZSÁR I.** The grass root endophytic fungus *Flavomyces fulophazii*: An abundant source of tetramic acid and chlorinated azaphilone derivatives. *Phytochemistry.* 2021 Oct;190:112851. doi: 10.1016/j.phytochem.2021.112851.
5. **BORBÉLY A, PETHŐ L, SZABÓ I, AL-MAJIDI M, STECKEL A, NAGY T, KÉKI S, KALLÓ G, CSÓSZ É, MEZŐ G, SCHLOSSER G.** Structural Characterization of Daunomycin-Peptide Conjugates by Various Tandem Mass Spectrometric Techniques. *Int J Mol Sci.* 2021 Feb 6;22(4):1648. doi: 10.3390/ijms22041648.
6. **BOULHAOUA M, PASINSZKI T, TORVISCO A, OLÁH-SZABÓ R, BŐSZE S, CSÁMPAI A.** Synthesis, structure and *in vitro* antiproliferative effects of alkyne-linked 1,2,4-thiadiazole hybrids including erlotinib- and ferrocene-containing derivatives. *RSC Adv.* 2021 Aug 25;11(46):28685-28697. doi: 10.1039/d1ra05095h.
7. **DÉNES N, KIS A, SZABÓ JP, JÓSZAI I, HAJDU I, ARATÓ V, ENYEDI KN, MEZŐ G, HUNYADI J, TRENCSENYI G, KERTÉSZ I.** *In vivo* preclinical assessment of novel <sup>68</sup>Ga-labelled peptides for imaging of tumor associated angiogenesis using positron emission

- tomography imaging. *Appl Radiat Isot.* 2021 Aug;174:109778. doi: 10.1016/j.apradiso.2021.109778.
8. **FARKAS V, FERENTZI K, HORVÁTI K, PERCZEL A.** Cost-Effective Flow Peptide Synthesis: Metamorphosis of HPLC. *Org. Process Res. Dev.* 2021 Jan 12; 25(2):182–191. doi: 10.1021/acs.oprd.0c00178
  9. **HORVÁTI K, FODOR K, PÁLYI B, HENCZKÓ J, BALKÁ G, GYULAI G, KISS É, BIRI-KOVÁCS B, SENONER Z, BŐSZE S.** Novel Assay Platform to Evaluate Intracellular Killing of *Mycobacterium tuberculosis*: *In Vitro* and *In Vivo* Validation. *Front Immunol.* 2021 Nov 12;12:750496. doi: 10.3389/fimmu.2021.750496.
  10. **IMRE L, NÁNÁSI P, BOSIRE R, CSÓTI Á, ENYEDI KN, MEZŐ G, KUSAKABE M, AUSIO J, HARATA M, SZABÓ G.** Fundamental role of the H2A.Z C-terminal tail in the formation of constitutive heterochromatin. *BIORXIV - The Preprint Server For Biology.* 2021. doi: 10.1101/2021.02.22.432230.
  11. **JUHÁSZ T, QUEMÉ-PEÑA M, KÖVÁGÓ B, MIHÁLY J, RICCI M, HORVÁTI K, BŐSZE S, ZSILA F, BEKE-SOMFAI T.** Interplay between membrane active host defense peptides and heme modulates their assemblies and in vitro activity. *Sci Rep.* 2021 Sep 15;11(1):18328. doi: 10.1038/s41598-021-97779-2.
  12. **KIS A, DÉNES N, SZABÓ JP, ARATÓ V, BEKE L, MATOLAY O, ENYEDI KN, MÉHEŠ G, MEZŐ G, BAI P, KERTÉSZ I, TRENCŠÉNYI G.** *In Vivo* Molecular Imaging of the Efficacy of Aminopeptidase N (APN/CD13) Receptor Inhibitor Treatment on Experimental Tumors Using <sup>68</sup>Ga-NODAGA-c(NGR) Peptide. *Biomed Res Int.* 2021 Mar 10;2021:6642973. doi: 10.1155/2021/6642973.
  13. **KOHUT G, JUHÁSZ T, QUEMÉ-PEÑA M, BŐSZE SE, BEKE-SOMFAI T.** Controlling Peptide Function by Directed Assembly Formation: Mechanistic Insights Using Multiscale Modeling on an Antimicrobial Peptide-Drug-Membrane System. *ACS Omega.* 2021 Jun 11;6(24):15756-15769. doi: 10.1021/acsomega.1c01114.
  14. **KÓSA N, ZOLCSÁK Á, VOSZKA I, CSÍK G, HORVÁTI K, HORVÁTH L, BŐSZE S, HERENYI L.** Comparison of the Efficacy of Two Novel Antitubercular Agents in Free and Liposome-Encapsulated Formulations. *Int J Mol Sci.* 2021 Feb 28;22(5):2457. doi: 10.3390/ijms22052457.
  15. **LISZTES E, MEZŐ E, DEMETER F, HORVÁTH L, BŐSZE S, ISTVÁN TÓTH B, BORBÁS A, HERCZEG M.** Synthesis and Cell Growth Inhibitory Activity of Six Non-glycosaminoglycan-Type Heparin-Analogue Trisaccharides. *ChemMedChem.* 2021 May 6;16(9):1467-1476. doi: 10.1002/cmdc.202000917.

16. **MEZŐ G, TRIPODI AAP, RANĐELOVIČ I, ENYEDI KN, BIRI-KOVÁCS B, TÓVÁRI J.** Asn-Gly-Arg szekvenciát tartalmazó ciklopeptidek alkalmazása a célzott tumorterápiában. *Magyar Onkológia* 65: 2 pp. 113-120., 8 p. (2021) (in Hungarian)
17. **PÉTER B, BOLDIZSÁR I, KOVÁCS GM, ERDEI A, BAJTAY Z, VÖRÖS A, RAMSDEN JJ, SZABÓ I, BŐSZE S, HORVATH R.** Natural Compounds as Target Biomolecules in Cellular Adhesion and Migration: From Biomolecular Stimulation to Label-Free Discovery and Bioactivity-Based Isolation. *Biomedicines*. 2021 Nov 26;9(12):1781. doi: 10.3390/biomedicines9121781.
18. **PFLÉGR V, HORVÁTH L, STOLAŘÍKOVÁ J, PÁL A, KORDULÁKOVÁ J, BŐSZE S, VINŠOVÁ J, KRÁTKÝ M.** Design and synthesis of 2-(2-isonicotinoylhydrazineylidene)propanamides as InhA inhibitors with high antitubercular activity. *Eur J Med Chem*. 2021 Nov 5;223:113668. doi: 10.1016/j.ejmech.2021.113668.
19. **QUEMÉ-PEÑA M, RICCI M, JUHÁSZ T, HORVÁTI K, BŐSZE S, BIRI-KOVÁCS B, SZEDER B, ZSILA F, BEKE-SOMFAI T.** Old Polyanionic Drug Suramin Suppresses Detrimental Cytotoxicity of the Host Defense Peptide LL-37. *ACS Pharmacol Transl Sci*. 2020 Dec 3;4(1):155-167. doi: 10.1021/acsptsci.0c00155.
20. **SEBÁK F, HORVÁTH LB, KOVÁCS D, SZOLOMÁJER J, TÓTH GK, BABICZKY Á, BŐSZE S, BODOR A.** Novel Lysine-Rich Delivery Peptides of Plant Origin ERD and Human S100: The Effect of Carboxyfluorescein Conjugation, Influence of Aromatic and Proline Residues, Cellular Internalization, and Penetration Ability. *ACS Omega*. 2021 Dec 6;6(50):34470-34484. doi: 10.1021/acsomega.1c04637.
21. **SZABÓ D, SCHLOSSER G, VÉKEY K, DRAHOS L, RÉVÉSZ Á.** Collision energies on QToF and Orbitrap instruments: How to make proteomics measurements comparable? *J Mass Spectrom*. 2021 Jan;56(1):e4693. doi: 10.1002/jms.4693.
22. **SZABÓ I, ILLIEN F, DÓKUS LE, YOUSEF M, BARANYAI Z, BŐSZE S, ISE S, KAWANO K, SAGAN S, FUTAKI S, HUDECZ F, BÁNÓCZI Z.** Influence of the DabcyL group on the cellular uptake of cationic peptides: short oligoarginines as efficient cell-penetrating peptides. *Amino Acids*. 2021 Jul;53(7):1033-1049. doi: 10.1007/s00726-021-03003-w.
23. **SZABO JP, DENES N, ARATO V, RACZ S, KIS A, OPPOSIT G, KEPES Z, HAJDU I, JOSZAI I, EMRI M, KERTESZ I, MEZO G, TRENCSENYI G.** In Vivo Imaging of Neo-angiogenesis of Transplanted Metastases in Subrenal Capsule Assay Induced Rat Model. *In Vivo*. 2022 Jul-Aug;36(4):1667-1675. doi: 10.21873/invivo.12878.

24. **UZONYI B, SZABÓ Z, TROJNÁR E, HYVÄRINEN S, URAY K, NIELSEN HH, ERDEI A, JOKIRANTA TS, PROHÁSZKA Z, ILLES Z, JÓZSI M.** Autoantibodies Against the Complement Regulator Factor H in the Serum of Patients With Neuromyelitis Optica Spectrum Disorder. *Front Immunol.* 2021 Apr 27;12:660382. doi: 10.3389/fimmu.2021.660382.
  
25. **ZÜRN M, TÓTH G, AUSBÜTTEL T, MUCSI Z, HORVÁTI K, BŐSZE S, SÜTÖRI-DIÓSZEGI M, PÁLYI B, KIS Z, NOSZÁL B, BOLDIZSÁR I.** Tissue-Specific Accumulation and Isomerization of Valuable Phenylethanoid Glycosides from *Plantago* and *Forsythia* Plants. *Int J Mol Sci.* 2021 Apr 9;22(8):3880. doi: 10.3390/ijms22083880.