

Publikációk/Publications

2023.

Közlemények ISSN kiadványban (cikkek)/Articles in periodicals

1. **BATÓ C, SZABÓ I, BÁNÓCZI Z.** Enhancing Cell Penetration Efficiency of Cyclic Oligoarginines Using Rigid Scaffolds. *Pharmaceutics*. 2023 Jun 14;15(6):1736. doi: 10.3390/pharmaceutics15061736.
2. **BELLINI C, VERGARA E, BENCS F, FODOR K, BŐSZE S, KRIVIĆ D, BACSA B, SURGUTA SE, TÓVÁRI J, RELJIC R, HORVÁTI K.** Design and Characterization of a Multistage Peptide-Based Vaccine Platform to Target *Mycobacterium tuberculosis* Infection. *Bioconj Chem*. 2023 Oct 18;34(10):1738-1753. doi: 10.1021/acs.bioconjchem.3c00273.
3. **BIRI-KOVÁCS B, BÁNÓCZI Z, TUMMALAPALLY A, SZABÓ I.** Peptide Vaccines in Melanoma: Chemical Approaches towards Improved Immunotherapeutic Efficacy. *Pharmaceutics*. 2023 Jan 30;15(2):452. doi: 10.3390/pharmaceutics15020452.
4. **ENYEDI KN, ENYEDI G, LAJKÓ E.** Three-dimensional, PEG-based hydrogels induce spheroid formation and enhance viability of A2058 melanoma cells. *FEBS Open Bio*. 2023 Dec;13(12):2356-2366. doi: 10.1002/2211-5463.13719.
5. **FELEGYI-TÓTH CA, HEILMANN T, BUDA E, STIPSICZ B, SIMON A, BOLDIZSÁR I, BŐSZE S, RIETHMÜLLER E, ALBERTI Á.** Evaluation of the Chemical Stability, Membrane Permeability and Antiproliferative Activity of Cyclic Diarylheptanoids from European Hornbeam (*Carpinus betulus* L.). *Int J Mol Sci*. 2023 Aug 30;24(17):13489. doi: 10.3390/ijms241713489.
6. **FINGER V, KUCERA T, KAFKOVA R, MUCKOVA L, DOLEZAL R, KUBES J, NOVAK M, PRCHAL L, LAKATOS L, ANDRS M, HYMPANOVA M, MAREK J, KUFA M, SPIWOK V, SOUKUP O, MEZEIOVA E, JANOUSEK J, NEVOSADOVA L, BENKOVA M, KITSON RRA, KRATKY M, BŐSZE S, MIKUSOVA K, HARTKOORN R, ROH J, KORABECNY J.** 2,6-Disubstituted 7-(naphthalen-2-ylmethyl)-7H-purines as a new class of potent antitubercular agents inhibiting DprE1. *Eur J Med Chem*. 2023 Oct 5;258:115611. doi: 10.1016/j.ejmech.2023.115611.
7. **GOMENA J, VÁRI B, OLÁH-SZABÓ R, BIRI-KOVÁCS B, BŐSZE S, BORBÉLY A, SOÓS Á, RANĐELOVIĆ I, TÓVÁRI J, MEZŐ G.** Targeting the Gastrin-Releasing Peptide Receptor (GRP-R) in Cancer Therapy: Development of Bombesin-Based Peptide-Drug Conjugates. *Int J Mol Sci*. 2023 Feb 8;24(4):3400. doi: 10.3390/ijms24043400.
8. **HUSZÁR B, SZOLGA R, BŐSZE S, OLÁHNÉ SZABÓ R, SIMON A, KARAGHIOSOFF K, CZUGLER M, DRAHOS L, KEGLEVICH G.** Synthesis and Anticancer Activity of Phosphinoylated and Phosponoylated N-Heterocycles Obtained by the Microwave-Assisted Palladium Acetate-Catalyzed Hirao Reaction. *Chemistry*. 2023 Dec 6;29(68):e202302465. doi: 10.1002/chem.202302465.

9. KRÁTKÝ M, KONEČNÁ K, JANĎOUREK O, DIEPOLTOVÁ A, VÁVROVÁ P, VOXOVÁ B, VEJSOVÁ M, BÁRTA P, BŐSZE S. Insight into the Antibacterial Action of Iodinated Imine, an Analogue of Rafoxanide: a Comprehensive Study of Its Antistaphylococcal Activity. *Microbiol Spectr.* 2023 Jun 15;11(3):e0306422. doi: 10.1128/spectrum.03064-22.
10. PÉTER B, MAJOROS B, KURUNCZI S, ÁCS AV, SZEKACS I, BŐSZE S, KOVÁCS GM, BOLDIZSÁR I, HORVATH R. Label-free biosensing of lignans for therapeutics using engineered model surfaces. *Int J Biol Macromol.* 2023 Apr 1;233:123528. doi: 10.1016/j.ijbiomac.2023.123528.
11. PETHŐ L, OLÁH-SZABÓ R, MEZŐ G. Influence of the Drug Position on Bioactivity in Angiopep-2-Daunomycin Conjugates. *Int J Mol Sci.* 2023 Feb 4;24(4):3106. doi: 10.3390/ijms24043106.
12. SOLTÉSZ D, SZABÓ I, BÁNÓCZI Z. The Balance between Hydrophobicity/Aromaticity and Positively Charged Residues May Influence the Cell Penetration Ability. *Pharmaceutics.* 2023 Apr 18;15(4):1267. doi: 10.3390/pharmaceutics15041267.
13. STECKEL A, PAPP D, URAY K, SCHLOSSER G. Collision-Induced Dissociation of Citrullinated Peptide Anions. *J Am Soc Mass Spectrom.* 2023 Aug 2;34(8):1569-1575. doi: 10.1021/jasms.3c00044.
14. SZALAI Z; TÓTH B; OLÁH-SZABÓ R; BŐSZE S; KARAGHIOSOFF K; CZUGLER M; DRAHOS L; KEGLEVICH G. A Study of the Bisphosphonic Derivatives from the Pudovik Reaction of Dialkyl α -Oxophosphonates and $>P(O)H$ Reagents: X-ray Structure and Bioactivity. *Molecules* 2023; 28:16 6037, 15p. doi: 10.3390/molecules28166037
15. SZÖLLŐSI D, HAJDRIK P, TORDAI H, HORVÁTH I, VERES DS, GILLICH B, SHAILAJA KD, SMELLER L, BERGMANN R, BACHMANN M, MIHÁLY J, GAÁL A, JEZSÓ B, BARÁTKI B, KÖVESDI D, BŐSZE S, SZABÓ I, FELFÖLDI T, OSZWALD E, PADMANABHAN P, GULYÁS BZ, HAMDANI N, MÁTHÉ D, VARGA Z, SZIGETI K. Molecular imaging of bacterial outer membrane vesicles based on bacterial surface display. *Sci Rep.* 2023 Oct 31;13(1):18752. doi: 10.1038/s41598-023-45628-9.
16. TÁRNOKI-ZÁCH J, BŐSZE S, CZIRÓK A. Quantitative Analysis of a Pilot Transwell Barrier Model with Automated Sampling and Mathematical Modeling. *Pharmaceutics.* 2023 Nov 20;15(11):2646. doi: 10.3390/pharmaceutics15112646.
17. TÁRNOKI-ZÁCH J, MÉHES E, BŐSZE S, CZIRÓK A. Biológiai gátrendszerek szövetmodelljének biofizikai jellemzése. *Fizikai Szemle* 2023; 73:324-328.
18. TÓTH G; HORVÁTI K; KRASZNI M; AUSBÜTTEL T; PÁLYI B; KIS Z; MUCSI Z; KOVÁCS GM; BŐSZE, S; BOLDIZSÁR I. Arylnaphthalene Lignans with Anti-SARS-CoV-2 and Antiproliferative Activities from the Underground Organs of *Linum austriacum* and *Linum perenne*. *J Nat Prod* 2023; 86:672-682. doi: 10.1021/acs.jnatprod.2c00580
19. TRENCSÉNYI G, ENYEDI KN, MEZŐ G, HALMOS G, KÉPES Z. NGR-Based Radiopharmaceuticals for Angiogenesis Imaging: A Preclinical Review. *Int J Mol Sci.* 2023 Aug 11;24(16):12675. doi: 10.3390/ijms241612675.
20. VARGA PR, SZABÓ RO, DORMÁN G, BŐSZE S, KEGLEVICH G. Cytotoxic Activity of α -Aminophosphonic Derivatives Coming from the Tandem Kabachnik-Fields Reaction and Acylation. *Pharmaceutics (Basel).* 2023 Mar 28;16(4):506. doi: 10.3390/ph16040506.
21. VÁRI B, DÓKUS L, BORBÉLY A, GAÁL A, VÁRI-MEZŐ D, RANDELOVIĆ I, SÓLYOM-TISZA A, VARGA Z, SZOBOSZLAI N, MEZŐ G, TÓVÁRI J. SREKA-targeted liposomes for highly metastatic breast cancer therapy. *Drug Deliv.* 2023 Dec;30(1):2174210. doi: 10.1080/10717544.2023.2174210.

22. **ZAMBRA M, RANDELOVIĆ I, TALARICO F, BORBÉLY A, SVAJDA L, TÓVÁRI J, MEZŐ G, BODERO L, COLOMBO S, ARRIGONI F, FASOLA E, GAZZOLA S, PIARULLI U.** Optimizing the enzymatic release of MMAE from *iso*DGR-based small molecule drug conjugate by incorporation of a GPLG-PABC enzymatically cleavable linker. *Front Pharmacol.* 2023 Jul 10;14:1215694. doi: 10.3389/fphar.2023.1215694.

Szabadalom

KOVÁCS G; BOLDIZSÁR I; BŐSZE S; HORVÁTI K; KIS Z; PÁLYI B. Hexahydronaphthalen-2-one derivatives for use against coronavirus infection. *WO2023017288A1. Európai szabadalom*