

Publikációk/Publications

2020.

Közlemények ISSN kiadványban (cikkek)/Articles in periodicals

1. AL-MAJIDI M, SZABÓ D, DÓKUS L, STECKEL A, MEZŐ G, SCHLOSSER G. Energy-resolved HCD fragmentation of daunorubicin-peptide conjugates. *Journal of Mass Spectrometry* 2020, 55(10): e4641. <https://doi.org/10.1002/jms.4641>
2. BIRI-KOVÁCS, B.; ADORJÁN, A.; SZABÓ, I.; SZEDER, B.; BŐSZE, SZ.; MEZŐ, G. Structure–Activity Relationship of HER2 Receptor Targeting Peptide and Its Derivatives in Targeted Tumor Therapy. *Biomolecules* 2020, 10(2), 183. <https://doi.org/10.3390/biom10020183>
3. BŐSZE, SZ.; ZSILA, F.; BIRI-KOVÁCS, B.; SZEDER, B.; MAJER, ZS.; HUDECZ, F.; URAY, K. Tailoring uptake efficacy of HSV-1 gD derived carrier peptides. *Biomolecules* 2020, 10(5), 721. <https://doi.org/10.3390/biom10050721>
4. DÓKUS, L.E.; YOUSEF, M.; BÁNÓCZI, Z. Modulators of calpain activity: inhibitors and activators as potential drugs. *Expert Opinion on Drug Discovery* 2020, 15(4), 471-486. <https://doi.org/10.1080/17460441.2020.1722638>
5. DÓKUS, L.E.; LAJKÓ, E.; RANDELOVIĆ, I.; MEZŐ, D.; SCHLOSSER, G.; KŐHIDAI, L.; TÓVÁRI, J.; MEZŐ, G. Phage Display-Based Homing Peptide-Daunomycin Conjugates for Selective Drug Targeting to PANC-1 Pancreatic Cancer. *Pharmaceutics* 2020, 12(6), 576. <https://doi.org/10.3390/pharmaceutics12060576>
6. FODOR, K.J.; HUTAI, D.; JERNEI, T.; TAKÁCS, A.; SZÁSZ, Z.; SÜLYOK-EILER, M.; HARMAT, V.; OLÁH, SZABÓ R.; SCHLOSSER, G.; HUDECZ, F.; KŐHIDAI, L.; CSÁMPAI, A. Novel Polycondensed Partly Saturated β -Carbolines Including Ferrocene Derivatives: Synthesis, DFT-Supported Structural Analysis, Mechanism of Some Diastereoselective Transformations and a Preliminary Study of Their in vitro Antiproliferative Effects. *Molecules* 2020, 25(7), 1599. <https://doi.org/10.3390/molecules25071599>
7. KIS, A.; SZABÓ, J.; DÉNES, N.; VÁGNER, A.; NAGY, G.; GARAI, I.; FEKETE, A.; SZIKRA, D.; HAJDU, I.; MATOLAY, O.; MÉHES, G.; MEZŐ, G.; KERTÉSZ, I.; TRENCSENYI, GY. In Vivo Imaging of Hypoxia and Neovascularization in Experimental Syngeneic Hepatocellular Carcinoma Tumor Model Using Positron Emission Tomography. *Biomed Research International* 2020, 2020, 4952372. <https://doi.org/10.1155/2020/4952372>
8. KIS, A.; DÉNES, N.; SZABÓ, J.; ARATÓ, V.; JÓSZAI, I.; ENYEDI, K.N.; LAKATOS, SZ.; GARAI, I.; MEZŐ, G.; KERTÉSZ, I.; TRENCSENYI, GY. In vivo assessment of aminopeptidase N (APN/CD13) specificity of different ⁶⁸Ga-labelled NGR derivatives using PET/MRI imaging. *International Journal of Pharmaceutics* 2020, 589, 119881. <https://doi.org/10.1016/j.ijpharm.2020.119881>
9. KISS, K.; VASS, P.; FARKAS, A.; HIRSCH, E.; SZABÓ, E.; MEZŐ, G.; NAGY, ZK.; MAROSI, G. A solid doxycycline HP-beta-CD formulation for reconstitution (i.v. bolus) prepared by scaled-up electrospinning. *International Journal of Pharmacology* 2020, 586, 119539. <https://doi.org/10.1016/j.ijpharm.2020.119539>

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11. KRÁTKÝ, M.; BARANYAI, ZS.; ŠTĚPÁNKOVÁ, Š.; SVRČKOVÁ, K.; ŠVARCOVÁ, M.; STOLAŘÍKOVÁ, J.; HORVÁTH, L.; BŐSZE, SZ.; VINŠOVÁ, J. N-Alkyl-2-[4-(trifluoromethyl)benzoyl]hydrazine-1-carboxamides and Their Analogues: Synthesis and Multitarget Biological Activity. *Molecules* 2020, 25(10), 2268. <https://doi.org/10.3390/molecules25102268>
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15. QUEMÉ-PEÑA, M.; RICCI, M.; JUHÁSZ, M.; HORVÁTI, K.; BŐSZE, SZ.; 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 Pharmacology & Translational Science* Article 2020, <https://doi.org/10.1021/acsptsci.0c00155>
16. RICCI, M.; HORVÁTI, K.; JUHÁSZ, T.; SZIGYÁRTÓ, I.; TÖRÖK, GY.; SEBÁK, F.; BODOR, A.; HOMOLYA, L.; HENCZKÓ, J.; PÁLYI, B.; MLINKÓ, T.; MIHÁLY, J.; NIZAMI, B.; YANG, ZHY.; LIN, FM.; LU, XL; ROMANSZKI, L.; BOTA, A.; VARGA, Z.; BŐSZE, SZ.; ZSILA, F.; BEKE-SOMFAI, T. Anionic food color tartrazine enhances antibacterial efficacy of histatin-derived peptide DHVAR4 by fine-tuning its membrane activity. *Quarterly Reviews of Biophysics* 2020, 53, e5 <https://doi.org/10.1017/S0033583520000013>
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20. STECKEL, A.; URAY, K.; SCHLOSSER, G. Detection of protein posttranslational modifications by mass spectrometry. *Amino Acids, Peptides and Proteins: Volume 44. Editors: Maxim Ryadnov, Ferenc Hudecz (2020), pp 140-170.* <https://doi.org/10.1039/9781788017008-00140>
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23. VISONI, V.; SZABÓ, I.; PERUGINO, G.; HUDECZ, F.; BÁNÓCZI, Z.; VALENTI, A. Topoisomerases inhibition and DNA binding mode of daunomycin-oligoarginine conjugate. *Journal of Enzyme Inhibition and Medicinal Chemistry* 2020, 35(1), 1363. <https://doi.org/10.1080/14756366.2020.1780226>
24. ZSILA, F.; BŐSZE, SZ.; BEKE-SOMFAI, T. Interaction of antitubercular drug candidates with α 1-acid glycoprotein produced in pulmonary granulomas. *International Journal of Biological Macromolecules* 2020, 147, 1318. <https://doi.org/10.1016/j.ijbiomac.2019.10.096>
25. SZABÓ, I.; BŐSZE, SZ. Az Aminosav analízis múltja és jelene a Peptidkémiai Kutatócsoport és az ELTE TTK Kémiai Intézet Szerves Kémiai Tanszék Mikroanalitikai Laboratóriumában. *BIOKÉMIA*: XLIV : 4 , 12-26.(2020) (in Hungarian)

Közlemények ISBN kiadványban (könyv, könyvrészlet)/Book chapters and conference proceedings

1. MEZŐ, G. Preface: Development of bioconjugates and their module constructs for targeted therapy of cancers with high mortality. *In: Development of Bioconjugates and Their Modul Constructs for Targeted Therapy of Cancers With High Mortality. (Ed.: Mező, G. Eötvös Loránd University, Budapest, Hungary) pp. 3-4 (2020) ISBN 987-963-489-286-1*
2. KISS, K.; BIRI-KOVÁCS, B.; SZABÓ R.; ENYEDI, K.N.; MURÁNYI, J.; SCHLOSSER, G.; RANĐELOVIĆ, I.; TÓVÁRI, J.; MEZŐ, G. Optimization of homing peptide sequence selected by phage display for HT-29 colon cancer cells to improve the antitumor activity. *In: Development of Bioconjugates and Their Modul Constructs for Targeted Therapy of Cancers With High Mortality. (Ed.: Mező, G. Eötvös Loránd University, Budapest, Hungary) pp. 5-9 (2020) ISBN 987-963-489-286-1*

- 3. SCHUSTER, S.; BIRI-KOVÁCS, B.; RANDELOVIĆ, I.; TÓVÁRI, J.; MEZŐ, G.;** New GnRH-III derivative as homing peptide for potential drug targeting in cancer therapy. *In: Development of Bioconjugates and Their Modul Constructs for Targeted Therapy of Cancers With High Mortality. (Ed.: Mező, G. Eötvös Loránd University, Budapest, Hungary) pp. 10-16 (2020) ISBN 987-963-489-286-1*
- 4. LAJKÓ, E.; HEGEDÜS, R.; MEZŐ, G.; KŐHIDAI L.** Comparison of the apoptotic effects of different GnRH-based conjugates with or without butyrate Lys in position 4 on colon carcinoma cells. *In: Development of Bioconjugates and Their Modul Constructs for Targeted Therapy of Cancers With High Mortality. (Ed.: Mező, G. Eötvös Loránd University, Budapest, Hungary) pp. 17-22 (2020) ISBN 987-963-489-286-1*
- 5. BIRI-KOVÁCS, B.; ADORJÁN, A.; SZABÓ, I.; SZEDER, B.; BŐSZE, S.; MEZŐ G.** Structural and binding characteristics of HER2 receptor targeting peptides. *In: Development of Bioconjugates and Their Modul Constructs for Targeted Therapy of Cancers With High Mortality. (Ed.: Mező, G. Eötvös Loránd University, Budapest, Hungary) pp. 23-27 (2020) ISBN 987-963-489-286-1*
- 6. TRIPODI, A.A.P.; ENYEDI, K.N.; BIRI-KOVÁCS, B.; RANDELOVIĆ, I.; TÓTH, S.; SZEDER, B.; SZAKÁCS, G.; TÓVÁRI, J.; MEZŐ G.** Development of novel cyclic NGR peptide–daunomycin conjugates with dual targeting property. *In: Development of Bioconjugates and Their Modul Constructs for Targeted Therapy of Cancers With High Mortality. (Ed.: Mező, G. Eötvös Loránd University, Budapest, Hungary) pp. 28-33 (2020) ISBN 987-963-489-286-1*
- 7. DÓKUS, L.E.; LAJKÓ, E.; LÁNG, O.; MEZŐ, D.; SZÁSZ, Z.; TAKÁCS, A.; KŐHIDAI, L.; SCHLOSSER, G., RANDELOVIĆ, I.; TÓVÁRI, J.; MEZŐ G.** Design, synthesis and characterization of Pancreatic Ductal Adenocarcinoma (PDAC) targeting antitumor daunomycin-peptide conjugates. *In: Development of Bioconjugates and Their Modul Constructs for Targeted Therapy of Cancers With High Mortality. (Ed.: Mező, G. Eötvös Loránd University, Budapest, Hungary) pp. 34-38 (2020) ISBN 987-963-489-286-1*
- 8. SZABÓ, I.; BŐSZE, S.; MEZŐ, G.** Synthesis and in vitro evaluation of drug containing melanoma specific peptide conjugates. *In: Development of Bioconjugates and Their Modul Constructs for Targeted Therapy of Cancers With High Mortality. (Ed.: Mező, G. Eötvös Loránd University, Budapest, Hungary) pp. 39-44 (2020) ISBN 987-963-489-286-1*
- 9. BÁNÓCZI, Z.; SZABÓ, I.; MEZŐ, G.** Optimization of the structure of targeted Daunomycin conjugates against non-small cell lung cancer. *In: Development of Bioconjugates and Their Modul Constructs for Targeted Therapy of Cancers With High Mortality. (Ed.: Mező, G. Eötvös Loránd University, Budapest, Hungary) pp. 45-49 (2020) ISBN 987-963-489-286-1*
- 10. BARANYAI, ZS.; URAY, K.; BIRI-KOVÁCS, B.; HORVÁTH, L.; BŐSZE SZ.** Peptide based delivery vehicles for tumor tissue targeting. *In: Development of Bioconjugates and Their Modul Constructs for Targeted Therapy of Cancers With High Mortality. (Ed.: Mező, G. Eötvös Loránd University, Budapest, Hungary) pp. 50-54 (2020) ISBN 987-963-489-286-1*

- 11. SCHLOSSER, G.; AL-MAJIDI, M.; BORBÉLY, A.; PETHŐ, L.; SZABÓ, D., DÓKUS, L.E.; MEZŐ, G.** Tandem mass spectrometry of daunorubicin-containing peptide conjugates. *In: Development of Bioconjugates and Their Modul Constructs for Targeted Therapy of Cancers With High Mortality. (Ed.: Mező, G. Eötvös Loránd University, Budapest, Hungary) pp. 55-59 (2020) ISBN 987-963-489-286-1*
- 12. PETHŐ, L.; MEZŐ, G.; SCHLOSSER, G.** Effect of ionization conditions in electrospray ionization mass spectrometry of daunorubicin-tuftsinn peptide conjugates. *In: Development of Bioconjugates and Their Modul Constructs for Targeted Therapy of Cancers With High Mortality. Excerpt from the results obtained in frame of the grant NVKP_16-1-2016-0036 (Ed.: Mező, G. Eötvös Loránd University, Budapest, Hungary) pp. 60-64 (2020) ISBN 987-963-489-286-1*
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- 14. OLÁH-SZABÓ, R.; JERNEI, T.; SZABÓ, I.; MEZŐ, G.; CSÁMPAI, A.** *In vitro* anti-tumor effect of cinchona-chalcone hybrids with 1,4- or 1,5-disubstituted 1,2,3-triazole linker. *In: Development of Bioconjugates and Their Modul Constructs for Targeted Therapy of Cancers With High Mortality. Excerpt from the results obtained in frame of the grant NVKP_16-1-2016-0036 (Ed.: Mező, G. Eötvös Loránd University, Budapest, Hungary) pp. 70-74 (2020) ISBN 987-963-489-286-1*
- 15. OLÁH-SZABÓ, R.; BÁRÁNY, P.; KOVÁCS, I.; CZUCZI, T.; BŐSZE, S.; CSÁMPAI, A.** *In vitro* antitumor effect and structure–activity relationships of ferrocene-containing imipridone hybrids. *In: Development of Bioconjugates and Their Modul Constructs for Targeted Therapy of Cancers With High Mortality. Excerpt from the results obtained in frame of the grant NVKP_16-1-2016-0036 (Ed.: Mező, G. Eötvös Loránd University, Budapest, Hungary) pp. 75-80 (2020) ISBN 987-963-489-286-1*