

Publications of Department of Biochemistry and Molecular Biology in 2024

1. **Mótyán, J., Tózsér, J.**: Retrovírus-szerű fehérjék az emberi szervezetben.
Biokémia. 48 (1), 5-32, 2024.

2. Bagoly, Z., **Bálint, B. L.**, Bereczky, Z., Blaskó, G., Bodnár, N., Katona, É., Muszbek, L., Sándor, J., Szekanecz, Z., Szentmiklósi, J. A., Vokó, Z.: Klinikai kutatások - Átfogó ismeretek a tervezéstől a közlésig. Medicina Könyvkiadó Zrt., Budapest, 316 p., 2024. ISBN: 9632269115

3. Szeőcs, D., Vida, B., Petővári, G., **Pólska, S.**, Janka, E., Sipos, A., Uray, K., Sebestyén, A., Krasznai, Z., Bai, P.: Cell-free ascites from ovarian cancer patients induces Warburg metabolism and cell proliferation through TGFbeta-ERK signalling.
GeroScience. 46 (4), 3581-3597, 2024.
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4. Linkner, T., Ambrus, V., Kunkli, B., Szojka, Z., Kalló, G., Csósz, É., Kumar, A., Emri, M., **Tózsér, J., Mahdi, M.**: Comparative Analysis of Differential Cellular Transcriptome and Proteome Regulation by HIV-1 and HIV-2 Pseudovirions in the Early Phase of Infection.
Int. J. Mol. Sci. 25 (1), 1-26, 2024.
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5. **Pólska, S., Fareh, C., Lengyel, A., Göczi, L., Tózsér, J., Szatmári, I.**: Comparative transcriptomic analysis of Illumina and MGI next-generation sequencing platforms using RUNX3- and ZBTB46-instructed embryonic stem cells.
Front. Genet. 14 1-14, 2024.
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Exp. Dermatol. 33 (1), 1-15, 2024.
IF: 3.1

7. Shanmuga Sundar, S., Kannan, N., **Sarang, Z.**, Lakshminarayanan, S., Manikandan, A., Sasikala, A., Veeranoth, N., Narendranath, J., Kamalakannan, V., Rajavelu, P., Karma, G.: In vitro study on the inflammatory response of chitosan nanoparticles as a potential siRNA carrier targeting towards osteosarcoma cells.
Z. Phys. Chemie-Int. J. Res. Phys. Chem. Chem. Phys. 238 (7), 1345-1360, 2024.
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8. Fehér E, Kaszab E, **Mótyán JA**, Máté D, Bali K, Hoitsy M, Sós E, Jakab F, Bányai K.: Structural similarity of human papillomavirus E4 and polyomaviral VP4 exhibited by genomic analysis of the common kestrel (*Falco tinnunculus*) polyomavirus.
Vet Res Commun. 48 (1), 309-315, 2024.
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9. Tordai C, Hathy E, Gyergyák H, Vincze K, Baradits M, Koller J, Póti Á, Jezsó B, Homolya L, Molnár MJ, **Nagy L**, Szüts D, Apáti Á, Réthelyi JM.: Probing the biological consequences of a previously undescribed de novo mutation of ZMYND11 in a schizophrenia patient by CRISPR genome editing and induced pluripotent stem cell based in vitro disease-modeling. *Schizophr Res.* 273, 107-120, 2024.

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10. Tóth E, Fagyas M, Nagy B Jr, Siket IM, Szóke B, Mártha L, **Mahdi M**, Erdősi G, Pólik Z, Kappelmayer J, Papp Z, Borbély A, Szabó T, Balla J, Balla G, Bácsi A, Szekanecz Z, Bai P, Tóth A.: Distinct subsets of anti-pulmonary autoantibodies correlate with disease severity and survival in severe COVID-19 patients. *Geroscience.* 2024 Apr;46(2):1561-1574.

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11. **Baráth, B., Nagy, L.:** A serine metabolic enzyme is flexing its muscle to help repair skeletal muscle.

Genes Dev. 38 (3-4), 95-97, 2024.

(Ismertetett mű: Veronica Ciuffoli, Xuesong Feng, Kan Jiang, Natalia Acevedo-Luna, Kyung Dae Ko, A. Hong Jun Wang, Giulia Riparini, Mamduh Khateb, Brian Glancy, Stefania Dell'Orso, Vittorio Sartorelli. -Psat1-generated α-ketoglutarate and glutamine promote muscle stem cell activation and regeneration /In: Genes & Development. - Megjelenés alatt (2024). -)

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12. Sándor, L., Huh, J., Benkő, P., Hiraga, T., **Póliska, S.**, Dobó Nagy, C., Simpson, J., Homer, N., Mahata, B., Győri, D.: De novo steroidogenesis in tumor cells drives bone metastasis and osteoclastogenesis.

Cell Reports. 43 (3), 1-22, 2024.

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13. **Nagy, G., Bojcsuk, D., Tzerpos, P., Silye-Cseh, T., Nagy, L.:** Lineage-determining transcription factor-driven promoters regulate cell type-specific macrophage gene expression. *Nucleic Acids Res.* 52 (8), 4234-4256, 2024.

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15. Ghani, M., Zohar, P., Ujlaki, G., Tóth, M., Amsalu, H., **Póliska, S.**, Tar, K.: Stable knockdown of Drp1 improves retinoic acid-BDNF-induced neuronal differentiation through global transcriptomic changes and results in reduced phosphorylation of ERK1/ 2 independently of DUSP1 and 6.

Front. Cell. Dev. Biol. 12 1-25, 2024.

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16. Laczkó, L., Jordán, S., **Póliska, S.**, Rácz, H., Nagy, N., Molnár, V., Sramkó, G.: The draft genome of *Spiraea crenata* L. (Rosaceae): the first complete genome in tribe Spiraeae.

Sci Data. 11 (1), 1-11, 2024.

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17. Szűcs D, Monostori T, Miklós V, Páhi ZG, **Póliska S**, Kemény L, Veréb Z.: Licensing effects of inflammatory factors and TLR ligands on the regenerative capacity of adipose-derived mesenchymal stem cells.

Front. Cell. Dev. Biol. 12 1-15, 2024.

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18. **Golda M, Hoffka G**, Cherry S, Tropea JE, Lountos GT, Waugh DS, Wlodawer A, **Tózsér J, Mótyán JA.**: P1' specificity of the S219V/R203G mutant tobacco etch virus protease.

Proteins. 2024 Sep;92(9):1085-1096. doi: 10.1002/prot.26693. Epub 2024 Apr 26.

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Osteoarthritis Cartilage. 32 S336, 2024.

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21. Mótyán, J., Tózsér, J.: The human retroviral-like aspartic protease 1 (ASPRV1): from in vitro studies to clinical correlations.

J. Biol. Chem. 300 (9), 1-16, 2024.

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23. **Kolostyak Z, Bojcsuk D**, Baksa V, Szigeti ZM, **Bene K, Czimmerer Z, Boto P**, Fadel L, **Poliska S**, Halasz L, **Tzerpos P**, Berger WK, Villabona-Rueda A, **Varga Z**, Kovacs T, Patsalos A, **Pap A**, Vamosi G, Bai P, Dezso B, Spite M, D'Alessio FR, **Szatmari I, Nagy L.**: EGR2 is an epigenomic regulator of phagocytosis and antifungal immunity in alveolar macrophages.

JCI Insight. 2024 Sep 10;9(17):e164009.

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24. Gáll T, Pethő D, Erdélyi K, Egri V, Balla JG, Nagy A, Nagy A, **Póliska S**, Gram M, Gábrriel R, Nagy P, Balla J, Balla G.: Heme: A link between hemorrhage and retinopathy of prematurity progression.

Redox Biol. 2024 Aug 16;76:103316. doi: 10.1016/j.redox.2024.103316. Online ahead of print.

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25. Saravanabhavan SS, Narayanaswamy Venkatesan P, Jonna N, Vasantha Palaniappan K, **Sarang Z**, Natesan B, Sergi CM.: Bioactivity, hemocompatibility, and inflammatory response of calcium incorporated sulfonated polyether ether ketone on mouse-derived bone marrow cells.

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26. **Hoffka G, Mhana S, Vas M, Toldi V, Mótyán JA, Tózsér J, Szabó A.**: Modeling protease-sensitive human pancreatic lipase mutations in the mouse ortholog.

J Biol Chem. 300 (10), 1-13, (cikkazonosító: 107763), 2024.

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Poult Sci. 2024 Jul 30;103(10):104144. Online ahead of print.

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Mod Pathol. 2024 May;37(5):100465.

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Br J Pharmacol. 2024 Aug 27. Online ahead of print.

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31. **Arda, A.**, Syaifie, P., Ramadhan, D., Jauhar, M., Nugroho, D., Kaswati, N., Noviyanto, A., Safihtri, M., Rochman, N., Andrianto, D., Mardiyati, E.: Activity of propolis compounds as potential MMP1 and MMP2 inhibitors by in silico studies in wound healing application.

J. Pharm. Pharmacogn. Res. 12 (2), 264-285, 2024.

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33. Syaifie PH, Ibadillah D, Jauhar MM, Reninta R, Ningsih S, Ramadhan D, **Arda AG**, Ningrum DWC, Kaswati NMN, Rochman NT, Mardiyati E.: Phytochemical Profile, Antioxidant, Enzyme Inhibition, Acute Toxicity, In Silico Molecular Docking and Dynamic Analysis of Apis Mellifera Propolis as Antidiabetic Supplement.

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