

Резюме: Марквичева Е.А.

Адрес

Федеральное государственное бюджетное учреждение науки Институт биоорганической химии им. академиков М.М. Шемякина и Ю.А. Овчинникова Российской академии наук, Москва, Россия

Контакты

<https://www.ibch.ru/users/129>

Работа в ИБХ

Заведующий лабораторией

Ведущий научный сотрудник

Научные интересы

Ее научные интересы связаны с получением новых биоматериалов для биомедицины (системы с контролируемой доставкой лекарств, нано-капсулирование биоактивных пептидов и белков, микрокапсулирование животных клеток, биодegradируемые матриксы (скаффолды) для репарации тканей и др..

Членство в сообществах

Участвует в работе русских научных и зарубежных обществ. Является представителем и главным координатором международного общества Bioencapsulation Research Group в России, представляет Россию (является экспертом и входит в координационный комитет) в международных программах COST (840 и 865).

Степени и звания

Доктор наук (Химические науки, 03.00.04 — Биохимия)

Гранты и проекты

2018– [Опухолевые сфероиды, полученные с помощью RGD-пептидов, как новые 3D in vitro модели для изучения цитотоксичности наноносителей с лекарствами](#)
2020

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2. Kuskov A, Selina O, Kulikov P, Imatdinov I, Balysheva V, Kryukov A, Shtilman M, **Markvicheva E** (2021). Amphiphilic Poly(N-Vinylpyrrolidone) Nanoparticles Loaded with DNA Plasmids Encoding Gn and Gc Glycoproteins of the Rift Valley Fever Virus: Preparation and in Vivo Evaluation. *ACS Applied Bio Materials* 4 (8), 6084–6092, [10.1021/acsabm.1c00426](#)
3. Borodina T, Gileva A, Akasov R, Trushina D, Burov S, Klyachko N, González-Alfaro Y, Bukreeva T, **Markvicheva E** (2020). Fabrication and evaluation of nanocontainers for lipophilic anticancer drug delivery in 3D in vitro model. *J Biomed Mater Res B Appl Biomater* 109 (4), 527–537, [10.1002/jbm.b.34721](#)
4. Gretskaia NM, Gamisonia AM, Dudina PV, Zakharov SS, Sherstyanykh G, Akasov R, Burov S, Serkov IV, Akimov MG, Bezuglov VV, **Markvicheva E** (2020). Novel bexarotene derivatives: Synthesis and cytotoxicity evaluation for glioma cells in 2D and 3D in vitro models. *Eur J Pharmacol* 883, 173346, [10.1016/j.ejphar.2020.173346](#)

5. Demina TS, Drozdova MG, Sevrin C, Compère P, Akopova TA, **Markvicheva E**, Grandfils C (2020). Biodegradable Cell Microcarriers Based on Chitosan/Polyester Graft-Copolymers. *Molecules* 25 (8), , [10.3390/molecules25081949](https://doi.org/10.3390/molecules25081949)
6. Selina O, Imatdinov I, Balysheva V, Akasov R, Kryukov A, Balyshev V, **Markvicheva E** (2020). Microencapsulated plasmids expressing Gn and Gc glycoproteins of Rift Valley Fever virus enhance humoral immune response in mice. *Biotechnol Lett* 42 (4), 529–536, [10.1007/s10529-020-02816-1](https://doi.org/10.1007/s10529-020-02816-1)
7. Sambhi M, Samuel V, Qorri B, Haq S, Burov SV, **Markvicheva E**, Harless W, Szewczuk MR (2020). A triple combination of metformin, acetylsalicylic acid, and oseltamivir phosphate impacts tumour spheroid viability and upends chemoresistance in triple-negative breast cancer. *Drug Des Devel Ther* 14, 1995–2019, [10.2147/DDDT.S242514](https://doi.org/10.2147/DDDT.S242514)
8. Gileva A, Sarychev G, Kondrya U, Mironova M, Sapach A, Selina O, Budanova U, Burov S, Sebyakin Y, **Markvicheva E** (2019). Lipoamino acid-based cerasomes for doxorubicin delivery: Preparation and in vitro evaluation. *Mater Sci Eng C Mater Biol Appl* 100, 724–734, [10.1016/j.msec.2019.02.111](https://doi.org/10.1016/j.msec.2019.02.111)
9. Ryabaya OO, Prokofieva AA, Khochenkov DA, Akasov RA, Burov SV, **Markvicheva EA**, Stepanova EV (2019). The role of epithelial-to-mesenchymal transition and autophagy in antitumoral response of melanoma cell lines to target inhibition of mek and mtor kinases. *Siberian Journal of Oncology* 18 (3), 54–63, [10.21294/1814-4861-2019-18-3-54-63](https://doi.org/10.21294/1814-4861-2019-18-3-54-63)
10. Trushina DB, Akasov RA, Khovankina AV, Borodina TN, Bukreeva TV, **Markvicheva EA** (2019). Doxorubicin-loaded biodegradable capsules: Temperature induced shrinking and study of cytotoxicity in vitro. *J Mol Liq* 284, 215–224, [10.1016/j.molliq.2019.03.152](https://doi.org/10.1016/j.molliq.2019.03.152)
11. Ryabaya O, Prokofieva A, Akasov R, Khochenkov D, Emelyanova M, Burov S, **Markvicheva E**, Inshakov A, Stepanova E (2019). Metformin increases antitumor activity of MEK inhibitor binimetinib in 2D and 3D models of human metastatic melanoma cells. *Biomed Pharmacother* 109, 2548–2560, [10.1016/j.biopha.2018.11.109](https://doi.org/10.1016/j.biopha.2018.11.109)
12. Sazhnev NA, Drozdova MG, Rodionov IA, Kildeeva NR, Balabanova TV, **Markvicheva EA**, Lozinsky VI (2018). Preparation of Chitosan Cryostructurates with Controlled Porous Morphology and Their Use as 3D-Scaffolds for the Cultivation of Animal Cells. *APPL BIOCHEM MICRO+ 54* (5), 459–467, [10.1134/S0003683818050162](https://doi.org/10.1134/S0003683818050162)
13. Li X, Sambhi M, Decarlo A, Burov SV, Akasov R, **Markvicheva E**, Malardier-Jugroot C, Szewczuk MR (2018). Functionalized folic acid-conjugated amphiphilic alternating copolymer actively targets 3D multicellular tumour spheroids and delivers the hydrophobic drug to the inner core. *Nanomaterials (Basel)* 8 (8), , [10.3390/nano8080588](https://doi.org/10.3390/nano8080588)
14. Koloskova OO, Gileva AM, Drozdova MG, Grechihina MV, Suzina NE, Budanova UA, Sebyakin YL, Kudlay DA, Shilovskiy IP, Sapozhnikov AM, Kovalenko EI, **Markvicheva EA**, Khaitov MR (2018). Effect of lipopeptide structure on gene delivery system properties: Evaluation in 2D and 3D in vitro models. *Colloids Surf B Biointerfaces* 167, 328–336, [10.1016/j.colsurfb.2018.04.003](https://doi.org/10.1016/j.colsurfb.2018.04.003)
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16. **(конференция)** Trushina DB, Bukreeva TV, Borodina T, Khovankina AV, Akasov RA, **Markvicheva EA** (2017). Biodegradable containers based on nanostructured polycrystals obtained by controlled crystallization. *Acta Crystallogr A Found Adv* 73, C1286.
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- co-culture models based on normal cells and tumor spheroids formed by cyclic RGD-peptide induced cell self-assembly. *Biotechnol Lett* 39 (1), 45–53, [10.1007/s10529-016-2218-9](https://doi.org/10.1007/s10529-016-2218-9)
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