Bacterial Ribonucleases

1. P.V. Zelenikhin, O.N. Ilinskaya, I.Y. Petrushanko, V.A. Mitkevich, V.S. Prassolov, A.A. Makarov Binase Induces Apoptosis Of Transformed Myeloid Cells And Does Not Induce T-Cell Immune Response. Biochem Biophys Res Commun.- 2007.- v.361.- p.-1000-1005.
2. O.N.Ilinskaya, A.Koschinski, H.Repp, V.Mitkevich, F.Dreyer, J.M.Scholtz, C.N.Pace, A.Makarov Rnase Induced Apoptosis: Fate Of Calcium –Activated Potassium Channels Biochemie.- 2008.- v. 90.- p. 717-725.
3. Vladimir A. Mitkevich, Nickolai A. Tchurikov, Pavel V. Zelenikhin, Irina Yu. Petrushanko, Alexander A. Makarov and Olga N. Ilinskaya. Binase cleaves cellular noncoding RNAs and affects coding mRNAs. FEBS J. 2010 Jan;277(1):186-96
4. Mitkevich VA, Petrushanko IY, Kretova OV, Zelenikhin PV, Prassolov VS, Tchurikov NA, Ilinskaya ON, Makarov AA. Oncogenic c-kit transcript is a target for binase. Cell Cycle. 2010 Jul 1;9(13):2674-8.
5. Ulyanova V, Vershinina V, Ilinskaya O. Barnase and binase: twins with distinct fates. Review. FEBS J. 2011 Oct;278(19):3633-43
6. Mitkevich VA, Petrushanko IY, Spirin PV, Fedorova TV, Kretova OV, Tchurikov NA, Prassolov VS, Ilinskaya ON, Makarov AA. Sensitivity of acute myeloid leukemia Kasumi-1 cells to binase toxic action depends on the expression of KIT and AML1-ETO oncogenes. Cell Cycle. 2011 Dec 1;10(23):4090-4097.
7. H. A. Cabrera_Fuentes, N. V. Kalacheva, R. T. Mukhametshina, P. V. Zelenikhin, A. I. Kolpakov, G. Barreto, K. T. Preissner, and O. N. Ilinskaya. Binase Penetration into Alveolar Epithelial CellsDoes not Induce Cell Death. Biochemistry (Moscow) Supplement Series B: Biomedical Chemistry, 2012, Vol. 6, No. 4, pp. 317–321.
8. Cabrera-Fuentes H.A., Zelenikhin P.V., Kolpakov A.I., Preissner K., Ilinskaya O.N. Comparative toxicity of binase towards tumor and normal cell. Toxicon, 2012 Volume 60, Issue 2, P. 104–105
9. Garipov, A.R. Bacillus intermedius ribonuclease (BINASE) induces apoptosis in human ovarian cancer cells [Text] / A.R. Garipov, A.A. Nesmelov , H.A. Cabrera-Fuentes, O.N. Ilinskaya //. Toxicon. – 2014. – V. 92. – P. 54-59. doi: 10.1016/j.toxicon.2014.09.014.
10. Cabrera-Fuentes, H.A. RNase1 Prevents the Damaging Interplay between Extracellular RNA and Tumor-Necrosis-Factor-α in Cardiac Ischemia/Reperfusion Injury [Text] / H.A. Cabrera-Fuentes, M. Ruiz-Meana, S. Simsekyilmaz, S. Kostin, J. Inserte, M. Saffarzadeh, S.P. Galuska, V. Vijayan, I. Barba, G. Barreto, S. Fischer, G. Lochnit, O.N. Ilinskaya, E. Baumgart-Vogt, A. Boning, S. Lecour, D.J. Hausenloy, E.A. Liehn, D. Garcia-Dorado, K.D. Schluter, K.T. Preissner // Thrombosis and Homeostasis. – 2014. (accepted)
11. Il'inskaya, O.N. Ribonucleolytic Activity of Mycoplasmas [Text] / O.N. Il'inskaya, Yu.V. Sokurenko, V.V. Ul'yanova, V.I. Vershinina, P.V. Zelenikhin, A.I. Kolpakov, E.S. Medvedeva, N.B. Baranova, M.N. Davydova, A.A. Muzykantov, O.A. Chernova, V.M. Chernov // Microbiology. - 2014. - V. 83. - P. 247–254.
12. Ilinskaya, O.N. Ribonucleases as Antiviral Agents [Text] / O.N. Ilinskaya, R. Shah Mahmud // Molecular Biology. – 2014. V. 48. - P. 615–623.
13. Fischer, S. Impact of extracellular RNA on endothelial barrier function [Text] / S. Fischer, H. A. Cabrera-Fuentes, T. Noll, K.T. Preissner // Cell Tissue Res. – 2014. – V. 355. - P.635-45.
14. Ulyanova V, Vershinina V, Ilinskaya O, Harwood CR. Binase-like guanyl-preferring ribonucleases are new members of Bacillus PhoP regulon. Microbiol Res. 2014 Aug 29. pii: S0944-5013(14)00091-3. doi: 10.1016/j.micres.2014.08.005.
15. Mitkevich, V. A. Cell Targets of Antitumor Ribonucleases [Text]/ V. A. Mitkevich, A. A. Makarov, O. N. Ilinskaya// Molecular Biology. –2014. –V. 48. –P. 181–188.

16. Ulyanova, V. Draft whole genome sequence of Bacillus pumilus strain 3-19, a chemical mutant overproducing extracellular ribonuclease. [Text] / V. Ulyanova, R. Shah Mahmud, E.Dudkina, V. Vershinina, O. Ilinskaya// Genome Announcements. –2014.
17. Sokurenko, J. Identification of 2',3'-cGMP as an intermediate of RNA catalytic cleavage by binase and evaluation of its biological action [Text] / Sokurenko J., Zelenikhin P., Ulyanova V., Kolpakov A., Muler D., Ilinskaya O. // Russian Journal of Bioorganic Chemistry. -2015. -V.41(1). -P.37-43. (0.535)
18. Митькевич, В.А. Механизм цитотоксичности катионных мутантов РНКазы Sa включает ингибирование калиевого тока через Ca2+-активируемые каналы [Текст]. / В.А. Митькевич, К.Н. Пейс, А. Кочински, А.А. Макаров, О.Н. Ильинская. // Молекулярная биология. – 2015. – Т.49, № 6. – С.1041–1047 (0.74)
19. Ulyanova, V. Binase-like guanyl-preferring ribonucleases are new members of Bacillus PhoP regulon [Text] / Ulyanova V., Vershinina V., Ilinskaya O., Harwood C.R. // Microbiological Research. -2015. -V.170. -P.131-138. (2,978)
20. Shah Mahmud, R. Draft Whole-Genome Sequence of *Bacillus altitudinis* Strain B-388, a Producer of Extracellular RNase [Text] / Shah Mahmud R., Ulyanova V., Malanin S., Dudkina E., Vershinina V., Ilinskaya O. // Genome Announcement. -2015. -V.3. -e01502-14. Published online 2015 January 29.