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## New inhibitor of the xanthine oxidase regulates cell proliferation

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X anthine Oxidase (XO; EC 1.17.3.2) is one of the final enzymes of the purine catabolism, regulating it by feed-back mechanism. In the current study, it has been demonstrated the classical inhibitor of XO - allopurinol along with vitamin B complex and particularly pyridoxine, by inhibiting the activity of XO, are capable for the stimulation of the neuronal cells proliferation. The Ki, Vmax as well as Km values of XO enzymatic activity for pyridoxine were delineated not only for the liver but also for the brain derived forms of above mentioned enzyme. The influence of the other components of vitamin B complex on the processes of cells proliferation and death were also highlighted.

## **Biography**

Danielyan K E has received her MS from Yerevan State University, Department of Biochemistry in 1999. PhD related work was performed at the Institute of Biochemistry and was completed in 2003. Her Postdoctoral trainings were passed in Miami University, Department of Neurology, USA; in University of Pennsylvania, Institute of Environmental Medicine and Department of Pharmacology, USA. Now she is a Team Leader and senior Scientist at the H. Buniatian Institute of Biochemistry of National Academy of Science of Armenia. She has more than 20 publications and is an award and grant winner.

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