

## **Endonuclease from *Proteus mirabilis***

Salikhova Z., Sokolova R., Ponomareva A., Yusupova D.  
*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

---

### **Abstract**

Two isoforms of nuclease displaying DNase and RNase activities were found in the culture liquid and periplasm of *Proteus mirabilis*. The enzyme was isolated from the periplasm and then purified to a functionally homogeneous state. The nuclease was equally potent in cleaving denatured and native DNAs by the endonuclease mechanism and was designated Pm endonuclease. The endonuclease was shown to be a temperature-dependent enzyme with a pH optimum of 10.4-10.6, requiring the presence of bivalent metal ions and inhibited by citrate and ethylenediaminetetraacetate.

---