



Vás zve na přednášku na téma:

INTERACTION OF ZINC IONS WITH DNA

Ing. Jiří Kudr

Abstract

Zinc plays an important role in cancer etiology. Many cellular processes such as proliferation, differentiation and apoptosis are influenced by concentration of Zn(II) ions. Metal ions also interact strongly with DNA influencing both the DNA structure and stability of the macromolecule. The concentration of intracellular free zinc is regulated by zinc transporters (ZIP), metallothionein (MT) and metal transcription factor (MTF). Although the concentration of cellular Zn(II) ions is less than 0,01% of total zinc, it can be sufficient amount to affect the melting temperature of DNA and destabilise B-DNA conformation by binding to DNA bases and sugar-phosphate skeleton.

Program

1. Biological role of zinc
2. DNA and zinc ions
3. Zinc and cancer
4. Conclusion

pátek 26. 04. 2013, 10:00 h

Ústav chemie a biochemie, místnost D06

Kontakt: pavlina.sobrova@seznam.cz, kizek@sci.muni.cz

