

The zinc-binding fragment of HypA from *Helicobacter pylori*: a tempting site also for nickel ions.

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Streszczenie

HypA, a nickel accessory protein from *H. pylori*, binds a zinc ion in its structural site, a loop with two conserved CXXC motifs (Ac-ELECKDCSHVFKPNALDYGVCEKCHS-NH₂). There are at least three hypotheses on the binding mode of this ion. In this paper, we try to understand how Zn²⁺ binds to this fragment and why Ni²⁺, a metal with quite a high affinity towards thiolic sites, doesn't compete with zinc in the binding to this motif. Potentiometric titrations, mass spectrometry, NMR, UV-Vis and CD spectroscopy help us to compare the coordination modes in both metal complexes and discuss their thermodynamic stabilities.

Adres publiczny

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Strona internetowa wydawcy

<https://www.rsc.org/>