

The C terminus of HspA—a potential target for native Ni(II) and Bi(III) anti-ulcer drugs.

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Rok wydania

2010

Czasopismo

Dalton Transactions

Numer woluminu

39

Strony

5814-5826

DOI

10.1039/C0DT00013B

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

HspA, a protein crucial for nickel homeostasis in *Helicobacter pylori* (*H. pylori*), has a unique histidine- and cysteine-rich domain at the C terminus. In this work, we compared the coordination of nickel (the natural co-factor) and bismuth (inhibitor) to this domain (Ac-ACCHDHKKH-NH₂) and to a reference peptide (Ac-CHCH-NH₂). Potentiometric, CD, UV-Vis spectroscopic and NMR methods have shown that bismuth binds incomparably stronger than nickel; the same data shows the impact of histidines on such a binding. Our results are in good agreement with earlier biological data and suggest that HspA can be a potential target of the bismuth anti-ulcer drug against *H. pylori*.

Adres publiczny

[http://dx.doi.org/ 10.1039/C0DT00013B](http://dx.doi.org/10.1039/C0DT00013B)

Strona internetowa wydawcy

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