

The role of the β Asp residue in copper(II) binding by modified peptides.

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Rok wydania

2012

Czasopismo

Tetrahedron Letters

Numer woluminu

53

Strony

1652-1655

DOI

10.1016/j.tetlet.2012.01.087

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

The synthesis and binding abilities of peptides containing β -amino acids towards Cu(II) ions are presented. The peptides studied were: Ala- β Asp-Ser-Gly and Arg-Lys- β Asp-Val-Tyr. Potentiometric titrations were carried out to establish the stoichiometry of the resulting metal-ligand complexes. The copper(II) coordination mode of the complexes was investigated by performing detailed spectroscopic analyses (UV-Vis, CD) in strict correlation with potentiometric measurements. The results obtained on the β -peptides studied allowed the characterization of the influence of this structural modification on the coordination abilities of the peptides. Moreover, the role of the α -Asp position in the peptide chain was also described.

Słowa kluczowe

β -Amino-acid, β -Peptide, copper(II), complex

Adres publiczny

<https://doi.org/10.1016/j.tetlet.2012.01.087>

Strona internetowa wydawcy

<http://www.elsevier.com>