

Abstract

Prion diseases are widely spread diseases among mammals. They are characterized by a change of prion protein structure PrP^C (cellular, native state) to PrP^{Sc} (scrapie, structure typical for prion diseases). It is a change at secondary structure of protein from α -helical to β -sheet structure, which aggregates in brain. One possibility, why it happens is higher transitional metal ions concentration (Zn(II), Cu(II), Fe(III)) in the brain, which bind to PrP^C and affects its structure. Aim of this thesis is a synthesis one of protentional drugs based on 2-aminothiazole and its modification to bind fluorescent or radiochemical markers and in future study of its possible interaction with transition metal ions.

Key words:

complexes; macrocyclic ligands; copper; prion diseases