

Structure of pravastatin and its complex with sodium dodecyl sulfate micelles studied by NMR spectroscopy

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Abstract

© 2014 John Wiley & Sons, Ltd. The aim of this work was to study the mechanisms of interaction between pravastatin and cell membranes using model membranes (sodium dodecyl sulfate micelles) by nuclear magnetic resonance spectroscopy methods. On the basis of the nuclear magnetic resonance experiments, it was established that pravastatin can form intermolecular complexes with sodium dodecyl sulfate micelles by the interaction of its hydrophilic groups with the polar surface of the micelle. Conformational features of pravastatin molecule were also studied.

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Keywords

Biophysical models, Complexation, Micelle, NMR spectroscopy, Nuclear overhauser effect, Pravastatin, Sodium dodecyl sulfate, Surfactants