

Fluphenazine : from an isolated molecule to its interaction with lipid bilayers.

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Streszczenie

Fluphenazine (FPh) belongs to the phenothiazine family of compounds and exhibits a wide variety of biological effects, including antimutagenic, proapoptotic, antiproliferative and anti-multidrug resistance (MDR) activities. The ability of FPh to interact with lipid membranes can have a significant impact on its biological activities. However, the mechanisms involved in the interaction of FPh with lipid membranes are poorly understood. FTIR-ATR spectroscopy has been used in this study to visualize the interactions between FPh and a model lipid bilayer composed of 1,2-dipalmitoyl-sn-glycero-3-phosphocholine (DPPC). Subsequent interpretation of the temperature-dependent FTIR spectra obtained for FPh:DPPC systems containing different concentrations of FPh was efficiently supported by principal component analysis.

Słowa kluczowe

FTIR–ATR spectroscopy, Fluphenazine, Lipid film, principal component analysis

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