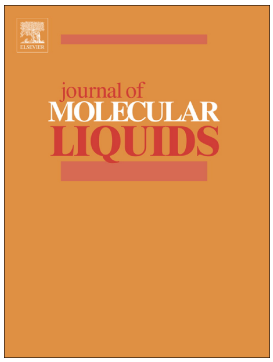

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Impact of biorelevant media on pharmacologically important properties of potential neuroprotectors based on 1,2,4-thiadiazole

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ABSTRACT

Pharmacologically important properties of two structurally related biologically active 1,2,4-thiadiazole derivatives were investigated in phosphate buffer and biorelevant media FaSSIF simulating the intestinal fluid. Solubility and distribution coefficients of thiadiazoles were found to be substantially higher in FaSSIF than in blank buffer. On the contrary, permeability coefficients decreased and dissolution rate was not changed in FaSSIF. Mechanism of FaSSIF components action on thiadiazoles behaviour was revealed using ^{1}H NMR and UV-spectroscopy.

Keywords: 1,2,4-thiadiazole; biorelevant medium; dissolution; distribution; permeability