

Interaction of Water-soluble Paclitaxel Prodrug and Albumin in Aqueous Solution

나행요, 조나래, 손정선[†]

조선대학교

(jss4347@chosun.ac.kr[†])

In this study, we have investigated the interaction of water-soluble paclitaxel (7-mPEG5,000-succinyloxymethyloxycarbonyl-paclitaxel, PP7) prodrug and hen egg albumin ($M_r \sim 45,000$) by pulse-gradient field NMR (PGF-NMR). Diffusion coefficient of PP7 with Albumin in modified Hank's Balanced Salt Solution (MHBSS) was measured as a function of PP7 (0.0~1.7% w/w) and albumin (0.0~1.4% w/w) concentration at different temperatures. This study suggested that the results of molecular mobility and interaction can be used to determine the transport mechanisms in human body liquid.