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
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Research paper

Enhancement of cytotoxicity of diallyl disulfide toward colon cancer by Eudragit S100/PLGA nanoparticles

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Abstract

According to WHO cancer is the second leading cause of death globally, amounting to about 1 in 6 deaths. Among these, colon cancer is the third leading cause of mortalities worldwide. Current measures for cancer treatment: chemotherapy, radiation, and surgery are accompanied by myriad side effects. In light of a mediocre success of synthetic drugs against cancer exploring the treasure of naturally occurring compounds with anti-cancer activity can be an effective strategy. Diallyl disulfide (DADS), a dietary phytochemical derived from garlic possesses a substantial anti-cancer activity against colon cancer. Nevertheless, its poor water solubility and restricted selectivity towards tumor tissues have limited its clinical applications. Moreover, to deliver intact drugs is another major concern in the treatment of ailments associated with the colon. To address these aforementioned clinically significant issues, we report dual functioning DADS loaded polymeric nanoparticles composed of a combination of Eudragit S100 (ES100) as a pH

FEEDBACK 