



中文标题 检索 药刊检索

氧化槐果碱在Caco-2细胞模型中的吸收机制研究

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中文摘要: 目的: 研究氧化槐果碱在Caco-2细胞模型中的吸收机制。方法: MTT实验考察氧化槐果碱在Caco-2细胞中的安全浓度范围, 再利用Caco-2细胞单层模型研究氧化槐果碱的双向转运机制, 以转运量及表观渗透系数(P_{app})为观测指标, 考察时间、浓度、pH和P-gp抑制剂维拉帕米对其吸收的影响。结果: 氧化槐果碱在Caco-2细胞模型中的转运与时间和浓度呈正相关, 并受pH影响; P-gp抑制剂维拉帕米对其转运无影响, 从单层细胞层顶端(AP)到基底端(BL)的转运与基底端到顶端的转运大致相同。结论: 氧化槐果碱在Caco-2细胞模型中的吸收是被动转运。

中文关键词: 氧化槐果碱 Caco-2细胞模型 HPLC 被动转运

Absorption mechanism of oxysophocarpine across Caco-2 cell monolayer mode

Abstract: Objective: To investigate the absorption mechanism of oxysophocarpine across Caco-2 cell monolayer model. Method: The safety concentration of oxysophocarpine in Caco-2 cell was first selected by using MTT method. Then the Caco-2 cell monolayers drug transport model was assigned to study the bi-direction transport mechanism of oxysophocarpine by evaluating the influent factors such as time, concentration, pH, P-gp inhibitor of verapamil, on its absorption characterization. Result: In the Caco-2 cell monolayer model, the transport volume was correlated positively with the time and concentration of oxysophocarpine, and affected by pH value. Verapamil had no influence on its transport since the transport of oxysophocarpine from apical (AP) to basolateral (BL) was similar to the transport from basolateral to apical. Conclusion: The intestinal absorption mechanism of oxysophocarpine was deduced as passive transference by Caco-2 cell monolayer model.

keywords: oxysophocarpine Caco-2 cell monolayer model HPLC passive transference

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