

论文

pH及温度敏感型生物可降解嵌段共聚物的研究进展

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摘要:

pH及温度敏感型生物可降解嵌段共聚物是指生物可降解材料与pH敏感单体聚合或其本身按照一定序列聚合而成的一种高分子材料, 对环境的pH及温度变化产生应答。本文结合近年的研究报道, 阐述了各种pH及温度敏感型生物可降解嵌段共聚物的作用机制和应用特点。目前, 对pH及温度敏感型生物可降解嵌段共聚物的研究备受关注, 其能较好的控制药物释放速度, 并具有良好的生物相容性, 在智能给药系统研究领域有着广阔的应用前景。

关键词: pH敏感 温度敏感 生物降解 嵌段共聚物 给药系统

Progress in the study of pH and temperature sensitive biodegradable block copolymers

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Abstract:

pH and temperature sensitive biodegradable block copolymers are some macromolecules connected by biodegradable materials and pH sensitive monomers according to a certain sequence, or biodegradable polyesters polymerized themselves. On the basis of pertinent documents, the development of pH and temperature sensitive biodegradable block copolymers was introduced, involving their mechanism of action and potential application. PH and temperature sensitive biodegradable block copolymers could control the drug release rate freely, avoiding burst effect. Besides, the biocompatibility of these biodegradable materials is also excellent. So the use of pH and temperature sensitive biodegradable block copolymers as biodegradable drug delivery devices has attracted considerable interest in the intelligent drug delivery system.

Keywords: temperature sensitivity biodegradation block copolymer drug delivery system pH sensitivity

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2. 郭圣荣; 方晓玲; 黄惠琼; 胡翔. 新型丙烯酸树脂肠溶包衣材料的合成与应用[J]. 药学报, 1998,33(11): 860-863
3. 戴俊东; 王学清; 张涛; 孟萌; 张炬; 吕万良; 张强. 环孢素A pH敏感性纳米粒的制备与小鼠口服药代动力学[J]. 药学报, 2004,39(12): 1023-1027

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