

研究简报

## 生物相容性BAB型两亲嵌段共聚物的合成及其自组装

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摘要

关键词 [嵌段共聚物](#) [聚乙二醇](#) [聚\(Nε-苄氧羰基赖氨酸\)](#) [自组装](#) [螺旋](#)

分类号

### SYNTHESIS AND SELF-ASSEMBLING OF BIOCOMPATIBLE BAB AMPHIPHILIC TRIBLOCK COPOLYMERS POLY(N<sup>ε</sup>-CBZ-LYSINE)-PEG-POLY(N<sup>ε</sup>-CBZ-LYSINE)

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**Abstract** Lys(z)-NCA was synthesized in the presence of triphosgene, amphiphilic triblock copolymers poly(N<sup>ε</sup>-CBZ-Lysine)-PEG-poly(N<sup>ε</sup>-CBZ-Lysine) were synthesized in DMF using amino-end ended PEG as initiator with the mechanism of anion ring opening polymerization. The structures of block copolymers were characterized by IR, <sup>1</sup>H-NMR, GPC and DSC. The results showed triblock copolymers with expected structure and low polydispersity in molecular weight could be synthesized by this method. At the same time, the self-assembling behaviors of block copolymer were investigated by TEM. A novel helical aggregates were found to be formed in DMF. Because of biocompatibility of two components of block copolymers, these block copolymers have potential applications in the field of biomaterials.

**Key words** [Block copolymers](#) [Poly \(ethylene glycol\)](#) [Poly \(N<sup>ε</sup>-CBZ-Lysine\)](#) [Self-assembling Helix](#)

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