

论文

超声微泡介导的基因递送系统应用进展

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摘要:

超声波可聚焦于体内的特定部位。含气体微泡既可以作为医学超声显像的造影剂, 又可以作为药物或基因载体。超声微泡有望实现基因的靶向递送, 因此成为药物递送系统研究的热门领域。本文阐述了超声微泡介导的基因递送系统在心肌、血管、骨骼肌和肿瘤组织等方面的研究进展, 讨论其在未来应用中面临的问题。

关键词: 超声 基因递送 靶向给药 微泡

Recent advances in the applications of ultrasonic microbubbles as gene delivery systems

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Abstract:

Ultrasonic beam can be focused on a particular tissue. As ultrasound contrast agents for medical ultrasound imaging, gas-filled microbubbles can also be used as drugs or gene carriers. Therefore, ultrasonic microbubbles become a topic of intense interest in drug delivery because they can be used as gene targeting delivery systems. Based on the relevant materials, the applications of ultrasonic microbubbles as gene delivery systems in various tissues *in vivo* were reviewed, such as cardiac, vascular, skeletal muscle and tumor. Their potential problems in future use were also discussed.

Keywords: gene delivery targeting delivery microbubbles ultrasound

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