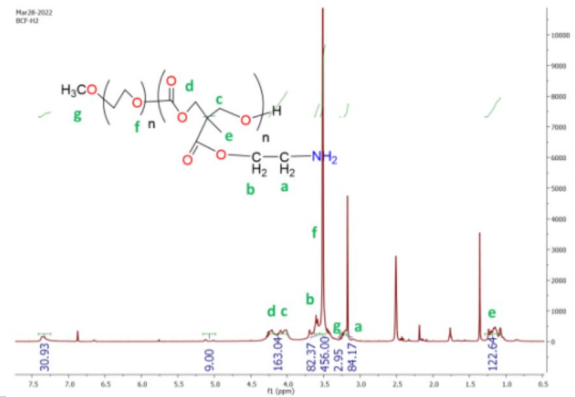


PENDING

(IN202311043000)

A cationic polymer for delivery of therapeutic agents and a method of synthesis thereof



NEED

Traditional drug delivery systems often face challenges like low bioavailability and toxicity. A more effective system is needed for targeted, safe, and efficient delivery of therapeutic agents.

TECHNOLOGY OVERVIEW

This invention introduces a biodegradable cationic polymer for the delivery of therapeutic agents like proteins, peptides, and nucleic acids. The polymer forms nanocomplexes (NCs) with therapeutic agents, enhancing their bioactivity and stability during delivery without chemical reactions.

TECHNOLOGY KEY FEATURES

Biodegradable, non-toxic cationic polymer, customizable molecular weight, electrostatic interaction with peptides/proteins/miRNA, efficient and safe therapeutic agent delivery, improved bioactivity retention, versatile therapeutic applications.

[Read more here](#)

MARKET ANALYSIS

The global drug delivery market is growing at a CAGR of 10.6%, expected to reach \$16.2 billion by 2033 (source: Grand View Research, 2023). The market is driven by the increasing demand for personalized treatments, targeted delivery systems, and the rising prevalence of chronic diseases.

Target Industries

Biopharmaceuticals, Healthcare, and Medical Devices. , Pharmaceutical companies, medical device manufacturers, contract research organizations, and biotechnological enterprises developing novel drug delivery systems for specialized treatments like cancer and diabetes.

AT A GLANCE

- SDG 3 (Good Health and Well-being), SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Responsible Consumption and Production)

Technology is available for licensing/ co-development.

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