

PENDING

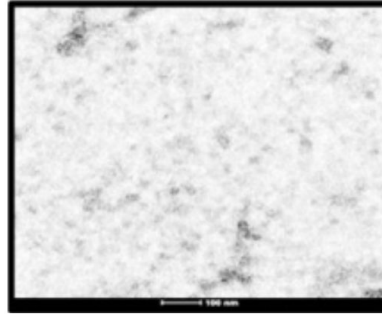
(IN202011052036)

CRISPR/Cas9

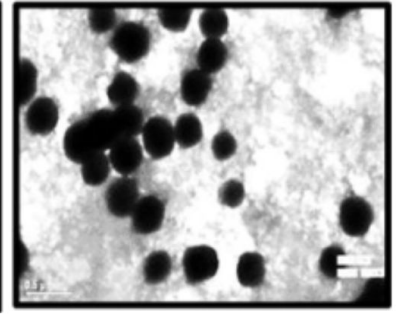
ribonucleoprotein

lipo-polymeric nanoplexes and  
method of preparation thereof

Free RNPs



RNPs Nanoplexes



## NEED

Gene editing holds great promise, but efficient delivery systems are a major challenge. What if there was a way to deliver CRISPR/Cas systems with improved stability and precision for better therapeutic outcomes?

## TECHNOLOGY OVERVIEW

This technology presents an amphiphilic polymer-based nano delivery system for CRISPR/Cas gene editing, using cationic groups, cholesterol, and ribonucleotide complexes to enhance stability and targeting.

## TECHNOLOGY KEY FEATURES

1) Stable CRISPR/Cas ribonucleoprotein delivery. 2) Optimized nanoparticle characteristics (size, zeta potential). 3) Electrostatic interaction for efficient gene editing. 4) Enhanced targeting and precision.

[Read more here](#)

## MARKET ANALYSIS

The global CRISPR gene editing market is expected to grow at a CAGR of 24.3%, reaching \$17.3 billion by 2033, driven by demand in healthcare and agriculture. (Source: Research and Markets, 2023)

## Target Industries

1) Biotechnology Companies focused on gene editing and gene therapy. 2) Pharmaceutical Manufacturers involved in biopharmaceutical R&D and clinical trials. 3) Agri-tech Providers working on genetically modified crops and precision agriculture.

## AT A GLANCE

- SDG 3 (Good Health and Well-Being), SDG 2 (Zero Hunger), SDG 9 (Industry, Innovation, and Infrastructure)

Technology is available for licensing/ co-development.

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