

Genetic Booster for mRNA Vaccines



Application

mRNA drugs have received growing attention due to their potential in gene therapy, regenerative medicine, cancer treatment, and infectious disease prevention (e.g. Ebola, COVID).

The global demand for mRNA vaccines & therapeutics market size, in terms of revenue, was worth of USD 587.7 million in 2019 and is expected to reach USD 2911.9 million in 2026, growing at a CAGR of 28.51% from 2020 to 2026¹



Technology

Artificial sequences can be simply incorporated into the DNA templates by regular PCR reactions, no additional cost is needed for synthesizing mRNA drugs carrying the artificial sequences. These artificial sequences can be broadly used on the existing and future mRNA drugs for enhancement of efficacy and for reduction of cost.



Advantages

- 2x – 8x Enhancement of immunogenicity for mRNA vaccines
- No additional chemical is needed (e.g. adjuvant for conventional vaccines)
- Improve stability & efficacy of mRNA vaccine (no extra dose needed)

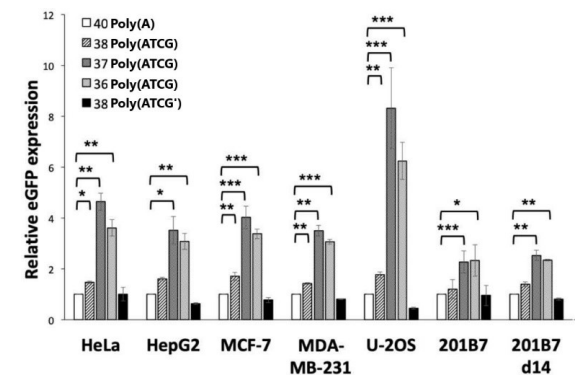
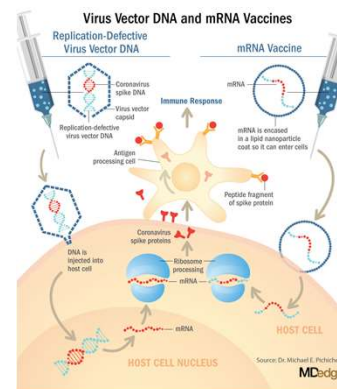


Fig 1. Effect of artificial sequences towards the protein expression of mRNA on various types of cells. 24 hours after transfection, the mean eGFP expression from positively transfected cells were recorded for analysis.



Intellectual Properties

US Patent Application: US63/103,492



Talk to Us

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1. According to Market research report: "mRNA Vaccines And Therapeutics Market Share, Segment Analysis, Growth Drivers And Forecast 2020-2026", ID: BMRC 566, published by Brandessence Market Research and Consulting Private Limited in Jan 2020

