#### Thermo Físher CIENTIFIC

# mRNA therapeutics workflow

Your journey through mRNA therapeutic development from discovery to commercialisation. End-to-end solutions to support your mRNA therapeutics workflow.

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With Thermo Fisher Scientific, you have the support to accelerate mRNA therapeutics from discovery to commercialisation with our comprehensive portfolio of products & services proven to meet critical process, scale, quality and regulatory needs.

### 1 TARGET DISCOVERY

Next generation sequencing, genetic analysis together with our Applied Biosystems<sup>™</sup> real-time PCR platforms provide true value with excellent performance and reliability during your search and validation of therapeutic targets.

MORE



High quality double stranded DNA strings or plasmid constructs are essential building templates during mRNA in vitro transcription.



#### 3 PLASMID PRODUCTION

Plasmids are the building blocks needed to manufacture mRNA therapeutics. Plasmid production takes place in a microbial fermentation process and our product solutions are designed to scale up the production from development to commercial phase.

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#### mRNA PURIFICATION

Simplify your purification process with our innovative chromatography solutions specifically designed to improve the downstream purification of mRNA molecules.

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#### 7 FORMULATION

Once the mRNA molecules have been purified, they are ready for formulation. The mRNA molecules can be complexed with the lipid reagents to mediate efficient delivery to the target cells.

Bring your formulation process together seamlessly with an extensive range of standard and customised bioprocess containers and fluid transfer products.

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### mRNA PRODUCTION

A comprehensive portfolio of nucleotide, enzymes, and capping solutions for mRNA production designed for seamless progression from preclinical development to commercial manufacturing.



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Detection of impurities and contaminants is critical in the therapeutics manufacturing process. We provide rapid analytical assays with total workflow solutions to align with regulatory requirements, from evaluation through to validation and approval.



#### PLASMID PURIFICATION

Achieve faster process development with our product solutions designed to scale production whilst isolating, purifying and extracting high quality plasmid DNA.



## FILL AND FINISH, AND STORAGE

After the mRNA has been formulated with lipid carriers, Thermo Fisher Scientific provides drug product fill, finish, and storage solutions.

MORE



Connect with us to bring your mRNA therapeutics development to commercialisation with confidence





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