Up to 40+ L (0.25 g/L)



Unleashing the Potential of Messenger RNA (mRNA)

BioCina offers highest quality mRNA development and clinical and commercial manufacturing services.

mRNA Offerings

Our expert mRNA team brings deep experience to every step of your program, from development through production.

We provide bespoke solutions to fit our client's specific needs, from pre-clinical development through commercial manufacturing.

We can perform more than 95% of testing in-house, which reduces the time and cost of our programs.

At our state-of-the-art cGMP facility, we meet the highest global regulatory standards, including US FDA and EMA.

1-50 L (Pre-Dilution)

nRNA Manufacturing		LNP Encapsulati	on
In vitro Capping & Transcription Template Removal	Optional RNA Capture Formula Conditioning	tion Bulk Fill LNP Encapsulation	Polishing or Formulation & Filtration Bulk Fill
RNA Development and Manuf	acturing Scales		
Stage	Equipment	Working Volume	Yield
Process Development	25 L Wave Reactor	.1 – 1 L	Up to 6 g
Process Development	Non-Turbulent Microfluidic Mixing	20 µL – 1 L (Pre-Dilution)	Up to 4 L (0.25 g/L)
	25 L Wave Reactor	.35 – 5 L	Up to 30 g
cGMP Manufacturing			

Typical mRNA / LNP Development and Manufacturing Timelines

3 Months \rightarrow	6 Months \rightarrow	9 Months —		
Process / Analytical Development		ent	+ 4 months to PD and AD completion, mRNA and LNP encapsulation processes ready to scale	
			Technology and Analytical Verification 6 months to ENG manufacture and disposition	
			8 months to cGMP batch disposition cGMP Batch Manufacturing	

Non-Turbulent Microfluidic Mixing