



CERTIFICATE OF ANALYSIS

Product Description: mRNA-1273 Moderna Part #: 50075
Manufacturer Name: Lonza Biologics Inc (Portsmouth) Container/Closure: (b) (4)
Manufacturer Lot: 948548
Moderna Lot Number: 5007520501 Specification: SPC-1213
Date of Manufacture: 05Nov2020 Expiry Date: 03Jul2021

Product Attribute	Method	Parameter	Specification	Result
Appearance	SOP-0278	Appearance - Color	(b) (4)	
		Appearance - Particulates		
Identity	SOP-1032	Identity		
Concentration	SOP-0999	Concentration		
Purity	SOP-0996	Purity		
		% IG1		
		% IG2		
		% IG3		
		% Total Impurities		
% RNA Encapsulation	SOP-1000	% Encapsulation		
Dynamic Light Scattering	SOP-0998	Particle Size		
		Polydispersity		
Lipid Identification	SOP-1001	SM102		
		Cholesterol		
		DSPC		
		PEG-DMG		

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FDA-CBER-2022-1614-3815345



CERTIFICATE OF ANALYSIS

Product Description:	mRNA-1273	Moderna Part #:	50075
Manufacturer Name:	Lonza Biologics Inc (Portsmouth)	Container/Closure:	(b) (4)
Manufacturer Lot:	948548		
Moderna Lot Number:	5007520501	Specification:	SPC-1213
Date of Manufacture:	05Nov2020	Expiry Date:	03Jul2021

Product Attribute	Method	Parameter	Specification	Result
Lipid Content		SM102	(b) (4)	
		Cholesterol		
		DSPC		
		PEG-DMG		
Lipid Impurities		% Area 1		
		RRT 1		
		% Total Impurities		
pH	SOP-0288	pH		
Osmolality	SOP-0279	Osmolality		
Bacterial Endotoxins	USP <85>	Bacterial Endotoxins		
Bioburden	USP <61>	TAMC		
		TYMC		

This material meets specification: Yes

Revision History:

1.0 - Original

2.0 - Corrected Date of Manufacture from 06Nov2020 to 05Nov2020 and expiry date from 04Jul2021 to 03Jul2021

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Document Approvals

Approved Date:

Approval Verdict: Approved	Steven Anderson, (b) (6) @modernatx.com Quality Control Approval 10-Dec-2020 20:24:41 GMT+0000
QA Approval Verdict: Approved	(b) (6) , (b) (6) @modernatx.com Quality Assurance Approval 10-Dec-2020 20:28:04 GMT+0000