

## CERTIFICATE OF ANALYSIS

|                      |            |                    |                                               |
|----------------------|------------|--------------------|-----------------------------------------------|
| Product Description: | mRNA-1273  | Moderna Part #:    | 60073                                         |
| Manufacturer Name:   | Catalent   | Container/Closure: | 10R Ompi Glass Vial, 20 mm Stopper, 20 mm Cap |
| Manufacturer Lot:    | 011L20     |                    |                                               |
| Moderna Lot Number:  | 6007320012 | Specification:     | SPC-1128                                      |
| Date of Manufacture: | 03Dec2020  | Expiry Date:       | 03Jul2021                                     |

| Product Attribute        | Method   | Parameter                 | Specification                                                       | Result                           |
|--------------------------|----------|---------------------------|---------------------------------------------------------------------|----------------------------------|
| Appearance               | SOP-0278 | Appearance - Color        | White to off-white dispersion.                                      | White to off-white dispersion    |
|                          |          | Appearance - Particulates | May contain visible, white or translucent product-related particles | Essentially Free of Particulates |
| Concentration            | SOP-0999 | RNA Content               | (b) (4)<br>(Target: 0.20 mg/mL)                                     |                                  |
| Identity                 | SOP-1032 | Identity                  | (b) (4)                                                             |                                  |
| Purity                   | SOP-0996 | Purity                    |                                                                     |                                  |
|                          |          | % IG1                     |                                                                     |                                  |
|                          |          | % IG2                     |                                                                     |                                  |
|                          |          | % IG3                     |                                                                     |                                  |
| % RNA Encapsulation      | SOP-1000 | % Encapsulation           |                                                                     |                                  |
| In vitro Translation     | SOP-0937 | Result                    |                                                                     |                                  |
| pH                       | SOP-0288 | pH                        |                                                                     |                                  |
| Osmolality               | SOP-0279 | Osmolality                |                                                                     |                                  |
| Dynamic Light Scattering | SOP-0998 | Particle Size             |                                                                     |                                  |
|                          |          | Polydispersity            |                                                                     |                                  |
| Lipid Identification     | SOP-1001 | SM102                     |                                                                     |                                  |
|                          |          | Cholesterol               |                                                                     |                                  |

CONFIDENTIAL - DO NOT DISTRIBUTE OUTSIDE OF MODERNATX, INC. WITHOUT WRITTEN PERMISSION

Generated By: Steven Anderson

Page 1 of 3

Generated Date: 20-Dec-2020

Document Number: VV-QUAL-004357 eDMS Version: 1.0 Page 1 of 4  
Confidential and Proprietary

FDA-CBER-2022-1614-3815235



## CERTIFICATE OF ANALYSIS

|                      |            |                    |                                               |
|----------------------|------------|--------------------|-----------------------------------------------|
| Product Description: | mRNA-1273  | Moderna Part #:    | 60073                                         |
| Manufacturer Name:   | Catalent   | Container/Closure: | 10R Ompi Glass Vial, 20 mm Stopper, 20 mm Cap |
| Manufacturer Lot:    | 011L20     |                    |                                               |
| Moderna Lot Number:  | 6007320012 | Specification:     | SPC-1128                                      |
| Date of Manufacture: | 03Dec2020  | Expiry Date:       | 03Jul2021                                     |

| Product Attribute  | Method   | Parameter                     | Specification | Result |
|--------------------|----------|-------------------------------|---------------|--------|
| Lipid Content      |          | DSPC                          | (b) (4)       |        |
|                    |          | PEG-DMG                       |               |        |
|                    |          | SM102                         |               |        |
|                    |          | Cholesterol                   |               |        |
|                    |          | DSPC                          |               |        |
| Lipid Impurities   |          | PEG-DMG                       |               |        |
|                    |          | % Area 1                      |               |        |
|                    |          | % Area 2                      |               |        |
|                    |          | % Area 3                      |               |        |
|                    |          | % Area 4                      |               |        |
|                    |          | % Area 5                      |               |        |
|                    |          | RRT 1                         |               |        |
|                    |          | RRT 2                         |               |        |
|                    |          | RRT 3                         |               |        |
|                    |          | RRT 4                         |               |        |
|                    |          | RRT 5                         |               |        |
|                    |          | % Total Impurities            |               |        |
| Particulate Matter | SOP-0509 | 10 µm particles per container |               |        |

CONFIDENTIAL - DO NOT DISTRIBUTE OUTSIDE OF MODERNATX, INC. WITHOUT WRITTEN PERMISSION

Generated By: Steven Anderson

Page 2 of 3

Generated Date: 20-Dec-2020



## CERTIFICATE OF ANALYSIS

|                      |            |                    |                                               |
|----------------------|------------|--------------------|-----------------------------------------------|
| Product Description: | mRNA-1273  | Moderna Part #:    | 60073                                         |
| Manufacturer Name:   | Catalent   | Container/Closure: | 10R Ompi Glass Vial, 20 mm Stopper, 20 mm Cap |
| Manufacturer Lot:    | 011L20     |                    |                                               |
| Moderna Lot Number:  | 6007320012 | Specification:     | SPC-1128                                      |
| Date of Manufacture: | 03Dec2020  | Expiry Date:       | 03Jul2021                                     |

| Product Attribute    | Method   | Parameter                     | Specification                                  | Result  |
|----------------------|----------|-------------------------------|------------------------------------------------|---------|
|                      |          | 25 µm particles per container | (b) (4)                                        |         |
| Container Content    | SOP-0950 | Container Content             | >= 5.0 mL (>=10 doses of 0.5 mL from one vial) | (b) (4) |
| Bacterial Endotoxins | USP <85> | Bacterial Endotoxins          | (b) (4)                                        |         |
| Sterility            | USP <71> | Sterility                     |                                                |         |

This material meets specification:      Yes

### Revision History:

1.0 - Original

Labeled Drug Product Lot Number: 7006520017

Drug Substance Manufacturer: Moderna, Norwood, MA

CONFIDENTIAL - DO NOT DISTRIBUTE OUTSIDE OF MODERNATX, INC. WITHOUT WRITTEN PERMISSION

Generated By:      Steven Anderson

Page 3 of 3

Generated Date:      20-Dec-2020

Document Number: VV-QUAL-004357 eDMS Version: 1.0      FDA-CBER-2022-1614-3815237  
Confidential and Proprietary

Document Approvals  
Approved Date: 20 Dec 2020

|                                  |                                                                                                          |
|----------------------------------|----------------------------------------------------------------------------------------------------------|
| Approval<br>Verdict: Approved    | Steven Anderson,<br>(b) (6) @modernatx.com)<br>Quality Control Approval<br>20-Dec-2020 18:30:38 GMT+0000 |
| QA Approval<br>Verdict: Approved | (b) (6)<br>(b) (6) @modernatx.com)<br>Quality Assurance Approval<br>20-Dec-2020 18:33:26 GMT+0000        |