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## New England Biolabs Certificate of Analysis

Product Name: M13mp18 Single-stranded DNA

Catalog Number:N4040SConcentration:250 μg/ml

Unit Definition: N/A

Packaging Lot Number: 10160098
Expiration Date: 05/2024
Storage Temperature: -20°C

Storage Conditions: 10 mM Tris-HCl (pH 8.0), 1 mM EDTA

Specification Version: PS-N4040S v2.0

| M13mp18 Single-stranded DNA Component List |                             |            |                      |  |
|--|-----------------------------|------------|----------------------|--|
| <b>NEB Part Number</b>                     | Component Description       | Lot Number | Individual QC Result |  |
| N4040SVIAL                                 | M13mp18 Single-stranded DNA | 10150980   | Pass                 |  |

| Assay Name/Specification  | Lot # 10160098 |
|---|----------------|
| Mung Bean Nuclease Digest (Sensitive) A 100 μl reaction in Mung Bean Nuclease Reaction Buffer containing 2.5 μg of M13mp18 Single-stranded DNA and 10 units of Mung Bean Nuclease incubated for 1 hour at 30°C results in complete digestion of the DNA as determined by agarose gel electrophoresis. | Pass           |
| Non-Specific DNase Activity (DNA, 16 hour) A 50 µl reaction in 1X NEBuffer 2 containing 2.5 µg of M13mp18 Single-stranded DNA incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.                           | Pass           |
| DNA Concentration (A260) The concentration of M13mp18 Single-stranded DNA is between 250 and 260 μg/ml as determined by UV absorption at 260 nm.  | Pass           |
| Electrophoretic Pattern (Plasmid) The banding pattern of M13mp18 Single-stranded DNA on a 1.2% agarose gel is evaluated against a control lot for sharpness and relative intensity as determined by gel electrophoresis using Ethidium Bromide.   | Pass           |
| A260/A280 Assay The ratio of UV absorption of M13mp18 Single-stranded DNA at 260 and 280 nm is  | Pass           |



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| Assay Name/Specification   | Lot # 10160098 |
|--|----------------|
| between 1.8 and 2.0.   |                |
| Restriction Digest (Single Stranded, Resistant) A 50 µl reaction in CutSmart™ Buffer containing 2.5 µg of M13mp18 Single-stranded DNA and a minimum of 20 units of Xhol incubated for 1 hour at 37°C results in no detectable digestion of the DNA as determined by agarose gel electrophoresis. | Pass           |

This product has been tested and shown to be in compliance with all specifications.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.

Vanessa Mathieu-Sheltry Production Scientist

06 Sep 2022

Erin Varney

Packaging Quality Control Inspector

06 Sep 2022



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