

New England Biolabs Certificate of Analysis

Product Name: M13mp18 Single-stranded DNA
Catalog Number: N4040S
Concentration: 250 µg/ml
Unit Definition: N/A
Packaging Lot Number: 10222375
Expiration Date: 09/2025
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 | | | |
|--|-----------------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| N4040SVIAL | M13mp18 Single-stranded DNA | 10207570 | Pass |

| Assay Name/Specification | Lot # 10222375 |
|---|----------------|
| A260/A280 Assay The ratio of UV absorption of M13mp18 Single-stranded DNA at 260 and 280 nm is between 1.8 and 2.0. | 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 |
| 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 | Pass |

| Assay Name/Specification | Lot # 10222375 |
|---|--------------------|
| <p>degradation as determined by agarose gel electrophoresis.</p> <p>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 XhoI incubated for 1 hour at 37°C results in no detectable digestion of the DNA as determined by agarose gel electrophoresis.</p> | <p>Pass</p> |

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
28 Sep 2023



Michael Tonello
Packaging Quality Control Inspector
08 Jan 2024