

New England Biolabs Certificate of Analysis

Product Name: *M13mp18 Single-stranded DNA*
Catalog #: *N4040S*
Concentration: *250 µg/ml*
Unit Definition: *N/A*
Lot #: *0181711*
Assay Date: *11/2017*
Expiration Date: *11/2019*
Storage Temp: *-20°C*
Storage Conditions: *10 mM Tris-HCl (pH 8.0), 1 mM EDTA*
Specification Version: *PS-N4040S v2.0*
Effective Date: *15 Dec 2016*

| Assay Name/Specification (minimum release criteria) | Lot #0181711 |
|--|--------------|
| 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 degradation as determined by agarose gel electrophoresis. | Pass |
| 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. | Pass |



Authorized by
Derek Robinson
15 Dec 2016



Inspected by
Vanessa Mathieu-Sheltry
15 Nov 2017

