

## 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:** 10249271  
**Expiration Date:** 05/2026  
**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	10241276	Pass

Assay Name/Specification	Lot # 10249271
<b>A260/A280 Assay</b> The ratio of UV absorption of M13mp18 Single-stranded DNA at 260 and 280 nm is between 1.8 and 2.0.	Pass
<b>DNA Concentration (A260)</b> The concentration of M13mp18 Single-stranded DNA is between 250 and 260 µg/ml as determined by UV absorption at 260 nm.	Pass
<b>Electrophoretic Pattern (Plasmid)</b> 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
<b>Mung Bean Nuclease Digest (Sensitive)</b> 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
<b>Non-Specific DNase Activity (DNA, 16 hour)</b> 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 # 10249271
<p>degradation as determined by agarose gel electrophoresis.</p> <p><b>Restriction Digest (Single Stranded, Resistant)</b> 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><b>Pass</b></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](http://www.neb.com/trademarks) for additional information.



Vanessa Mathieu-Sheltry  
Production Scientist  
30 Apr 2024



Josh Hersey  
Packaging Quality Control Inspector  
25 Jul 2024