

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: 10180329
Expiration Date: 11/2024
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			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N4040SVIAL	M13mp18 Single-stranded DNA	10171910	Pass

Assay Name/Specification	Lot # 10180329
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 # 10180329
<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.

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Production Scientist
18 Nov 2022



Michael Tonello
Packaging Quality Control Inspector
14 Mar 2023