

New England Biolabs Certificate of Analysis

Product Name: Duplex DNase
Catalog Number: M7635L
Concentration: 2,000 U/ml
Unit Definition: One unit is the amount of enzyme required to release 50 pmol of FAM from a 35 bp FAM-BHQ1 labeled hairpin dsDNA oligo in 1 minute at 30°C in a 50 µL reaction in 1X NEBuffer r1.1.
Packaging Lot Number: 10226321
Expiration Date: 01/2026
Storage Temperature: -20°C
Storage Conditions: 10 mM Tris-HCl, 50 mM KCl, 50% Glycerol (pH 7.4 @ 25°C)
Specification Version: PS-M7635S/L v1.0

Duplex DNase Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M7635LVIAL	Duplex DNase	10226518	Pass
B6001SVIAL	NEBuffer™ r1.1	10215157	Pass

Assay Name/Specification	Lot # 10226321
Protease Activity (SDS-PAGE) A 20 µl reaction in 1X rCutSmart™ Buffer containing 24 µg of a standard mixture of proteins and a minimum of 2 units of Duplex DNase incubated for 18 hours at 37°C, results in no detectable degradation of the protein mixture as determined by SDS-PAGE with Coomassie Blue detection.	Pass
Protein Purity Assay (SDS-PAGE) Duplex DNase is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass
RNase Activity (Extended Digestion) A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 2 units of Duplex DNase is incubated at 37°C. After incubation for 4 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	Pass
qPCR DNA Contamination (Eukaryotic Genomic) A minimum of 2 units of Duplex DNase is screened for the presence of eukaryotic	Pass

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genomic DNA using SYBR® Green qPCR with universal primers for the 18S rRNA locus. Results are quantified using a standard curve generated from purified eukaryotic genomic DNA. The measured level of eukaryotic genomic DNA contamination is ≤ 2.5 pg DNA/ μ l.	

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

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Heidi Church
Production Scientist
30 Jan 2024



Josh Hersey
Packaging Quality Control Inspector
31 Jan 2024