

New England Biolabs Certificate of Analysis

Product Name: DNase I (RNase-free)
Catalog #: M0303S/L
Concentration: 2,000 units/ml
Unit Definition: One unit is defined as the amount of enzyme which will completely degrade 1 µg of pBR322 DNA in 10 minutes at 37°C in DNase I Reaction Buffer. Complete degradation is defined as the reduction of the majority of DNA fragments to tetranucleotides or smaller.
Lot #: 0111408
Assay Date: 08/2014
Expiration Date: 8/2016
Storage Temp: -20 °C
Storage Conditions: 10 mM Tris-HCl (pH 7.6), 2 mM CaCl₂, 50 % Glycerol
Specification Version: PS-M0303S/L v1.0
Effective Date: 11 Feb 2014

Assay Name/Specification (minimum release criteria)	Lot #0111408
Protein Purity Assay (SDS-PAGE) - DNase I (RNase-free) is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass
RNase Activity (ds RNA) - A 50 µl reaction in DNase I Reaction Buffer containing 10 µg of a dsRNA Ladder and a minimum of 100 units of DNase I (RNase-free) is incubated at 37°C. After incubation for 4 hours, >90% of the substrate RNA remains intact as determined by fluorescent 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 DNase I (RNase-free) is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	Pass

M. W. Southworth

John Greci

Authorized by
Maurice Southworth
11 Feb 2014

Inspected by
John Greci
25 Aug 2014

