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New England Biolabs Certificate of Analysis

Product Name: DNase I (RNase-free)

M0303S/L Catalog #: 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 #: 0141504 04/2015 Assay Date: 4/2017 Expiration Date: -20°C Storage Temp:

Storage Conditions: 10 mM Tris-HCl (pH 7.6), 2 mM CaCl2, 50 % Glycerol

Specification Version: PS-M0303S/L v1.0 27 Mar 2014 Effective Date:

Assay Name/Specification (minimum release criteria)	Lot #0141504
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 μ l 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

Authorized by Derek Robinson

27 Mar 2014 ISO 9001





John Greci 28 Apr 2015