

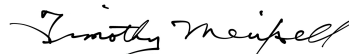
New England Biolabs Certificate of Analysis

Product Name: ShortCut[®] RNase III
Catalog #: M0245S/L
Concentration: 2,000 units/ml
Unit Definition: One unit is the amount of enzyme required to digest 1 µg of dsRNA to siRNA in 20 minutes at 37°C in a total reaction volume of 50 µl.
Lot #: 0051803
Assay Date: 03/2018
Expiration Date: 03/2020
Storage Temp: -20°C
Storage Conditions: 10 mM Tris-HCl, 500 mM NaCl, 1 mM DTT, 0.5 mM EDTA, 50% Glycerol, (pH 8.0 @ 25°C)
Specification Version: PS-M0245S/L v1.0
Effective Date: 01 May 2018

Assay Name/Specification (minimum release criteria)	Lot #0051803
Exonuclease Activity (Radioactivity Release) - A 50 µl reaction in ShortCut [®] Reaction Buffer containing 1 µg of a mixture of single and double-stranded [³ H] <i>E. coli</i> DNA and a minimum of 10 units of ShortCut [®] RNase III incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Non-Specific DNase Activity (16 Hour) - A 50 µl reaction in ShortCut [®] Reaction Buffer containing 1 µg of Lambda-HindIII DNA and a minimum of 6 units of ShortCut [®] RNase III incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Protein Purity Assay (SDS-PAGE) - ShortCut [®] RNase III is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass
RNase Activity (Extended Digestion) - A 10 µl reaction in ShortCut [®] Reaction Buffer containing 40 ng of a 300 base single-stranded RNA and a minimum of 2 units of ShortCut [®] RNase III is incubated at 37°C. After incubation for 1 hour, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	Pass



Authorized by
Derek Robinson
01 May 2018



Inspected by
Timothy Meixsell
01 Mar 2018

