

New England Biolabs Certificate of Analysis

Product Name: RNase HII
Catalog Number: M0288S
Concentration: 5,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to yield a fluorescence signal consistent with the nicking of 100 pmol of synthetic double-stranded DNA substrate containing a single ribonucleotide near the quencher of a fluorophore/quencher pair in 30 minutes at 37°C in 1X ThermoPol® Reaction Buffer.
Lot Number: 10052483
Expiration Date: 12/2020
Storage Temperature: -20°C
Storage Conditions: 20 mM Tris-HCl, 100 mM NaCl, 1 mM DTT, 1 mM EDTA, 50 % Glycerol, (pH 8.0 @ 25°C)
Specification Version: PS-M0288S/L v1.0

RNase HII Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0288SVIAL	RNase HII	10028948	Pass
B9004SVIAL	ThermoPol® Reaction Buffer Pack	10041932	Pass

Assay Name/Specification	Lot # 10052483
Endonuclease Activity (Nicking) A 50 µl reaction in NEBuffer 4 containing 1 µg of supercoiled pBR322 DNA and a minimum of 5 units of RNase HII incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 4 containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 50 units of RNase HII incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
RNase Activity (Extended Digestion) A 10 µl reaction in NEBuffer 4 containing 3.3 pmol of a synthetic RNA oligo (26-mer) and a minimum of 50 units of RNase HII is incubated at 37°C. After incubation for 2 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	Pass

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

Timothy Meixsell

Tim Meixsell
Production Scientist
10 Dec 2018

Michael Tonello

Michael Tonello
Packaging Quality Control Inspector
16 Aug 2019