

New England Biolabs Certificate of Analysis

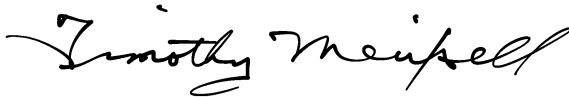
Product Name: *RNase HII*
Catalog Number: *M0288S*
Concentration: *5,000 U/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to yield a fluorescence signal consistent with the nicking of 100 pmol of synthetic double-stranded DNA substrate containing a single ribonucleotide near the quencher of a fluorophore/quencher pair in 30 minutes at 37°C in 1X ThermoPol® Reaction Buffer.*
Packaging Lot Number: *10106678*
Expiration Date: *04/2023*
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	10106677	Pass
B9004SVIAL	ThermoPol® Reaction Buffer Pack	10102088	Pass

Assay Name/Specification	Lot # 10106678
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
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
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.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.



Timothy Meixsell
Production Scientist
30 Jun 2021



Jason Davis
Packaging Quality Control Inspector
30 Jun 2021