

New England Biolabs Certificate of Analysis

Product Name: ProtoScript[®] II Reverse Transcriptase
Catalog #: M0368S/L/X
Concentration: 200,000 units/ml
Unit Definition: One unit is defined as the amount of enzyme that will incorporate 1 nmol of dTTP into an acid-insoluble form in 10 minutes at 37°C.
Lot #: 0041803
Assay Date: 03/2018
Expiration Date: 03/2020
Storage Temp: -20°C
Storage Conditions: 20 mM Tris-HCl, 100 mM NaCl, 1 mM DTT, 0.1 mM EDTA, 0.01 % IGEPAL[®] CA-630, 50 % Glycerol, (pH 7.5 @ 25°C)
Specification Version: PS-M0368S/L/X v1.0
Effective Date: 22 Sep 2016

Assay Name/Specification (minimum release criteria)	Lot #0041803
Endonuclease Activity (Nicking) - A 50 µl reaction in ProtoScript [®] II Reverse Transcriptase Reaction Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 200 units of ProtoScript [®] II Reverse Transcriptase 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 ProtoScript [®] II Reverse Transcriptase Reaction Buffer containing 1 µg of a mixture of single and double-stranded [³ H] <i>E. coli</i> DNA and a minimum of 200 units of ProtoScript [®] II Reverse Transcriptase 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 NEBuffer 2 containing 1 µg of T3 DNA in addition to a reaction containing Lambda-HindIII DNA and a minimum of 200 units of ProtoScript [®] II Reverse Transcriptase 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) - ProtoScript [®] II Reverse Transcriptase is ≥ 99% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass



