

New England Biolabs Certificate of Analysis

Product Name: OneTaq[®] DNA Polymerase
Catalog #: M0480S/L/X
Concentration: 5,000 units/ml
Unit Definition: One unit is defined as the amount of enzyme that will incorporate 15 nmol of dNTP into acid insoluble material in 30 minutes at 75°C.
Lot #: 0091503
Assay Date: 03/2015
Expiration Date: 03/2017
Storage Temp: -20°C
Storage Conditions: 10 mM Tris-HCl, 100 mM KCl, 1 mM DTT, 0.1 mM EDTA, 0.5 % Tween[®] 20, 0.5 % IGEPAL[®] CA-630, 50 % Glycerol, (pH 7.4 @ 25°C)
Specification Version: PS-M0480S/L/X v1.0
Effective Date: 15 Sep 2015

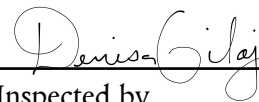
Assay Name/Specification (minimum release criteria)	Lot #0091503
Non-Specific DNase Activity (16 Hour) - A 50 µl reaction in NEBuffer 2 containing 1 µg of T3 DNA in addition to a reaction containing Lambda-HindIII DNA and a minimum of 5 units of OneTaq [®] DNA Polymerase incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
PCR Amplification (5.0 kb Lambda DNA) - A 25 µl reaction in OneTaq [®] Standard Reaction Buffer in the presence of 200 µM dNTPs and 0.2 µM primers containing 5 ng Lambda DNA with 0.625 units of OneTaq [®] DNA Polymerase for 25 cycles of PCR amplification results in the expected 5.0 kb product.	Pass
PCR Amplification (Buffer Dependent, >65% GC-rich) - A 25 µl reaction in OneTaq [®] GC Reaction Buffer in the presence of 200 µM dNTPs and 0.2 µM primers containing 10 ng Human Genomic DNA with 0.625 units of OneTaq [®] DNA Polymerase for 30 cycles of PCR amplification results in the buffer-dependent production of the expected 737 bp product.	Pass
PCR Amplification (Enhancer Dependent, >70% GC-rich) - A 25 µl reaction in OneTaq [®] GC Reaction Buffer and 20% OneTaq [®] High GC Enhancer in the presence of 200 µM dNTPs and 0.2 µM primers containing 10 ng Human Genomic DNA with 0.625 units of OneTaq [®] DNA Polymerase for 30 cycles of PCR amplification results in the enhancer-dependent production of the expected 627 bp product.	Pass
RNase Activity (Extended Digestion) - A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of OneTaq [®] DNA Polymerase 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



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Authorized by
Melanie Fortier
15 Sep 2015



Inspected by
Denisa Gilaj
26 Feb 2015

