

New England Biolabs Certificate of Analysis

Product Name: LongAmp[®] Taq 2X Master Mix
Catalog #: M0287S/L
Concentration: 2X Concentrate
Lot #: 0301702
Assay Date: 02/2017
Expiration Date: 8/2018
Storage Temp: -20°C
Composition (1X): 60 mM Tris-SO₄ (pH 9.1 @ 25°C), 20 mM (NH₄)₂SO₄, 2 mM MgSO₄, 0.3 mM dATP, 0.3 mM dCTP, 0.3 mM dGTP, 0.3 mM dTTP, 3 % Glycerol, 0.06 % IGEPAL[®] CA-630, 0.05 % Tween[®] 20, 125 units/ml LongAmp[®] Taq DNA Polymerase
Specification Version: PS-M0287S/L v1.0
Effective Date: 10 Feb 2017

Assay Name/Specification (minimum release criteria)	Lot #0301702
Non-Specific DNase Activity (16 hour, Buffer) - A 50 µl reaction in 1X LongAmp [®] Taq Master Mix containing 1 µg of T3 DNA in addition to a reaction containing Lambda-HindIII DNA 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 (30 kb Human Genomic DNA, Master Mix) - A 25 µl reaction in 1X LongAmp [®] Taq Master Mix and 0.4 µM primers containing 500 ng Human Genomic DNA for 28 cycles of PCR amplification results in the expected 30 kb product.	Pass
PCR Amplification (30 kb Lambda DNA, Master Mix) - A 25 µl reaction in 1X LongAmp [®] Taq Master Mix and 0.4 µM primers containing 1 ng Lambda DNA for 28 cycles of PCR amplification results in the expected 30 kb product.	Pass
qPCR DNA Contamination (E. coli Genomic) - A minimum of 2.5 units of LongAmp [®] Taq DNA Polymerase is screened for the presence of E. coli genomic DNA using SYBR [®] Green qPCR with primers specific for the E. coli 16S rRNA locus. Results are quantified using a standard curve generated from purified E. coli genomic DNA. The measured level of E. coli genomic DNA contamination is ≤ 1 E. coli genome.	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 LongAmp [®] Taq 2X Master Mix is incubated at 37°C. After incubation for 4 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	Pass



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Authorized by
Karen Moreira
10 Feb 2017



Inspected by
Tony Spear-Alfonso
23 Feb 2017

