

New England Biolabs Certificate of Analysis

Product Name: Phusion[®] High-Fidelity DNA Polymerase
Catalog #: M0530S/L
Concentration: 2,000 units/ml
Unit Definition: One unit is defined as the amount of enzyme that will incorporate 10 nmol of dNTP into acid insoluble material in 30 minutes at 74°C.
Lot #: 0051704
Assay Date: 04/2017
Expiration Date: 4/2019
Storage Temp: -20°C
Storage Conditions: 20 mM Tris-HCl, 100 mM KCl, 1 mM DTT, 0.1 mM EDTA, 200 µg/ml BSA, 1X Stabilizers, 50 % Glycerol, (pH 7.4 @ 25°C)
Specification Version: PS-M0530S/L v1.0
Effective Date: 16 Oct 2015

Assay Name/Specification (minimum release criteria)	Lot #0051704
<p>Endonuclease Activity (Nicking, Polymerase, dNTP) - A 50 µl reaction in NEBuffer 2 in the presence of 200 µM dNTPs containing 1 µg of supercoiled PhiX174 DNA and a minimum of 10 units of Phusion[®] High-Fidelity DNA Polymerase incubated for 4 hours at either 37°C or 72°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	Pass
<p>PCR Amplification (20 kb Lambda DNA) - A 50 µl reaction in Phusion[®] HF Buffer in the presence of 200 µM dNTPs and 1.0 µM primers containing 10 ng Lambda DNA with 1 unit of Phusion[®] High-Fidelity DNA Polymerase for 22 cycles of PCR amplification results in the expected 20 kb product.</p>	Pass
<p>PCR Amplification (7.5 kb Human Genomic DNA) - A 50 µl reaction in Phusion[®] HF Buffer in the presence of 200 µM dNTPs and 1.0 µM primers containing 50 ng Human Genomic DNA with 1 unit of Phusion[®] High-Fidelity DNA Polymerase for 30 cycles of PCR amplification results in the expected 7.5 kb product.</p>	Pass

* The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.



Authorized by
Melanie Fortier
16 Oct 2015



Inspected by
Tony Spear-Alfonso
28 Apr 2017

