


New England Biolabs Certificate of Analysis

Product Name: Phusion[®] High-Fidelity DNA Polymerase
Catalog Number: M0530S
Concentration: 2,000 U/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 Number: 10019998
Expiration Date: 03/2020
Storage Temperature: -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

Phusion [®] High-Fidelity DNA Polymerase Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0530SVIAL	Phusion [®] High-Fidelity DNA Polymerase	0051803	Pass
B0519SVIAL	Phusion [®] GC Buffer Pack	0051804	Pass
B0518SVIAL	Phusion [®] HF Buffer Pack	0071804	Pass
B0515AVIAL	DMSO	0051711	Pass
B0510AVIAL	MgCl ₂ Solution (50 mM)	10009811	Pass

Assay Name/Specification	Lot # 10019998
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.	Pass
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.	Pass
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.	Pass

This product has been tested and shown to be in compliance with all specifications.



Lynne Apone
Production Scientist
10 Oct 2018



Josh Hersey
Packaging Quality Control Inspector
10 Oct 2018