

New England Biolabs Certificate of Analysis

Product Name: *Thermolabile Proteinase K*
Catalog Number: *P8111S*
Unit Definition: *One unit is defined as the amount of enzyme required to release 1.0 μmol of 4-nitroaniline per minute from N-Succinyl-Ala-Ala-Pro-Phe-p-nitroanilide at 25°C in a total reaction volume of 105 μl.*
Packaging Lot Number: *10058664*
Expiration Date: *10/2021*
Storage Temperature: *-20°C*
Storage Conditions: *20 mM Tris-HCl, 1 mM CaCl₂, 50 % Glycerol, (pH 7.4 @ 25°C)*
Specification Version: *PS-P8111S v1.0*

Thermolabile Proteinase K Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
P8111SVIAL	Thermolabile Proteinase K	10055880	Pass

Assay Name/Specification	Lot # 10058664
<p>qPCR DNA Contamination (Eukaryotic Genomic) A minimum of 0.12 units of Thermolabile Proteinase K is screened for the presence of eukaryotic genomic DNA using SYBR® Green qPCR with universal primers for the 18S rRNA locus. Results are quantified using a standard curve generated from purified E. album genomic DNA. The measured level of eukaryotic genomic DNA contamination is ≤ 2.5 pg DNA/μl.</p>	Pass
<p>qPCR DNA Contamination (E. coli Genomic) A minimum of 0.12 units of Thermolabile Proteinase K 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.</p>	Pass
<p>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 Thermolabile Proteinase K 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.</p>	Pass
<p>Single Stranded DNase Activity (FAM-Labeled Oligo)</p>	Pass

Assay Name/Specification	Lot # 10058664
A 50 µl reaction in CutSmart® Buffer containing a 20 nM solution of a fluorescent internal labeled oligonucleotide and a minimum of 0.6 units of Thermolabile Proteinase K incubated for 16 hours at 37°C yields <5% degradation as determined by capillary electrophoresis.	

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

Beth M. Paschal

Beth Paschal
Production Scientist
11 Oct 2019

Michael Tonello

Michael Tonello
Packaging Quality Control Inspector
15 Nov 2019