

New England Biolabs Certificate of Analysis

Product Name: *Thermolabile Proteinase K*
Catalog Number: *P8111S*
Concentration: *120 U/ml*
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: *10179459*
Expiration Date: *02/2025*
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	10177416	Pass

Assay Name/Specification	Lot # 10179459
<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>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>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

Assay Name/Specification	Lot # 10179459
<p>Single Stranded DNase Activity (FAM-Labeled Oligo) 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.</p>	<p>Pass</p>

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.



Beth Paschal
Production Scientist
27 Jan 2023



Michael Tonello
Packaging Quality Control Inspector
10 Feb 2023