240 County Road
Ipswich, MA 01938-2723
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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:	*10256767*
Expiration Date:	*08/2026*
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	10251538	**Pass**

Assay Name/Specification	**Lot # 10256767**
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.	**Pass**
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.	**Pass**
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.	**Pass**

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Assay Name/Specification	Lot # 10256767
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.	**Pass**

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
21 Aug 2024

Michael Tonello
Packaging Quality Control Inspector
28 Aug 2024