

New England Biolabs Certificate of Analysis

Product Name: Nt.CviPII
Catalog Number: R0626S
Concentration: 2,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pUC19 DNA in CutSmart™ Buffer incubated for 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10061775
Expiration Date: 12/2020
Storage Temperature: -20°C
Storage Conditions: 100 mM NaCl, 20 mM Tris-HCl (pH 8.0), 50% Glycerol
Specification Version: PS-R0626S/L v2.0

Nt.CviPII Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0626SVIAL	Nt.CviPII	10061523	Pass
B7204SVIAL	CutSmart® Buffer	10055736	Pass

Assay Name/Specification	Lot # 10061775
DNase Activity (Labeled Oligo, 3' extension) A 50 µl reaction in CutSmart® Buffer containing a 20 nM solution of a fluorescent labeled double-stranded oligonucleotide containing a 3' extension and a minimum of 10 units of Nt.CviPII incubated for 16 hours at 37°C yields <5% degradation as determined by capillary electrophoresis.	Pass
DNase Activity (Labeled Oligo, 5' extension) A 50 µl reaction in CutSmart® Buffer containing a 20 nM solution of a fluorescent labeled double-stranded oligonucleotide containing a 5' extension and a minimum of 10 units of Nt.CviPII incubated for 16 hours at 37°C yields <5% degradation as determined by capillary electrophoresis.	Pass
Double Stranded DNase Activity (Labeled Oligo) A 50 µl reaction in CutSmart® Buffer containing a 20 nM solution of a fluorescent labeled double-stranded oligonucleotide containing a blunt end and a minimum of 10 units of Nt.CviPII incubated for 16 hours at 37°C yields <5% degradation as determined by capillary electrophoresis.	Pass
qPCR DNA Contamination (E. coli Genomic)	Pass

Assay Name/Specification	Lot # 10061775
<p>A minimum of 2 units of Nt.CviPII 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> <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 10 units of Nt.CviPII 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.



Jianying Luo
Production Scientist
19 Dec 2019



Jay Minichiello
Packaging Quality Control Inspector
20 Dec 2019