

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.
Lot Number: 10048532
Expiration Date: 07/2020
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	10048533	Pass
B7204SVIAL	CutSmart® Buffer	10043914	Pass

Assay Name/Specification	Lot # 10048532
<p>qPCR DNA Contamination (E. coli Genomic) 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>	Pass
<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>	Pass
<p>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.</p>	Pass

Assay Name/Specification	Lot # 10048532
<p>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.</p>	Pass
<p>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.</p>	Pass

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



Ben Penta
Production Scientist
20 Jun 2019



Josh Hersey
Packaging Quality Control Inspector
22 Jul 2019