

## 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:** 10065653  
**Expiration Date:** 02/2021  
**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	10065652	Pass
B7204SVIAL	CutSmart® Buffer	10071078	Pass

Assay Name/Specification	Lot # 10065653
<p><b>Single Stranded DNase Activity (FAM-Labeled Oligo)</b>            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 &lt;5% degradation as determined by capillary electrophoresis.</p>	Pass
<p><b>qPCR DNA Contamination (E. coli Genomic)</b>            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><b>Double Stranded DNase Activity (Labeled Oligo)</b>            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 &lt;5% degradation as determined by capillary electrophoresis.</p>	Pass

Assay Name/Specification	Lot # 10065653
<p><b>DNase Activity (Labeled Oligo, 5' extension)</b> 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 &lt;5% degradation as determined by capillary electrophoresis.</p>	<b>Pass</b>
<p><b>DNase Activity (Labeled Oligo, 3' extension)</b> 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 &lt;5% degradation as determined by capillary electrophoresis.</p>	<b>Pass</b>

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



JianYing Luo  
Production Scientist  
01 May 2020



Jay Minichiello  
Packaging Quality Control Inspector  
01 May 2020