

New England Biolabs Certificate of Analysis

Product Name: PvuI-HF[®]
Catalog Number: R3150L
Concentration: 20,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pXba DNA in 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10071128
Expiration Date: 04/2022
Storage Temperature: -20°C
Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 500 µg/ml BSA
Specification Version: PS-R3150S/L v1.0

PvuI-HF [®] Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R3150LVIAL	PvuI-HF [®]	10071127	Pass
B7204SVIAL	CutSmart [®] Buffer	10071078	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10065747	Pass

Assay Name/Specification	Lot # 10071128
<p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart[™] Buffer containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 200 units of PvuI-HF[™] incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p>	Pass
<p>Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of pXba DNA with PvuI-HF[™], >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with PvuI-HF[™].</p>	Pass
<p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart[™] Buffer containing 1 µg of pXba DNA and a minimum of 200 Units of PvuI-HF[™] incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p>	Pass
<p>Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart[™] Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 200 Units of PvuI-HF[™] incubated for 4 hours at 37°C results in <10%</p>	Pass

Assay Name/Specification	Lot # 10071128
conversion to the nicked form as determined by agarose gel electrophoresis.	

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



Penghua Zhang
Production Scientist
27 Apr 2020



Jay Minichiello
Packaging Quality Control Inspector
27 Apr 2020