

be INSPIRED *drive* DISCOVERY *stay* GENUINE

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

New England Biolabs Certificate of Analysis

Product Name:	Pvul-HF®
Catalog Number:	R3150L
Concentration:	20,000 U/ml
Unit Definition:	One unit is defined as the amount of enzyme required to digest 1 μ g of pXba DNA in 1 hour at 37°C in a total reaction volume of 50 μ l.
Packaging Lot Number:	10098309
Expiration Date:	11/2022
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

Pvul-HF® Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R3150LVIAL	Pvul-HF®	10089116	Pass	
B7204SVIAL	CutSmart® Buffer	10093122	Pass	
B7024AVIAL	Gel Loading Dye, Purple (6X)	10091034	Pass	

Assay Name/Specification	Lot # 10098309
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% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart [™] Buffer containing 1 µg of a mixture of single and double-stranded [³ H] 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.	Pass
Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of pXba DNA with Pvul-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 Pvul-HF [™] .	Pass
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 Pvul-HF™ incubated for 16 hours at 37⁰C results in a DNA pattern free	Pass





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Assay Name/Specification	Lot # 10098309
of detectable nuclease degradation as determined by agarose gel electrophoresis.	

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.

Penghua Zhang Production Scientist 22 Feb 2021

Michae 1. .

Michael Tonello Packaging Quality Control Inspector 22 Feb 2021

