

*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:	R3150S
Concentration:	20,000 U/ml
Unit Definition:	One unit is defined as the amount of enzyme required to digest 1 $\mu$ g of pXba DNA in 1 hour at 37°C in a total reaction volume of 50 $\mu$ l.
Lot Number:	10026313
Expiration Date:	10/2020
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	
R3150SVIAL	Pvul-HF®	10026314	Pass	
B7204SVIAL	CutSmart® Buffer	10021126	Pass	
B7024SVIAL	Gel Loading Dye, Purple (6X)	10021131	Pass	

Assay Name/Specification	Lot # 10026313
Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart <sup>™</sup> Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 200 Units of Pvul-HF <sup>™</sup> 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 <sup>™</sup> Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] E. coli DNA and a minimum of 200 units of PvuI-HF <sup>™</sup> 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 <sup>™</sup> , >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 <sup>™</sup> .	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart <sup>™</sup> Buffer containing 1 µg of pXba DNA and a minimum of 200 Units of Pvul-HF <sup>™</sup> incubated for 16 hours at 37ºC results in a DNA pattern free	Pass





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Assay Name/Specification	Lot # 10026313
of detectable nuclease degradation as determined by agarose gel electrophoresis.	

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

Jianying Luo Production Scientist 24 Oct 2018

Michae m. 1

Michael Tonello Packaging Quality Control Inspector 11 Dec 2018

