

New England Biolabs Certificate of Analysis

Product Name: NotI-HF[®]
Catalog Number: R3189S
Concentration: 20,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pBC4 DNA in 1 hour at 37°C in a total reaction volume of 50 µl.
Lot Number: 10023162
Expiration Date: 09/2020
Storage Temperature: -20°C
Storage Conditions: 50 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA
Specification Version: PS-R3189S/L v1.0

NotI-HF [®] Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R3189SVIAL	NotI-HF [®]	10020162	Pass
B7204SVIAL	CutSmart [®] Buffer	10018445	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10018415	Pass

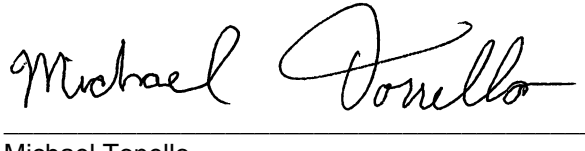
Assay Name/Specification	Lot # 10023162
<p>Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of pBC4 DNA with NotI-HF[™], >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with NotI-HF[™].</p>	Pass
<p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart[™] Buffer containing 1 µg of pBC4 DNA and a minimum of 200 Units of NotI-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 100 Units of NotI-HF[™] incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	Pass
<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 NotI-HF[™] incubated</p>	Pass

Assay Name/Specification	Lot # 10023162
for 4 hours at 37°C releases <0.1% of the total radioactivity.	

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



Tony Spear-Alfonso
Production Scientist
05 Sep 2018



Michael Tonello
Packaging Quality Control Inspector
02 Oct 2018