

New England Biolabs Certificate of Analysis

Product Name: NheI-HF[®] RE-Mix[®]
Catalog #: R5131S
Concentration: 10X Concentrate
Unit Definition: One reaction is defined as the amount of enzyme required to digest 1 µg of DNA in 15 minutes at 37°C in a total reaction volume of 20 µl.
Lot #: 0021605
Assay Date: 05/2016
Expiration Date: 05/2017
Storage Temp: -20°C
Storage Conditions: Proprietary
Specification Version: PS-R5131S v1.0
Effective Date: 23 Dec 2015

Assay Name/Specification (minimum release criteria)	Lot #0021605
Endonuclease Activity (Nicking, RE-Mix) - A 20 µl reaction containing 1X NheI-HF [®] RE-Mix [®] with 1 µg of supercoiled ΦX174 DNA 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, RE-Mix) - A 20 µl reaction containing 1X NheI-HF [®] RE-Mix [®] with 1 µg of a mixture of single and double-stranded [³ H] <i>E. coli</i> DNA incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity, RE-Mix) - After over-digestion with 1X NheI-HF [®] RE-Mix [®] containing Lambda DNA, >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 NheI-HF [®] RE-Mix [®] .	Pass
Non-Specific DNase Activity (16 hour, RE-Mix) - A 20 µl reaction containing 1X NheI-HF [®] RE-Mix [®] with 1 µg of Lambda DNA incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

* The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.



Authorized by
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23 Dec 2015



Inspected by
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10 May 2016

