

New England Biolabs Certificate of Analysis

Product Name: NmeAIII
Catalog Number: R0711S
Concentration: 2,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of PhiX174 RF I DNA in 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10095460
Expiration Date: 01/2023
Storage Temperature: -20°C
Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl, 1 mM DTT, 0.1 mM EDTA, 0.32 mM S-adenosylmethionine (SAM), 50% Glycerol, 500 µg/ml BSA (pH 7.4 @ 25°C)
Specification Version: PS-R0711S v3.0

NmeAIII Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0711SVIAL	NmeAIII	10095459	Pass
B7204SVIAL	CutSmart® Buffer	10093122	Pass

Assay Name/Specification	Lot # 10095460
Ligation and Recutting (Terminal Integrity) After a 5-fold over-digestion of PhiX174 RF I DNA with NmeAIII, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, <5% can be recut with NmeAIII.	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 10 units of NmeAIII incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass

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

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Production Scientist
12 Feb 2021



Josh Hersey
Packaging Quality Control Inspector
12 Feb 2021