

## 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.  
**Lot Number:** 10053313  
**Expiration Date:** 08/2021  
**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-R0711S/L v2.0

NmeAIII Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0711SVIAL	NmeAIII	10053314	Pass
B9003SVIAL	S-adenosylmethionine (SAM)	10049759	Pass
B7204SVIAL	CutSmart® Buffer	10046087	Pass

Assay Name/Specification	Lot # 10053313
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> 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
<b>Ligation and Recutting (Terminal Integrity)</b> 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

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



Doreen Duquette  
Production Scientist  
09 Aug 2019



Jay Minichiello  
Packaging Quality Control Inspector  
22 Aug 2019