

## New England Biolabs Certificate of Analysis

**Product Name:** *AhdI*  
**Catalog Number:** *R0584L*  
**Concentration:** *10,000 U/ml*  
**Unit Definition:** *One unit is defined as the amount of enzyme required to digest 1 µg Lambda DNA in 1 hour at 37°C in a total reaction volume of 50 µl.*  
**Packaging Lot Number:** *10076246*  
**Expiration Date:** *06/2022*  
**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-R0584S/L v2.0*

AhdI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0584LVIAL	AhdI	10076247	Pass
B7204SVIAL	CutSmart® Buffer	10075569	Pass

Assay Name/Specification	Lot # 10076246
<b>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in CutSmart® Buffer containing 1 µg of Lambda DNA and a minimum of 10 units of AhdI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
<b>Ligation and Recutting (Terminal Integrity)</b> After a 10-fold over-digestion of Lambda DNA with AhdI, 95% can be recut with AhdI.	Pass
<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 30 units of AhdI 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.



Penghua Zhang  
Production Scientist  
07 Jul 2020



Michael Tonello  
Packaging Quality Control Inspector  
07 Jul 2020