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New England Biolabs Certificate of Analysis

Product Name: AsiSI
Catalog Number: R0630L
Concentration: 10,000 U/ml

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg

of Xhol digested pXba in 1 hour at 37°C in a total reaction volume

of 50 μl.

Packaging Lot Number: 10192026 Expiration Date: 12/2024 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-R0630S/L v1.0

AsiSI Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0630LVIAL	AsiSI	10192025	Pass	
B7024AVIAL	Gel Loading Dye, Purple (6X)	10189226	Pass	
B6004SVIAL	rCutSmart™ Buffer	10189224	Pass	

Assay Name/Specification	Lot # 10192026
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 10 units of AsiSI incubated for 4 hours at 37°C releases <0.2% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 2-fold over-digestion of pXbal (Xho digested) DNA with AsiSI, ~75% 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 AsiSI.	Pass
Non-Specific DNase Activity (16 hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pXbal (Xho digested) DNA and a minimum of 10 Units of AsiSI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. NOTE: although no nuclease degradation is detected under these conditions, extended incubations and/or high concentrations of this enzyme may result in star activity. See the product FAQ for recommended reaction conditions for	Pass



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Assay Name/Specification	Lot # 10192026
this enzyme.	

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.

YunJie Sun

Production Scientist

02 Jun 2023

Michael Tonello

Packaging Quality Control Inspector

05 Jul 2023



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