

*be* INSPIRED *drive* DISCOVERY *stay* GENUINE

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## New England Biolabs Certificate of Analysis

Product Name:	AsiSI
Catalog Number:	R0630S
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:	10210751
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	
R0630SVIAL	AsiSI	10192023	Pass	
B7024AVIAL	Gel Loading Dye, Purple (6X)	10202499	Pass	
B6004SVIAL	rCutSmart™ Buffer	10202504	Pass	

Assay Name/Specification	Lot # 10210751
Exonuclease Activity (Radioactivity Release)	Pass
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 AsiSI incubated for 4	
hours at 37°C releases <0.2% of the total radioactivity.	
Ligation and Recutting (Terminal Integrity)	Pass
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.	
Non-Specific DNase Activity (16 hour)	Pass
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	





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Assay Name/Specification	Lot # 10210751
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

Josh Hersey

Packaging Quality Control Inspector 09 Oct 2023

