

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 XhoI digested pXba in 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10181638
Expiration Date: 05/2024
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

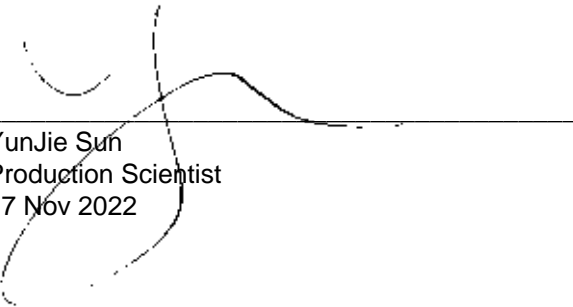
| AsiSI Component List | | | |
|----------------------|------------------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R0630SVIAL | AsiSI | 10171186 | Pass |
| B7024AVIAL | Gel Loading Dye, Purple (6X) | 10175294 | Pass |
| B6004SVIAL | rCutSmart™ Buffer | 10179339 | Pass |

| Assay Name/Specification | Lot # 10181638 |
|---|----------------|
| <p>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.</p> | Pass |
| <p>Ligation and Recutting (Terminal Integrity) After a 2-fold over-digestion of pXbaI (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.</p> | Pass |
| <p>Non-Specific DNase Activity (16 hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pXbaI (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</p> | Pass |

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|--------------------------|----------------|
| this enzyme. | |

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

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YunJie Sun
Production Scientist
17 Nov 2022



Michael Tonello
Packaging Quality Control Inspector
16 Mar 2023