

New England Biolabs Product Specification

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| Product Name: | SspI |
| Catalog #: | R0132M |
| Concentration: | 25,000 units/ml |
| Unit Definition: | One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 37°C in a total reaction volume of 50 µl. |
| Shelf Life: | 24 months |
| Storage Temp: | -20 °C |
| Storage Conditions: | 250 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 0.15% Triton X-100, 200 µg/ml BSA |
| Specification Version: | PS-R0132M v1.0 |
| Effective Date: | 19 Jul 2013 |

Assay Name/Specification (minimum release criteria)

Exonuclease Activity (Radioactivity Release) - A 50 µl reaction in NEBuffer SspI containing 1 µg of a mixture of single and double-stranded [³H] *E. coli* DNA and a minimum of 100 units of SspI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.

Ligation and Recutting (Terminal Integrity) - After a 10-fold over-digestion of Lambda DNA with SspI, >95% 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 SspI.

Non-Specific DNase Activity (16 Hour) - A 50 µl reaction in NEBuffer SspI containing 1 µg of Lambda DNA and a minimum of 15 Units of SspI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.

Protein Purity Assay (SDS-PAGE) - SspI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.

* The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.



Date 19 Jul 2013

Derek Robinson
Director of Quality Control

