

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:          | SalI  |
|------------------------|---|
| Catalog #:             | R0138S/L  |
| Concentration:         | 20,000 units/ml   |
| Unit Definition:       | One unit is defined as the amount of enzyme required to digest 1 $\mu$ g of Lambda DNA (HindIII digest) in 1 hour at 37°C in a total reaction volume of 50 $\mu$ l. |
| <i>Lot</i> #:          | 0551711   |
| Assay Date:            | 11/2017   |
| Expiration Date:       | 11/2019   |
| Storage Temp:          | -20°C   |
| Storage Conditions:    | 50 mM KCl, 10 mM Tris-HCl (pH 7.5), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 300 μg/ml BSA  |
| Specification Version: | PS-R0138S/L v1.0  |
| Effective Date:        | 14 Jan 2015   |

| Assay Name/Specification (minimum release criteria)  | Lot #0551711<br>Pass |
|--|----------------------|
| <b>Blue-White Screening (Terminal Integrity)</b> - A sample of pUC19 vector linearized with a 10-fold excess of SalI, religated and transformed into an <i>E. coli</i> strain expressing the LacZ beta fragment gene results in <1% white colonies.  |                      |
| <b>Exonuclease Activity (Radioactivity Release)</b> - A 50 $\mu$ l reaction in NEBuffer 3.1 containing 1 $\mu$ g of a mixture of single and double-stranded [ <sup>3</sup> H] <i>E. coli</i> DNA and a minimum of 100 units of SalI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity. | Pass                 |
| <b>Ligation and Recutting (Terminal Integrity)</b> - After a 20-fold over-digestion of Adenovirus-2 DNA with Sall, >95% of the DNA fragments can be ligated with T4 DNA ligase in 4 hours at 25°C. Of these ligated fragments, >95% can be recut with Sall.  | Pass                 |
| <b>Non-Specific DNase Activity (16 Hour)</b> - A 50 $\mu$ l reaction in NEBuffer 3.1 containing 1 $\mu$ g of pBR322 DNA and a minimum of 20 units of SalI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.      | Pass                 |

\* 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.

otunen

Authorized by Derek Robinson 14 Jan 2015



Inspected by Jianying Luo 17 Nov 2017