

New England Biolabs Certificate of Analysis

Product Name: *Sall*
Catalog Number: *R0138S*
Concentration: *20,000 U/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA (HindIII digest) in 1 hour at 37°C in a total reaction volume of 50 µl.*
Packaging Lot Number: *10140477*
Expiration Date: *03/2024*
Storage Temperature: *-20°C*
Storage Conditions: *10 mM Tris-HCl, 50 mM KCl, 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 300 µg/ml BSA, (pH 7.5 @ 25°C)*
Specification Version: *PS-R0138S/L/V v2.0*

Sall Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0138SVIAL	Sall	10140475	Pass
B7024AVIAL	Gel Loading Dye, Purple (6X)	10132772	Pass
B6003SVIAL	NEBuffer™ r3.1	10132774	Pass

Assay Name/Specification	Lot # 10140477
Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of pBC4XS 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
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of pBR322 DNA and a minimum of 20 units of Sall incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 100 units of Sall incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Blue-White Screening (Terminal Integrity) A sample of pUC19 vector linearized with a 10-fold excess of Sall, religated and	Pass

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transformed into an E. coli strain expressing the LacZ beta fragment gene results in <1% white colonies.	

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

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Production Scientist
22 Mar 2022



Josh Hersey
Packaging Quality Control Inspector
22 Mar 2022