

## 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.  
**Lot Number:** 10038779  
**Expiration Date:** 03/2021  
**Storage Temperature:** -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

Sall Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0138SVIAL	Sall	10038780	Pass
B7203SVIAL	NEBuffer™ 3.1	10033149	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10021133	Pass

Assay Name/Specification	Lot # 10038779
<b>Blue-White Screening (Terminal Integrity)</b> A sample of pUC19 vector linearized with a 10-fold excess of Sall, religated and transformed into an E. coli strain expressing the LacZ beta fragment gene results in <1% white colonies.	Pass
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> 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
<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 µl reaction in NEBuffer 3.1 containing 1 µg of pBR322 DNA and a minimum of 20	Pass

Assay Name/Specification	Lot # 10038779
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.	

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



Tony Spear-Alfonso  
Production Scientist  
23 Jan 2019



Michael Tonello  
Packaging Quality Control Inspector  
22 Mar 2019