

## New England Biolabs Certificate of Analysis

**Product Name:** Sall  
**Catalog Number:** R0138L  
**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:** 10009662  
**Expiration Date:** 05/2020  
**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
R0138LVIAL	Sall	10009669	Pass
B7203SVIAL	NEBuffer™ 3.1	10010189	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	0261805	Pass


Assay Name/Specification	Lot # 10009662
<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 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
<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>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>Blue-White Screening (Terminal Integrity)</b> 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.



Jianying Luo  
Production Scientist  
31 May 2018



Michael Tonello  
Packaging Quality Control Inspector  
25 Jul 2018