

## 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:** *10248417*  
**Expiration Date:** *06/2026*  
**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*

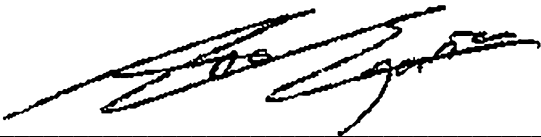
Sall Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0138SVIAL	Sall	10241814	Pass
B7024AVIAL	Gel Loading Dye, Purple (6X)	10236423	Pass
B6003SVIAL	NEBuffer™ r3.1	10237087	Pass

Assay Name/Specification	Lot # 10248417
<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.	<b>Pass</b>
<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.	<b>Pass</b>
<b>Ligation and Recutting (Terminal Integrity)</b> 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.	<b>Pass</b>
<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	<b>Pass</b>

Assay Name/Specification	Lot # 10248417
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.

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18 Jun 2024



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