

New England Biolabs Certificate of Analysis

Product Name: *Swal*
Catalog Number: *R0604L*
Concentration: *10,000 U/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to digest 1 µg of pUPS DNA in 1 hour at 25°C in a total reaction volume of 50 µl.*
Packaging Lot Number: *10115119*
Expiration Date: *07/2023*
Storage Temperature: *-20°C*
Storage Conditions: *400 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA*
Specification Version: *PS-R0604S/L v1.0*

Swal Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0604LVIAL	Swal	10115117	Pass
B6003SVIAL	NEBuffer™ r3.1	10110766	Pass

Assay Name/Specification	Lot # 10115119
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 Swal incubated for 4 hours at 25°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of pUPS DNA with Swal, ~75% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, ~75% can be recut with Swal.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of pUPS DNA and a minimum of 100 Units of Swal incubated for 16 hours at 25°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

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

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19 Jul 2021



Michael Tonello
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19 Jul 2021