

## New England Biolabs Certificate of Analysis

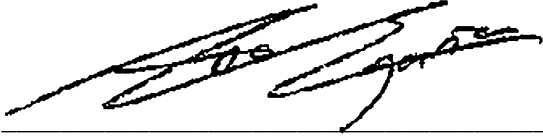
**Product Name:** *Nt.AlwI*  
**Catalog Number:** *R0627S*  
**Concentration:** *10,000 U/ml*  
**Unit Definition:** *One unit is defined as the amount of enzyme required to convert 1 µg of supercoiled pUC101 DNA (dam-/dcm-) to open circular form in 1 hour at 37°C in a total reaction volume of 50 µl.*  
**Packaging Lot Number:** *10233288*  
**Expiration Date:** *02/2026*  
**Storage Temperature:** *-20°C*  
**Storage Conditions:** *50 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA*  
**Specification Version:** *PS-R0627S/L v2.0*

Nt.AlwI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0627SVIAL	Nt.AlwI	10226124	Pass
B6004SVIAL	rCutSmart™ Buffer	10225675	Pass

Assay Name/Specification	Lot # 10233288
<p><b>Exonuclease Activity (Radioactivity Release)</b>            A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [<sup>3</sup>H] E. coli DNA and a minimum of 50 units of Nt.AlwI incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</p>	<b>Pass</b>
<p><b>Non-Specific DNase Activity (16 hour)</b>            A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pUC101dam-dcm- DNA and a minimum of 10 units of Nt.AlwI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. NOTE: although no nuclease degradation is detected under these conditions, extended incubations and/or high concentrations of this enzyme may result in star activity. See the product FAQ for recommended reaction conditions for this enzyme.</p>	<b>Pass</b>

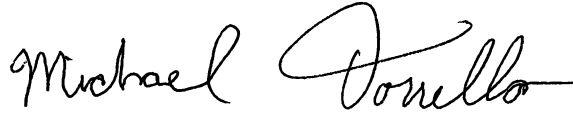
This product has been tested and shown to be in compliance with all specifications.

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21 Feb 2024



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Michael Tonello  
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21 Feb 2024