

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: 10070510
Expiration Date: 03/2022
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	10070509	Pass
B7204SVIAL	CutSmart® Buffer	10071080	Pass

Assay Name/Specification	Lot # 10070510
<p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 50 units of Nt.AlwI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p>	Pass
<p>Non-Specific DNase Activity (16 hour) 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>	Pass

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



Penghua Zhang
Production Scientist
13 May 2020



Jay Minichiello
Packaging Quality Control Inspector
13 May 2020