

New England Biolabs Certificate of Analysis

Product Name: *Nt.AlwI*
Catalog #: R0627S/L
Concentration: 10,000 units/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.
Lot #: 0011502
Assay Date: 02/2015
Expiration Date: 2/2017
Storage Temp: -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 v1.0
Effective Date: 07 Mar 2014

Assay Name/Specification (minimum release criteria)	Lot #0011502
<p>Exonuclease Activity (Radioactivity Release) - A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³H] <i>E. coli</i> 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 pUC101<i>dam-dcm</i>- 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

* The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.



Authorized by
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07 Mar 2014



Inspected by
Emma Jean Hess
13 Feb 2015

