240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## 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 #:
 0011605

 Assay Date:
 05/2016

 Expiration Date:
 05/2018

 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 v2.0 Effective Date: 07 Mar 2014

Assay Name/Specification (minimum release criteria)	Lot #0011605
<b>Exonuclease Activity (Radioactivity Release)</b> - A 50 μl reaction in CutSmart <sup>TM</sup> Buffer containing 1 μg of a mixture of single and double-stranded [ <sup>3</sup> H] <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.	Pass
Non-Specific DNase Activity (16 hour) - A 50 μl reaction in CutSmart <sup>TM</sup> 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.	Pass

<sup>\*</sup> 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 Derek Robinson 07 Mar 2014







Inspected by Anthony Francis 11 May 2016