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: MspJI
Catalog #: R0661S/L
Concentration: 5,000 units/ml

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pBR322 (dcm+) DNA in 1 hour at 37°C in a total

reaction volume of 50 µl.

 Lot #:
 0091612

 Assay Date:
 12/2016

 Expiration Date:
 12/2018

 Storage Temp:
 -20°C

Storage Conditions: 300 mM NaCl , 10 mM Tris-HCl , 1 mM DTT , 0.1 mM EDTA , 50 % Glycerol , 500  $\mu$ g/ml BSA, (pH 7.4 @ 25°C)

Specification Version: PS-R0661S/L v2.0
Effective Date: 27 Oct 2016

Assay Name/Specification (minimum release criteria)	Lot #0091612
<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] <i>E. coli</i> DNA and a minimum of 15 units of MspJI 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® Buffer containing 1 µg of pBR322 DNA and a minimum of 5 units of MspJI 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
<b>Protein Purity Assay (SDS-PAGE)</b> - MspJI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	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 27 Oct 2016







Inspected by
Mala Samaranayake
28 Dec 2016