

## New England Biolabs Certificate of Analysis

**Product Name:** MspJI  
**Catalog Number:** R0661L  
**Concentration:** 5,000 U/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.  
**Packaging Lot Number:** 10208535  
**Expiration Date:** 09/2025  
**Storage Temperature:** -20°C  
**Storage Conditions:** 300 mM NaCl, 10 mM Tris-HCl, 1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, 500 µg/ml BSA, (pH 7.4 @ 25°C)  
**Specification Version:** PS-R0661S/L v2.0

MspJI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
S0538LVIAL	Enzyme Activator Solution	10208539	Pass
R0661LVIAL	MspJI	10208538	Pass
B6004SVIAL	rCutSmart™ Buffer	10204840	Pass

Assay Name/Specification	Lot # 10208535
<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 15 units of MspJI incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</p>	Pass
<p><b>Non-Specific DNase Activity (16 hour)</b>            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.</p>	Pass
<p><b>Protein Purity Assay (SDS-PAGE)</b>            MspJI is &gt;95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.</p>	Pass

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit [www.neb.com/trademarks](http://www.neb.com/trademarks) for additional information.

  
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26 Sep 2023

  
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01 Nov 2023