

## New England Biolabs Certificate of Analysis

**Product Name:** *MspJI*  
**Catalog Number:** *R0661S*  
**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:** *10243458*  
**Expiration Date:** *05/2026*  
**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*

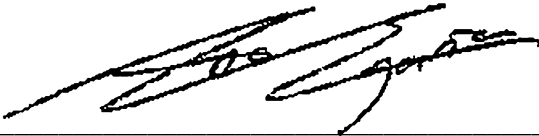
MspJI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
S0538SVIAL	Enzyme Activator Solution	10243460	Pass
R0661SVIAL	MspJI	10238060	Pass
B6004SVIAL	rCutSmart™ Buffer	10238052	Pass

Assay Name/Specification	Lot # 10243458
<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 <0.1% of the total radioactivity.	<b>Pass</b>
<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.	<b>Pass</b>
<b>Protein Purity Assay (SDS-PAGE)</b> MspJI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	<b>Pass</b>

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



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29 May 2024



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29 May 2024