

New England Biolabs Certificate of Analysis

Product Name: *Taq DNA Ligase*
Catalog #: *M0208S/L*
Concentration: *40,000 units/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to give 50% ligation of the 12-base pair cohesive ends of 1 µg of BstEII-digested Lambda DNA in a total reaction volume of 50 µl in 15 minutes at 45°C.*
Lot #: *0101602*
Assay Date: *02/2016*
Expiration Date: *2/2018*
Storage Temp: *-20°C*
Storage Buffer: *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-M0208S/L v1.0*
Effective Date: *16 Jun 2015*

Assay Name/Specification (minimum release criteria)	Lot #0101602
Endonuclease Activity (Nicking) - A 50 µl reaction in NEBuffer 4 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 1000 units of <i>Taq</i> DNA Ligase incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
Exonuclease Activity (Radioactivity Release) - A 50 µl reaction in <i>Taq</i> DNA Ligase Reaction Buffer containing 1 µg of a mixture of single and double-stranded [³ H] <i>E. coli</i> DNA and a minimum of 1000 units of <i>Taq</i> DNA Ligase 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 NEBuffer 4 containing 1 µg of Lambda-HindIII DNA and a minimum of 40 units of <i>Taq</i> DNA Ligase incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	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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16 Jun 2015



Inspected by
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05 Feb 2016

