

New England Biolabs Certificate of Analysis

Product Name: *EagI*
Catalog Number: *R0505L*
Concentration: *10,000 U/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to digest 1 µg of pXba DNA in 1 hour at 37°C in a total reaction volume of 50 µl.*
Lot Number: *10008867*
Expiration Date: *05/2020*
Storage Temperature: *-20°C*
Storage Conditions: *500 mM NaCl, 10 mM Tris-HCl (pH 8.0), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA*
Specification Version: *PS-R0505S/L v1.0*

| EagI Component List | | | |
|---------------------|------------------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R0505LVIAL | EagI | 10008881 | Pass |
| B7203SVIAL | NEBuffer™ 3.1 | 10010189 | Pass |
| B7024SVIAL | Gel Loading Dye, Purple (6X) | 10011266 | Pass |

| Assay Name/Specification | Lot # 10008867 |
|--|----------------|
| Blue-White Screening (Terminal Integrity) A sample of Litmus38i vector linearized with a 10-fold excess of EagI, religated and transformed into an E. coli strain expressing the LacZ beta fragment gene results in <1% white colonies. | Pass |
| Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 100 units of EagI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity. | Pass |
| Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of pXba DNA with EagI, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with EagI. | Pass |
| Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of pXba DNA and a minimum of 100 Units of EagI incubated for 16 hours at 37°C results in a DNA pattern free of | Pass |

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|--|--------------------|
| <p>detectable nuclease degradation as determined by agarose gel electrophoresis.</p> <p>Protein Purity Assay (SDS-PAGE) Eagl is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.</p> | <p>Pass</p> |

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



Stephanie Cornelio
Production Scientist
22 May 2018



Mary Conlon
Packaging Quality Control Inspector
30 Jul 2018