

New England Biolabs Certificate of Analysis

Product Name: *EagI*
Catalog Number: R0505S
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: 10010521
Expiration Date: 06/2020
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
R0505SVIAL	EagI	10010522	Pass
B7203SVIAL	NEBuffer™ 3.1	10010189	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10013725	Pass

Assay Name/Specification	Lot # 10010521
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

Assay Name/Specification	Lot # 10010521
<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.



Tony Spear-Alfonso
Production Scientist
06 Jun 2018



Michael Tonello
Packaging Quality Control Inspector
15 Aug 2018