

New England Biolabs Certificate of Analysis

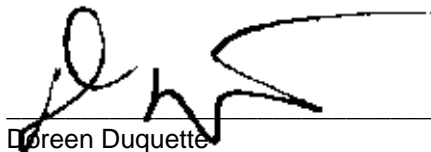
Product Name: RecJf
Catalog Number: M0264S
Concentration: 30,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to produce 0.05 nmol TCA soluble deoxyribonucleotide in a total reaction volume of 50 µl in 30 minutes at 37°C.
Lot Number: 10048155
Expiration Date: 07/2021
Storage Temperature: -20°C
Storage Conditions: 10 mM Tris-HCl , 50 mM KCl , 1 mM DTT , 0.1 mM EDTA , 200 µg/ml BSA , 50 % Glycerol, (pH 7.4 @ 25°C)
Specification Version: PS-M0264S/L v1.0

RecJf Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0264SVIAL	RecJf	10048157	Pass
B7002SVIAL	NEBuffer™ 2	10043903	Pass

Assay Name/Specification	Lot # 10048155
<p>RNase Activity Assay (4 Hour Digestion) A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 30 units of RecJf is incubated at 37°C. After incubation for 4 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.</p>	Pass
<p>Ligation and Recutting (Terminal Integrity, Digested DNA) A 50 µl reaction in 1X CutSmart® Buffer containing 4 µg of Lambda-HaeIII digest and a minimum of 60 units of RecJf incubated for 4 hours at 37°C results in >95% ligation of the DNA fragments as determined by agarose gel electrophoresis. Of these ligated fragments, >95% can be recut with HaeIII.</p>	Pass
<p>Ligation and Recutting (Terminal Integrity, Digested DNA) A 50 µl reaction in 1X CutSmart® Buffer containing 4 µg of pUC19-SphI digest and a minimum of 60 units of RecJf incubated for 4 hours at 37°C results in >95% ligation of the DNA fragments as determined by agarose gel electrophoresis. Of these ligated fragments, >95% can be recut with SphI.</p>	Pass

Assay Name/Specification	Lot # 10048155
<p>Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart® Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 90 units of RecJf incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	Pass
<p>Endonuclease Activity (Circular Single Stranded DNA) A 50 µl reaction in CutSmart® Buffer containing 1 µg of PhiX174 Virion DNA and a minimum of 90 units of RecJf incubated for 4 hours at 37°C results in <10% conversion to linear DNA as determined by agarose gel electrophoresis.</p>	Pass

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



Doreen Duquette
Production Scientist
30 Jul 2019



Michael Tonello
Packaging Quality Control Inspector
31 Jul 2019