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## 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.

Packaging Lot Number: 10150791
Expiration Date: 05/2024
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 v2.0

RecJf Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
M0264SVIAL	RecJf	10150790	Pass	
B7002SVIAL	NEBuffer™ 2	10143291	Pass	

Assay Name/Specification	Lot # 10150791
<b>Ligation and Recutting (Terminal Integrity, Digested DNA)</b> 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.	Pass
<b>Ligation and Recutting (Terminal Integrity, Digested DNA)</b> A 50 μl reaction in 1X CutSmart® Buffer containing 4 μg of PhiX174-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.	Pass
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.	Pass
Endonuclease Activity (Nicking)	Pass



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Assay Name/Specification	Lot # 10150791
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.	
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.	Pass

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.

John Greci **Production Scientist** 24 May 2022

Erin Varney

Packaging Quality Control Inspector

24 May 2022



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