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New England Biolabs Certificate of Analysis

Product Name: RecJf
Catalog Number: M0264L
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: 10113737 Expiration Date: 07/2023 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 | | | | |
|------------------------|-----------------------|------------|----------------------|--|
| NEB Part Number | Component Description | Lot Number | Individual QC Result | |
| M0264LVIAL | RecJf | 10113007 | Pass | |
| B7002SVIAL | NEBuffer™ 2 | 10111608 | Pass | |

| Assay Name/Specification | Lot # 10113737 |
|---|----------------|
| 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) 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. | Pass |
| 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. | Pass |
| RNase Activity Assay (4 Hour Digestion) A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA | Pass |



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| Assay Name/Specification | Lot # 10113737 |
|--|----------------|
| 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. | |
| Ligation and Recutting (Terminal Integrity, Digested DNA) 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 |

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

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John Greci Production Scientist 16 Aug 2021 Michael Tonello

Packaging Quality Control Inspector

16 Aug 2021



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