

Rec J Exonuclease

For Research Use Only. Not for use in diagnostic procedures.



Manual

AmpliScribe T7-Flash Biotin-RNA Transcription Kit

1. Introduction

Rec J Exonuclease, derived from *E. coli*, catalyses removal of deoxyribonucleotide monophosphates from single stranded DNA (ssDNA) in a $5'\rightarrow 3'$ direction. The enzyme requires magnesium (Mg²⁺) and can be heat inactivated by incubation at 65 °C for 20 minutes.

2. Product designations and kit components

Product	Kit size	Catalogue number	Reagent description	Part number	Volume
Rec J Exonuclease	250 units	RJ411250	Rec J Exonuclease (10 units/μL)	E0059-10D1	25 µL
			10X Rec J Exonuclease Buffer	SS000272-D3	250 μL

3. Product specifications

Storage: Store only at -65 °C to -85 °C in a freezer without a defrost cycle.

Storage buffer: Rec J Exonuclease is supplied in a 50% glycerol solution containing 50 mM Tris-HCl (pH 7.5), 100 mM NaCl, 1.0 mM dithiothreitol (DTT), 0.1 mM EDTA and 0.1% Triton® X-100 (Rohm & Haas).

Unit definition: One unit of Rec J Exonuclease results in the acid-solubilisation of 1 nmol of nucleotides from activated single-stranded calf thymus DNA in 30 minutes at 37 °C.

10X Rec J Exonuclease Reaction Buffer: 330 mM Tris-acetate (pH 7.5), 660 mM potassium acetate, 100 mM magnesium acetate and 5 mM DTT.

Quality control: Rec J Exonuclease is function-tested in a reaction containing 33 mM Tris-acetate (pH 7.5), 66 mM potassium acetate, 10 mM magnesium acetate, 0.5 mM DTT, 10 μg of heat-denatured activated calf thymus DNA and varying amounts of Rec J Exonuclease.

Contaminating activity assays: Rec J Exonuclease is free of detectable RNase, DNA endonuclease, and dsDNA exonuclease activities.

4. Applications

- Removal of primers from completed PCR reactions.
- Degradation of linear ssDNA in double-stranded DNA (dsDNA) and plasmid preps.

5. Further support

If you require any further support, please do not hesitate to contact our Technical Support Team: techsupport@lgcgroup.com.





biosearchtech.com

All trademarks and registered trademarks mentioned herein are the property of their respective owners. All other trademarks and registered trademarks are the property of LGC and its subsidiaries. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or any retrieval system, without the written permission of the copyright holder. © LGC Limited, 2023. All rights reserved. GEN/987EK/0123



