RsaI

Restriction enzyme for molecular biology applications

RsaI is a restriction enzyme that recognizes GT^AC sites.

10X Cutting Buffer is included that contains BSA, which enhances enzyme stability and binds to contaminants in DNA preps.

Ordering Information

Order Online »

ENZ-GEN109-1000	1000U

Manuals, SDS & CofA

View Online »

- High quality enzyme with stringent QC testing
- Includes 10X Cutting Buffer
- BSA premixed into buffers
- Suitable for molecular cloning, restriction site mapping, genotyping, southern blotting, SNP


Enzo
www.enzolifesciences.com

Handling & Storage

Long Term Storage -20°C

Shipping Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Activity

One unit is defined as the amount of enzyme required to digest 1 µg of λ DNA in 1 hour at 37°C in a total reaction volume of 50 µl.

Application Notes

For molecular cloning, restriction site mapping, genotyping, Southern blotting, SNP.

Concentration

RsaI 10,000 units/mlIncludes 10X Cutting Buffer

Formulation

Liquid. In 100mM sodium chloride, containing 10mM Tris-HCl, pH 7.4, 1mM DTT, 0.1mM EDTA, 50% glycerol and 200µg/ml BSA.

After reconstitution, 1X Cutting Buffer: 50mM potassium acetate, 20mM Tris-acetate, 10mM magnesium acetate, 100µg/ml BSA, pH 7.9, at 25°C.

Quality Control

Exonuclease Activity (Radioactivity Release):
A 50 µl reaction in 1X Cutting Buffer containing 1 µg of a mixture of single and double stranded [^{3}H] *E. coli* DNA and a minimum of 50 units of RsaI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.

Ligation and Recutting (Terminal Integrity):
After a 10-fold over digestion of λ DNA with RsaI, ~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 RsaI.

Non-Specific DNase Activity (16 Hour):
A 50 µl reaction in 1X Cutting Buffer containing 1 µg of λ DNA and a minimum of 50 Units of RsaI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.

Reconstitution

Reconstitute 10X Cutting Buffer with nuclease-free water

Source	Produced in an *E. coli* strain that carries the cloned RsaI gene from *Rhodopseudomonas sphaeroides*.

Last modified: May 29, 2024

ENZO LIFE SCIENCES, INC.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com

For local distributors and detailed product information visit us online: enzo.com All product names, logos, and brands are the property of their respective owners.