Tinzyme Co., Limited

Email: sales@tinzyme.com Website: www.tinzyme.com
Tel: +86-755-86134126 WhatsApp/Facebook/Twitter: +86-189-22896756

RNase T1,Recombinant

Product Number: RA05

Shipping and Storage

-20℃±5℃。

Components

Component	RA05	RA05
RNase T1(1000U/μl)	100μl	500μl
10×RNase T1 Reaction Buffer	1ml	1ml×5

Description

RNase T1 is a recombinant protein isolated through a series of purification steps and is a ribonuclease. This enzyme specifically cleaves single stranded RNA after the guanosine residue site, producing a 3'phosphate terminal. This enzyme cleaves the phosphodiester bond between the 3'-guanosine residue and adjacent nucleoside 5'-OH groups by forming nucleoside 2', 3'- cyclic phosphate intermediates. The reaction product is a 3 '- GMP terminal oligonucleotide. The activity of RNase T1 does not require the involvement of metal ions and can be used for rapid analysis of the physical structure of target RNA.

This product strictly controls the residue of host nucleases, with high enzyme activity and strong specificity.

Feature

1. Remove RNA from DNA extract;
2. RNA sequencing;
3. Ribonuclease protection analysis, synergistic effect with RNase A;
4. Remove RNA from the extract of recombinant protein;
5. Detect RNA synthesized by in vitro transcription of G-less cassette DNA template.

Unit definition

One active unit refers to the amount of enzyme required to hydrolyze yeast total RNA and increase its absorbance at a wavelength of 260nm by 1.0 under the condition of 37 ℃ and pH 7.5 for 15 minutes.

Storage buffer

10mM HEPES; 1mM EDTA; 0.1% Triton X-100; 50%glycerol.

Recommended reaction system

10×RNase T1 Reaction Buffer	5μl
ssRNA	50μg
RNase T1(1000U/μl)	0.5μl-1.5μl
RNase Free Water	Up to 50μl

React at 37℃ for 15-30 minutes.

Note

1. The inhibition efficiency of metal ion $MgCl_2$ 100mM concentration is about 40%;
2. The inhibition efficiency of metal ion $CaCl_2$ at a concentration of 10mM is about 30%;
3. Metal ions Zn^{2+}, Fa^{2+}, and Cu^{2+} exhibit strong inhibition at a concentration of 1mM;
4. The thermal inactivation of this enzyme is reversible, and it is recommended to use column purification or phenol/chloroform

extraction for removal.

Related products

Product Number	Product Name
M062	Vaccinia Capping Enzyme
GMP-RI01	RNase Inhibitor, GMP Grade
M072	mRNA Cap 2´O Methyltransferase
GMP-DI05	DNase I Recombinant GMP grade
M012	Poly(A) Polymerase
M036	Pyrophosphatase, Inorganic (yeast) (ppase)
TR01	T7 RNA Polymerase
RN02	Thermostable RNase H