RNaseOff™ RNase Inhibitor

Catalog Number:

R666114 (3000 U)

R666114 (20,000 U)

Storage condition:

2-8℃ storage, room temperature transportation.

Products content

Component	3000 U	20000 U
RNaseOff™ RNase Inhibitor	3000 U	20000 U
RNaseOff™ RNase Inhibitor Storage Buffer	100 μL	600 μL

Products Introduction

RNaseOff™ RNase Inhibitor is a lyophilized form of recombinantly expressed RNase inhibitor that specifically binds to RNase in a non-covalent complex to inactivate RNase A, RNase B, and RNase C without inhibiting RNase H. RNaseOff™ RNase Inhibitor is a lyophilized form of recombinantly expressed RNase inhibitor, S1 nuclease, SP6, T7 or T3 RNA polymerase, AMV or M-MLV reverse transcriptase, Taq DNA polymerase, RNase T1 and other enzymes without affecting the subsequent reverse transcription and translation processes. Widely used in RNA research, such as RT-PCR, cDNA synthesis, mRNA protection, in vitro transcription and in vitro translation, in situ hybridization and mRNA localization.

Active Definition

One unit of activity (U) refers to the amount of enzyme used to inhibit 50% 5 ng of the glycoside 2',3'-cyclic phosphate in RNase A from undergoing hydrolysis.

fineness

1.300 U of RNaseOff™ RNase Inhibitor and 1 μg of λDNA-Hind Ⅲ catabolite were reacted for 1 hour at 37°C without changes in the electrophoretic bands of DNA.

2.300 U of RNaseOff™ RNase Inhibitor and 1 μg of superhelical pBR322 DNA were reacted for 1 hour at 37°C without changes in the electrophoretic bands of the DNA.

3.100 U of RNaseOff™ RNase Inhibitor and 1 μg of 16S and 23S rRNA were reacted at 37℃ for 1 hour, and the electrophoretic bands of RNA did not change.

main application

cDNA合成　体外翻译　体外转录　RNA 扩增

RNA提取纯化和储存

procedure

1. Add the specified amount of RNaseOff™ RNase Inhibitor Storage Buffer to the RNaseOff™ RNase Inhibitor lyophilized powder to dissolve it, and the concentration of RNaseOff™ RNase Inhibitor after dissolution is 40U/μL.

Component	/	/
RNaseOff™ RNase Inhibitor	3000 U	20000 U
RNaseOff™ RNase Inhibitor Storage Buffer	80 μL	540 μL

2. A final concentration of 1 U/μL is recommended.

3. The prepared RNaseOff™ RNase Inhibitor can be stored at 4℃ for one month, avoiding repeated freezing and thawing to avoid affecting its activity, and can be stored at -20℃ and below for 2 years after reconstitution.

Bring your own instruments

Thermostatic mixer.

Pre-experiment Preparation and Important Notes

1. Read these instructions carefully before experimenting.

2. If Proteinase K is to be stored for a long period of time, please keep it at -20℃.

3. Check Buffer RLC for crystallization or precipitation prior to use, and if crystallization or precipitation occurs, redissolve Buffer RLC in a 56°C water bath.

4. Pre-treatment of tissue samples: Take 20 mg of tissue samples into 1.5 mL centrifuge tubes (self-provided), add 500 μL of Buffer RLC, and after the tissue homogenizer breaks up, centrifuge the samples for 1 minute at 12,000 rpm (~13,400×g), and take 200 μL of supernatant as samples.

procedure

1. Take a 1.5 mL centrifuge tube (provided), add 500 μL of Buffer RLC, 200 μL of sample, 20 μL of Proteinase K, vortex for 5 s, and then place it in a thermostatic mixer at 1200 rpm for 10 min at room temperature. Note: For wet swab samples, 200 μL of sample was taken after sufficiently shaking and mixing. Note: For wet swabs, 200 μL was taken from the sample after it was soaked in 400 μL of saline, shaken and mixed thoroughly for 5 minutes, and then centrifuged at 12,000 rpm for 1 minute, and 200 μL was taken for extraction.

2. Instantly remove the centrifuge tube and add the solution from step 1 to the Spin Columns DM in the collection tube. centrifuge at 12,000 rpm (~13,400 x g) for 1 minute, pour off the waste liquid from the collection tube, and return the column to the collection tube.

3. Add 500 μL of Buffer PGWT to the adsorbent column, centrifuge at 12,000 rpm for 1 minute, pour off the waste liquid from the collection tube, and return the column to the collection tube.

4. Add 500 μL of Buffer GWT2 to the adsorbent column, centrifuge at 12,000 rpm for 1 minute, pour off the waste liquid from the collection tube, and return the column to the collection tube.

5. Centrifuge at 12,000 rpm for 2 minutes and pour off the waste liquid in the collection tube. Place the adsorption column at room temperature for 2 minutes and allow to dry.

6. Place the column in a new collection tube (RNase-Free Centrifuge Tube), add 40-100 μL of RNase-Free Water to the center of the column membrane, let it stand at room temperature for 2 minutes, and then centrifuge at 12,000 rpm for 1 minute to collect the nucleic acid solution. Store at -80℃ for a long time.