



## RNasin (RNase Inhibitor)

RNase inhibitor ( 40U/ $\mu$ l)	1000 U
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**For research use only**

Cat No : YT4560

Size: 1000 U (25  $\mu$ l)

Store at  $-20^{\circ}\text{C}$

### Description

RNasin is a ribonuclease inhibitor purified from human placenta. RNasin reduces the activity of RNase A , B and C type enzymes in a variety of organisms.

### Source

E.coli cells with a cloned gene encoding mammalian ribonuclease inhibitor.

### Definition of Activity Unit

One unit of the protein inhibits the activity of 5ng RNase A by 50%.

### Applications

- Inhibition of RNA degradation in the following procedures:
  - in vitro transcription ;
  - cDNA synthesis ;
  - in vitro translation ;
  - isolation of mammalian cell fractions that contain mRNA protein complex.
- Separation and identification of specific ribonuclease activities.
- Studies of tumor suppression.

### Quality Control

The absence of exodeoxyribonu- cleases, phosphatases and ribonucleases confirmed by appropriate quality tests. Functionally tested in RNA and cDNA synthesis.

### Inhibition and Inactivation

- Inhibitors: common denaturants (SDS, urea and all oxidizing reagents (p-chloromercuribenzoate, dissolved oxygen, ions in their higher oxidation states) strongly inhibit RNase Inhibitor and release the RNase bound.
- Inactivated by heating at  $75^{\circ}\text{C}$  for 10min. Residual activity detectable after 10min heating at  $70^{\circ}\text{C}$ .

### Note

- DTT provided in the Storage Buffer ensures stability during long term storage, but is not necessary for inhibitor activity.
- Recommended concentration 1U/ $\mu$ l for a reaction mixture.

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