

RNasein (RNase Inhibitor)

Cat No: YT4560

Size: 1000 U (25 μ l)

Concentration : 40U/ μ l

<For research Use Only>

<Store at -20°C>

Description

RNasin is a ribonuclease inhibitor purified from human placenta. RNasin reduces the activity of RNase A-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 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°C for 10min. Residual activity detectable after 10min heating at 70°C.

Note

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