Ribonuclease Inhibitors

Human Placental Ribonuclease Inhibitor

Human placental ribonuclease inhibitor is a strong inhibitor of ribonuclease, such as RNase A and B. Addition of ribonuclease inhibitor has proven to be useful whenever the integrity of RNA must be preserved, as is the case in cDNA synthesis, in vitro RNA transcription and in vitro protein synthesis.

NOTE
If opened frequently during storage, additions of DTT are required to maintain the optimal 5 mM level.

Concentration
40 U/µl

Unit Definition
One unit is the amount of protein required to inhibit by 50% the activity of 5 ng RNase A.

Assay Conditions
20 mM Hepes-KOH (pH 7.6); 50 mM KCl, 1 mM EDTA, 5 mM DTT, 20 µg total yeast RNA, ^{32}P-labelled RNA, 0.2 RNase A, Ribonuclease Inhibitor. Incubate for 15 minutes at 37°C in a volume of 0.5 ml.

Storage Buffer
20 mM Hepes-KOH (pH 7.6); 50 mM KCl, 5 mM DTT, 50% (v/v) glycerol.

Storage Temperature
-20°C. Do not store in frost-free freezer.

Non-Specific Endonuclease
None detected after a 24-hour incubation of 100 µg/ml of supercoiled plasmid at an inhibitor concentration of 5000 U/ml.

RNase Activity
None detected after a 6-hour incubation with 2 µg of RNA in a 20 µl volume at an inhibitor concentration of 5000 U/ml as analyzed by electrophoresis on 5% PAGE autoradiography.

Ordering information

Order Nr	Product	Description	Packaging
R101a	Human Placental RNasin	Human Placental Ribonuclease Inhibitor	2.500 units
R101b	Human Placental RNasin	Human Placental Ribonuclease Inhibitor	10.000 units