

**Product Name:** RNaseBLK RNase Inhibitor

**Catalog No:** VN80BLK, VN81BLK

**Packing Size:** 4000 Unites (1 x 100 µl), 100,000 Units (2 x 1.25 ml)

**Shipping Condition:** Dry ice

**Storage Condition:** -20°C

### Product Description:

**RNaseBLK Ribonuclease Inhibitor** is a high-affinity inhibitor that specifically targets common ribonucleases, including RNase A, B, and C. It is an essential enzyme for safeguarding RNA against potential RNase contamination, without interfering with polymerase activity in PCR/RT-PCR assays.

Compared to the high oxidation-sensitive human RNase inhibitor, RNaseBLK is a more robust version of the RNase inhibitor and has improved resistance to oxidation. This ribonuclease inhibitor is stable even at very low concentrations of DTT (< 1 mM), which makes it the best choice for optimal RNA protection.

### Product Features

- High stability at 70°C
- High resistance to oxidation
- No downstream inhibition

### Applications

- *in vitro* transcription
- cDNA synthesis
- *in vitro* translation
- RNA purification and storage.
- separation and identification of specific ribonuclease activities
- Studies of tumor suppression

### Definition of Activity Unit

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

### Protocol

Always keep RNaseBLK on ice during reaction set-up. It is recommended to set-up all RNA- related or RNase-sensitive work under conditions where RNase contamination has been eliminated. The use of “clean” pipettors designated for PCR and aerosol-resistant barrier tips are recommended.

RNaseBLK should be added to the reaction tube prior to the addition of other components (including the sample) to ensure RNase inhibitory activity. Prevent inactivation of RNaseBLK and release of active ribonuclease by avoiding temperatures greater than 55°C, and high concentrations of urea or other denaturing agents. Use 1 U / 1 µl reaction volume.