

# ANTI-RNase

Catalog Number AM2690, AM2692

Pub. No. 4393875 Rev. C

Contents	Quantity	Storage conditions
ANTI-RNase	Cat. no. AM2690: 2,500 Units	Store at -20°C. <i>Do not store in a frost-free freezer or at -70°C.</i>
	Cat. no. AM2692: 10,000 Units	



**WARNING!** Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from [www.lifetechnologies.com/support](http://www.lifetechnologies.com/support).

## Product description

ANTI-RNase is a protein ribonuclease inhibitor that non-covalently binds and inactivates RNases A, B, and C. No inhibition is seen with RNases T1, T2, H, U1, U2, or CL3. ANTI-RNase is distinct from human placental ribonuclease inhibitor (Cat. nos. AM2682, AM2684) in that it has a more robust interaction with RNase and does not release active RNase in the absence of DTT or other reducing agents.

**Unit (U) definition:** One unit is the amount of protein required to inhibit the activity of 5 ng of RNase A by 50%. Unit assay conditions: 100 mM Tris-acetate (pH 6.5), 1 mM EDTA, 1 mM cyclic 2',3'-CMP, and RNase inhibitor. Addition of RNase A initiates the reaction. RNase inhibitor activity is measured by the inhibition of hydrolysis of cyclic 2',3'-CMP by RNase A.

**Storage buffer (not included):** 2.0 mM KH<sub>2</sub>PO<sub>4</sub>, 2.7 mM KCl, 137 mM NaCl, pH 7.4 and 50% Glycerol.

## Using ANTI-RNase

ANTI-RNase may be used in any application where placental ribonuclease inhibitor is used. It is ideal for use in *in vitro*

transcription and translation, cDNA synthesis, PCR, RT-PCR, RNA isolation procedures and the preparation of RNase-free antibodies. Add ANTI-RNase to reactions to give a final concentration of 1 U/μL. Slight inhibition of ANTI-RNase is seen in the presence of DTT (≥20 mM). The addition of DTT is not recommended for storage.

## Limited product warranty

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## References

Murphy, N.R., Leinback, S.S. and Hellwig, R.J. 1995. A potent, cost-effective RNase inhibitor. *BioTechniques* 18: 1068–1073.

**For Research Use Only. Not for use in diagnostic procedures.**

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