



**SOLIS
BIODYNE**

RiboGrip[®] Glycerol-Free RNase Inhibitor (220 U/ μ l)

Catalogue Number	Size (U)	20 μ l rxn
06-29-0000S	2000	100
06-29-4000U	4000	200
06-29-010kU	10 000	500



Shipping:

At room temperature

Batch Number and Expiry Date:

See vial

**Store at -20°C
upon receipt**

Storage and Stability*:

- Routine storage at -20°C (-28°C to -18°C) until expiry date
- Stable at room temperature (25°C) for up to 1 month.
- Freeze-thaw stability: 10 cycles

Storage and Dilution Buffer:

- 25 mM Tris-HCl pH 7.5, 100 mM KCl, 0.1 mM EDTA, 5 mM DTT, cryoprotectant, and stabilizers.

Manufactured by Solis BioDyne, in compliance with the ISO 9001 and ISO 13485 certified Quality Management System.

Product description:

- RiboGrip[®] Glycerol-Free RNase Inhibitor is an *in silico* designed protein-based ribonuclease inhibitor, which blocks RNase A, RNase B, RNase III(C). Due to its genetic modifications**, it has enhanced stability at room temperature with no activity loss for up to 1 month. It is produced in *E. coli* strain that carries an overproducing plasmid containing a RiboGrip[®] RNase Inhibitor gene.
- RiboGrip[®] inhibits the activity of ribonucleases by noncovalently binding in a noncompetitive mode at a 1:1 ratio. RiboGrip[®] does not inhibit or interfere with other enzymes such as reverse transcriptases, Taq or Bsm DNA polymerase making it compatible with many enzymatic reactions involving RNA.
- Stable up to 60 °C allowing effective use in assays requiring high incubation temperatures.

Applications:

Recommended for preventing RNA degradation in various applications, such as:

- First-strand cDNA synthesis
- RT-(q)PCR
- RT-LAMP
- *In vitro* transcription and translation
- Isolation, purification, and storage of RNA
- RNA sequencing

Recommendations for use:

1. Thaw RiboGrip[®] at room temperature. Before using, mix it by gentle vortexing or pipetting up and down, then spin down.
2. RiboGrip[®] Glycerol-Free RNase Inhibitor is used generally at a final reaction concentration of 0.5-2.5 U/ μ l. Exact concentration depends on the application and amount of RNases present. 1 U/ μ l is suitable for most application. If there is a need for intermediate dilution, use any 1X RT, RT-(q)PCR, or RT-LAMP reaction buffer to do so.
3. The protein can be inactivated by heating at 85 °C for 5 min.

Unit definition:

One unit is defined as the amount of protein required to inhibit the activity of 5 ng of RNase A by 50%. Activity is measured by the inhibition of hydrolysis of cytidine 2',3'-cyclic monophosphate by ribonuclease A.

Safety precautions:

Please refer to the Safety Data Sheet for more information.

Technical support:

Contact your sales representative for any questions or send an email to support@solisbiodyne.com

DS-06-29 v4. Effective from 06.12.2023

*Product stability is assessed using routine QC assays and QC criteria set forth in the product specification and are intended to provide guidelines for shipping and storage conditions only. The customer or its designee shall be responsible for conducting all necessary stability testing applicable to their assay and/or QC criteria, and to comply with any applicable regulatory requirements or guidelines. Such stability testing shall include testing to validate the lead times for shipment, the shelf life of, and the product specifications applicable to shipment, storage and handling of the assay assembled and packed by the customer.

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Trademark information: RiboGrip® is a registered trademark of Solis BioDyne OÜ.

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