

RiboProtect Hu-Mut RNase Inhibitor

CERTIFICATE OF ANALYSIS

#RT36	RiboProtect Hu-Mut RNase Inhibitor
Batch number:	715773
Expiry Date:	02.2020
Concentration:	40 U/μl
Storage conditions:	-20°C in a freezer without a defrost cycle blue ice
Shipping conditions:	blue ice
Storage buffer:	20 mM HEPES-KOH; 50 mM KCl; 8 mM reducing agent; 50% (v/v) glycerol; pH 7,6
Inactivation:	60°C /10 minutes
Unit definition:	One unit is defined as the amount of <i>RiboProtect Hu-Mut</i> RNase Inhibitor required to inhibit the activity of 5ng of ribonuclease A by 50%.
Specification:	<i>RiboProtect Hu-Mut</i> RNase Inhibitor is a 50 kDa recombinant human placental protein expressed and purified from <i>Escherichia coli</i> . It inhibits ribonuclease activity of RNase A, RNase B, RNase C by non-covalent binding in a 1:1 ratio. <i>RiboProtect Hu-Mut</i> RNase Inhibitor does not contain cysteine residues, which have been implicated in the oxidation sensitivity of wild-type human placental RNase inhibitor. It protects RNA in temperatures up to 58°C. <i>RiboProtect Hu-Mut</i> RNase Inhibitor is intended for use in applications where the presence of RNases may cause a hazard to RNA quality and experiment results, e.g. in RNA isolation, cDNA synthesis, RT-PCR, <i>in vitro</i> transcription and translation, or RNase-free monoclonal antibody preparation. <i>RiboProtect Hu-Mut</i> RNase Inhibitor shows no activity towards RNase 1, T1, T2, S1 nuclease and RNase H.



QUALITY CONTROL

Physical Purity: The purity is >90% as evaluated by SDS-PAGE electrophoresis

RNase Contamination: RNase activity is judged by incubation of 1 µg of RNA with 200 units of *RiboProtect Hu-Mut* RNase Inhibitor for 1 hour at 37°C. Results are visualized on an ethidium bromide-stained agarose gel.

Result: PASSED

Latent RNase Contamination: Latent RNase activity is judged by incubation of 1 µg of RNA with 200 units of heat-inactivated *RiboProtect Hu-Mut* RNase Inhibitor for 1 hour at 37°C. Results are visualized on an ethidium bromide-stained agarose gel.

Result: PASSED

Endonuclease Contamination: Endonuclease activity is judged by incubation of 1 µg of supercoiled plasmid DNA with 200 units of *RiboProtect Hu-Mut* RNase Inhibitor for 2 hours at 37°C. Results are visualized on an ethidium bromide-stained agarose gel.

Result: PASSED

Exonuclease Contamination: Exonuclease activity is judged by incubation of 1 µg of digested plasmid DNA with 200 units of *RiboProtect Hu-Mut* RNase Inhibitor for 2 hours at 37°C. Results are visualized on an ethidium bromide-stained agarose gel.

Result: PASSED

Quality authorized by: Justyna Leibner-Ciszak

Date: 07.05.2018

This document was generated electronically and is therefore valid without signature.

PRODUCT USE LIMITATION

This product of Blirt S.A. has been developed for research purposes only and it is not suitable for human and animal therapeutic or diagnostic use.

WARRANTY TERMS

Blirt S.A. guarantees that the quality of the product, within its expiry date, complies with the specifications of the Certificate of Analysis provided the product was stored properly in original packaging. In case of any complaints within specified warranty period, Blirt S.A. is obliged to replace any batch or Product's item within the Product's expiry date, free of charge. Blirt S.A. awards no other, additional warranties, excluding any other direct or indirect guarantees regarding suitability, productivity, the purpose of use, merchantability, storage conditions or any other factors in relation to products of Blirt S.A.

LIMITATION OF LIABILITY

Blirt S.A. is not liable for any direct, indirect, incidental, intentional, or consequential damages that may result from the use of or inability to use any product of Blirt's. By purchasing any Blirt's product, a purchaser acknowledges the guarantee terms that indisputably state that the only grounds for a complaint and thereby replacement of the product, free of charge is a detection of the product's defect that compromises its functionality in accordance with its specification.