



# NxGen<sup>®</sup> RNAse Inhibitor



IMPORTANT!

**-20 °C Storage Required**

Immediately Upon Receipt

FOR RESEARCH USE ONLY. NOT FOR HUMAN OR DIAGNOSTIC USE.

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## Technical Support

Lucigen is dedicated to the success and satisfaction of our customers. Our products are tested to assure they perform as specified when used according to our recommendations. It is imperative that the reagents supplied by the user are of the highest quality. Please follow the instructions carefully and contact our technical service representatives if additional information is necessary. We encourage you to contact us with your comments regarding the performance of our products in your applications. Thank you.

### Lucigen Technical Support

Email: [techsupport@lucigen.com](mailto:techsupport@lucigen.com)

Phone: (888) 575-9695

Product Guarantee: Lucigen guarantees that this product will perform as specified for one year from the date of shipment. Please avoid using reagents one year past receipt.

# NxGen<sup>®</sup> RNase Inhibitor

## Product Description

NxGen<sup>®</sup> RNase Inhibitor is an acidic, 52-kD protein that is a potent non-competitive inhibitor of pancreatic-type ribonucleases such as RNase A, RNase B, and RNase C. The enzyme is provided as a fusion of the porcine RNase Inhibitor gene with a proprietary 22.5-kD protein tag.

**Storage buffer:** NxGen RNase Inhibitor is supplied in 20 mM HEPES-KOH, 50 mM KCl, 8 mM DTT, 50% glycerol, pH 7.5 @ 25 °C.

**Source:** A recombinant *E. coli* strain carrying the porcine RNase Inhibitor gene.

**Unit Definition:** One unit is defined as the amount of enzyme required to inhibit by 50% the hydrolysis of cytidine 2',3'-cyclic monophosphate by 5 ng of RNase A (1).

## Product Specifications

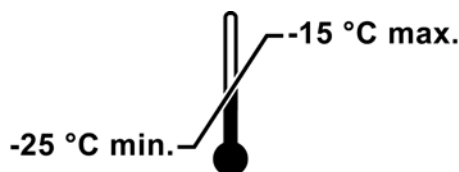
TEST:	SPECIFICATION
Unit Concentration	40,000 U/mL
Purity (SDS-PAGE)	>99%
SS Exonuclease	2,000 U <5.0% released
DS Exonuclease	2,000 U <0.5% released
Endonuclease	2,000 U <10% converted
Non-specific RNase	2,000 U none detected
E.coli 16S rDNA Contamination	2,000 U <10 copies

## Product Designations

Product	Kit Size	Catalog Number
NxGen RNase Inhibitor (40,000 U/mL)	10,000 Units	30281-1
	50,000 Units	30281-2

## Components & Storage Conditions

**Store all Kits and Components**



The NxGen<sup>®</sup> RNase Inhibitor package consists of the following components:

Description	Part Number	10,000 U	50,000 U
NxGen RNase Inhibitor	F83923-1	250 µL	5 x 250 µL

# NxGen® RNase Inhibitor

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## Applications and Suggested Use

Application	Suggested NxGen® RNase Inhibitor Concentration
cDNA Synthesis	0.5 U/μL
<i>In vitro</i> translation	1 U/μL
<i>In vitro</i> transcription	20 U/μL
<i>In vitro</i> transcription with SP6 or T7 RNA polymerase	1 U/μL
Polysome isolation	1 U/μL

## References

1. Blackburn, P., 1979. Ribonuclease Inhibitor from Human Placenta: Rapid Purification and Assay. The Journal of Biological Chemistry, Vol. 254, No. 24 pp 12484-12487.

## Related Lucigen Products

- [2.5 mM dNTP Mix, PCR Grade](#)
- [10 mM dNTP Set, PCR Grade](#)
- [NxGen® M-MuLV Reverse Transcriptase](#)
- [NxGen T7 RNA Polymerase](#)
- [Sygnis SunScript™ Reverse Transcriptase RNase H-](#)
- [T4 DNA Polymerase](#)
- [T4 DNA Polymerase, Exonuclease Minus](#)
- [NxGen Lambda Exonuclease](#)
- [NxGen Exonuclease I](#)
- [NxGen Exonuclease III](#)
- [NxGen T4 DNA Ligase](#)

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