

## TECHNICAL DATA SHEET

# Recombinant Human Endostatin (Carrier-free)

Catalog Number: 21-7182

## RPx-Pro™ Recombinant Protein

### PRODUCT INFORMATION

#### CONTENTS

Recombinant Human Endostatin (Carrier-free)

#### DESCRIPTION

Endostatin is a C-terminal proteolytic fragment of collagen XVIII  $\alpha 1$  (Col 18) that is localized in the vascular basement membrane of almost all epithelia and endothelia. Expressed in multiple organs, its highest levels of expression are in liver, lung and kidney. Endostatin is known to inhibit proliferation, migration, and tubule formation of endothelial cells and is an endogenous inhibitor of angiogenesis. Since tumor growth and metastasis relies on angiogenesis to provide blood supply, Endostatin is inhibitory for a wide variety of primary and metastatic tumors.

#### MOLECULAR MASS

Recombinant Human Endostatin is a 20.2 kDa protein consisting of 184 amino acid residues.

#### AMINO ACID SEQUENCE

MHSHRDFQPV LHLVALNSPL SGGMRGIRGA DFQCFQQARA VGLAGTFRAF LSSRLQDLYS IVRRADRAAV PIVNLKDELL FPSWEALFSG SEGPLKPGAR  
IFSFDGKVDL RHPTWPQKSV WHGSDPNGRR LTESYCETWR TEAPSATGQA SLLGGRLLG QSAASCHHAY IVLCIENSFM TASK

#### SOURCE

E.coli

#### APPLICATIONS

Bioassay

#### PURITY

98 %

#### STORAGE

-20°C

#### PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

#### ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/ $\mu$ g of protein (<1EU/ $\mu$ g).

#### AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

#### CROSS REACTIVITY

N/A

#### BIOACTIVITY

Measured by its ability to inhibit HUVEC migration.

#### RESEARCH AREAS

Angiogenesis & Cardiovascular

#### RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

#### REFERENCES

Yu Y, Sun F, Zhang C, Wang Z, Liu J and Tan H. 2016. Carbohydr Polym. 154:204-13. Aydemir EA, Şimşek E, Korcum AF and Fişkin K. 2016. Mol Med Rep. 14(3):2343-51.

Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

For Research Use Only.

Not for use in diagnostic or therapeutic procedures. Not for resale. Not for distribution without written consent. Tonbo Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Tonbo Biosciences, Tonbo Biosciences Logo and all other trademarks are the property of Tonbo Biotechnologies Corporation. © 2013 Tonbo Biosciences.