

TECHNICAL DATA SHEET

Recombinant Human TSG (Carrier-Free)

Catalog Number: 21-9066

RPx-Pro™ Recombinant Protein
PRODUCT INFORMATION

CONTENTS

Recombinant Human TSG (Carrier-Free)

DESCRIPTION

Twisted Gastrulation Protein (TSG) is a secreted BMP-binding protein that is structurally related to the BMP antagonists Chordin and Noggin. TSG can inhibit BMP activity by binding directly to BMP proteins, and can act either as a BMP-4 agonist or antagonist (depending on the specific biochemical environment) by binding to the BMP-4/Chordin complex.

MOLECULAR MASS

Recombinant Human TSG is a 198 amino acid, 22.2 kDa protein containing the BMP/TGF-beta binding portion of the full length TSG protein.

AMINO ACID SEQUENCE

CNKALCASDV SKCLIQELCQ CRPGEKNCSC CKECMLCLGA LWDECCDCVG MCNPRNYSdT PPTSKSTVEE LHEPIPSLFR ALTEGDTQLN
 WNIVSFPVAE ELSHHENLVS FLETVNQPHH QNVSVPNNV HAPYSSDKEH MCTVVYFDDC MSHQCKISC ESMGASKYRW FHNACCECIG
 PECIDYGSKT VKCMNCMF

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/µg of protein (<1EU/µg).

AUTHENTICITY

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

CROSS REACTIVITY

Human, Mouse

BIOACTIVITY

Determined by its ability to neutralize BMP-6-induced alkaline phosphatase production by ATDC chondrogenic cells. The expected ED50 for this effect is ≤ 2.0 ug/ml of TSG.

RESEARCH AREAS

Bones, Skeletal, Cartilage

RECONSTITUTION

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

REFERENCES

Tanno, T. Identification of TWSG1 as a second novel erythroid regulator of hepcidin expression in Mouse and human cells. 2009. Blood; 114(1):181-6.

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.