



Recombinant Human TSG

20150227BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-361S
Size:	10 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	57045
Synonyms:	TWSG1; TSG

Twisted Gastrulation Protein (TSG) is a secreted BMP binding protein 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 BMP4 agonist or antagonist (depending on the specific biochemical environment) by binding to the BMP4/Chordin complex. Recombinant human TSG is a 199 amino acid 22.2 kDa protein containing the BMP/TGFβ binding portion of the full length TSG protein.

Sequence

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MCNKALCASD VSKCLIQELC QCRPGE GNC S CKECMLCLG  
ALWDECCDCV GMCNPRNYS D TPPTSKSTVE ELHEPIPSLF  
RALTEGDTQL NWNIVSFPVA EELSHHENLV SFLETVNQPH  
HQNVSVPSNN VHAPYSSDKE HMCTVVYFDD CMSIHQCKIS  
CESMGASKYR WFNACCECI GPECIDYGSK TVKCMNCMF
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Database References

Protein RefSeq:	NP_065699.1
Uniprot ID:	Q9GZX9
mRNA RefSeq:	NM_020648.5

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	199
MW:	22.2 kDa

Biological Activity: 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 µg/ml of TSG.



AVOID REPEATED FREEZE AND THAW CYCLES!