

TSG Human E. coli

Product Data Sheet

Type: Recombinant	Cat. No.:	
Source: E. coli	RBG10333010	(10 µg)
Species: Human	RBG10333050	(50 µg)
Other names: Twisted Gastrulation Protein	RBG10333100	(100 µg)

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. 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.

Research topic

Bone and cartilage metabolism

Amino Acid Sequence

CNKALCASDV SKCLIQELCQ CRPGEGNCSC CKECMLCLGA LWDECCDCVG MCNPRNYSDT PPTSSTVEE LHEPIPSLFR
ALTEGDTQLN WNIVSFPVAE ELSHHENLVS FLETVNQPHH QNVSVPNNV HAPYSSDKEH MCTVVYFDDC MSIHQCKISC
ESMGASKYRW FHNACCECIG PECIDYGSKT VKCMNCMF

Source

E. coli

Purity

98%

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.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Storage, Stability/Shelf Life

-20°C

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