## Synonyms:Twisted Gastrulation Protein Homolog 1; TWSG1; TSG

Description:Twisted Gastrulation Protein Homolog 1 (TWSG1) is a 22 kDa secreted protein that belongs to the twisted gastrulation protein family. Human TWSG1 is synthesized as a 223 aa precursor that contains a 25 aa signal peptide and a 198 aa mature chain. TWSG1 may be involved in dorsoventral axis formation. TWSG1 seems to antagonize BMP signaling by forming ternary complexes with CHRD and BMPs, thereby preventing BMPs from binding to their receptors.TWSG1 can inhibit BMP activity by binding directly to BMP proteins, and can act the antiBMP function, partly mediated by cleavage and degradation of CHRD, which releases BMPs from ternary complexes. TWSG1 may be an important modulator of BMP-regulated cartilage development, chondrocyte differentiation and thymocyte development.

## Form:PBS

Molecular Weight:23.2 kDa
Sequences:Cys26-Phe223
Purity:> 95\% by HPLC

## Concentration:

Endotoxin Level: $<1.0$ EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at $+4^{\circ} \mathrm{C}$ short term (1-2 weeks). For long term storage, aliquot and store at $-20^{\circ} \mathrm{C}$ or $-70^{\circ} \mathrm{C}$. Avoid repeated freezing and thawing cycles.

