

**TWSG1**  
Catalog # PVGS1510**Specification**

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**TWSG1 - Product Information****Sequence**

Cys<sup>26</sup>-Phe<sup>223</sup> (Accession #: Q9GZX9), expressed with N-terminal 8×His

**Purity**

> 95% as analyzed by SDS-PAGE and HPLC.

**Endotoxin Level**

< 0.2 EU/ µg, determined by LAL method.

**Formulation**

**Lyophilized after extensive dialysis against PBS.**

**Reconstitution**

Reconstituted in ddH<sub>2</sub>O or PBS at 100 µg/ml.

**TWSG1 - Additional Information****Target Background**

**Twisted gastrulation (TWSG1 or TSG)** is a cysteine-rich 24 kDa glycoprotein. It is a secreted BMP binding protein that modulates BMP ligand availability in extracellular space. Human TSG shares 98% aa identity with mouse and rat TSG, and 99.5% aa identity with canine, equine, bovine and porcine TSG. Glycosylation and bioactivity of TWSG1 recombinant proteins vary markedly by cellular source. Non-glycosylated hTWSG1 made in E. coli has both reduced affinity for BMPs, as shown by surface plasmon resonance analysis, and reduced BMP inhibitory activity in a mandibular explant culture system compared to glycosylated proteins made in insect cells or mouse myeloma cells. Recombinant **human Twisted Gastrulation (TSG)**, produced in HEK 293 cells is a polypeptide chain containing 211 amino acids. A fully biologically active molecule, rhTSG has a molecular mass of 30~33 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at .

**TWSG1 - Protein Information****TWSG1 - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**TWSG1 - Images**