



Recombinant Protein Technical Manual
Recombinant Human TWSG1/TSG Protein (His Tag)
RPES1743

Product Data:

Product SKU: RPES1743

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q9GZX9

Protein Information:

Molecular Mass: 23.2 kDa

AP Molecular Mass: 35 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Twisted Gastrulation Protein Homolog 1; TWSG1; TSG

Immunogen Information:

Sequence: Cys26-Phe223

Background:

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 anti-BMP 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.