Recombinant Human TWSG1/TSG Protein (His Tag)

Catalog Number: PKSH033169

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

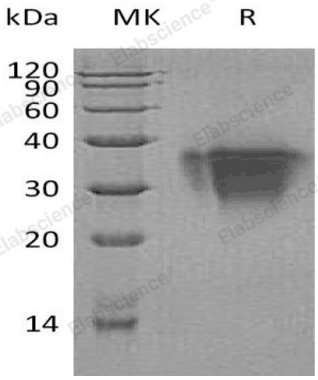
Description

Species	Human
Source	HEK293 Cells-derived Human TWSG1/TSG protein Cys26-Phe223, with an C-terminal His
Calculated MW	23.2 kDa
Observed MW	35 kDa
Accession	Q9GZX9
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

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.