Human USAG-1 Protein, Fc Tag

Catalog # US1-H5254

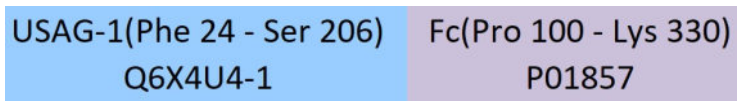
Synonym

Uterine sensitization-associated gene 1 protein

Source

Human USAG-1, Fc Tag(US1-H5254) is expressed from human 293 cells (HEK293). It contains AA Phe 24 - Ser 206 (Accession # Q6X4U4-1).
Predicted N-terminus: Phe 24

Molecular Characterization



This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 47.2 kDa. The protein migrates as 45-65 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

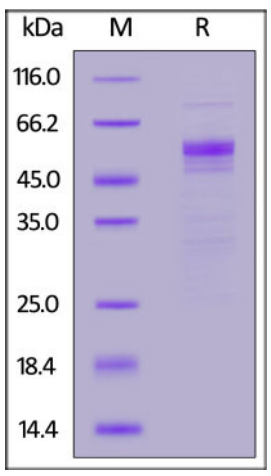
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human USAG-1, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Background

USAG1 (uterine sensitization associated gene 1), also known asSOSTDC1 (sclerostin domain–containing 1), Ectodin, is a secreted protein with a glycosylated N-terminus that contains a C-terminal cysteine knot domain. This C-terminal cysteine knot domain is present in numerous growth factors, including TGFβ, NGF, PDGF, vWF, NDP, and mucin-2, and involved in dimerization, receptor binding, and signal transduction. SOSTDC1 negatively regulates BMP signaling during

cellular proliferation, differentiation, and apoptosis in several biological processes (such as dentary morphogenesis, embryo implantation in the endo-metrium, and healing of bone fractures) [8]. In addition, SOSTDC1 might also involve cancer development processes through the regulation of the Wnt pathway.

Clinical and Translational Updates