

Synonym

COMP,TSP5,EDM1,EPD1,MED,PSACH,THBS5

Source

Human COMP, His Tag(COP-H5220) is expressed from human 293 cells (HEK293). It contains AA Gln 21 - Ala 757 (Accession # [AAI25093](#)).

Predicted N-terminus: Gln 21

Molecular Characterization

COMP(Gln 21 - Ala 757)
AAI25093 Poly-his

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 81.9 kDa. The protein migrates as 90-100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>88% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 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.

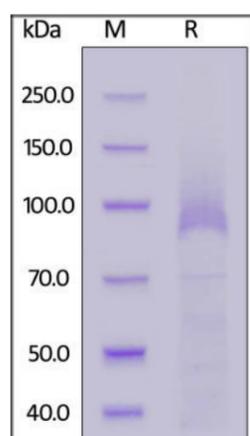
Storage

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 COMP, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 88%.

Background

Cartilage oligomeric matrix protein (COMP) is also known as Thrombospondin-5 (TSP5), EDM1, EPD1, MED, PSACH, THBS5, which belongs to the thrombospondin family. COMP / TSP5 contains 4 EGF-like domains, 1 TSP C-terminal (TSPC) domain, 8 TSP type-3 repeats. Abundantly expressed in the chondrocyte extracellular matrix, and is also found in bone, tendon, ligament and synovium and blood vessels. COMP may play a role in the structural integrity of cartilage via its interaction with other extracellular matrix proteins such as the collagens and fibronectin. COMP can mediate the interaction of chondrocytes with the

cartilage extracellular matrix through interaction with cell surface integrin receptors. Thrombospondin-5 could play a role in the pathogenesis of osteoarthritis. COMP is a marker of cartilage turnover.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.