Recombinant Protein Technical Manual

Recombinant Human COMP Protein (His Tag)(Active)

RPES1000

Product Data:

Product SKU: RPES1000

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_000086.2

Protein Information:

Molecular Mass: 82.4 kDa

AP Molecular Mass: 12030 kDa

Tag: C-His

Bio-activity: Measured by its ability to induce adhesion of ATDC5 mouse chondrogenic cells. When cells are added to coated plates (5 µg/ml, 100 µl/well), approximately 40% will adhere specifically after 60 minutes at 37 °C.

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℃ 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 sterile PBS, pH 7.4

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

Application:

Synonyms: EDM1;EPD1;MED;PSACH;THBS5

Immunogen Information:

Sequence: Met 1-Ala 757

Background:

Cartilage Oligomeric Matrix Protein (COMP), also referred to as Thrombospondin-5, is a non-collagenous extracellular matrix (ECM) protein and belongs to the subgroup B of the thrombospondin protein family. This protein is expressed primarily in cartilage, ligament, and tendon, and binds to other ECM proteins such as collagen I, II and IX with high affinities depending on the divalent cations Zn2+ or Ni2+. COMP is a secreted glycoprotein that is important for growth plate organization and function. It is suggested to play a role in cell growth and development, and recent studies have revealed the possible mechanism that it protects cells against death by elevating members of the IAP (inhibitor of apoptosis protein) family of survival proteins. Mutations in COMP cause two skeletal dysplasias, pseudoachondroplasia (PSACH) and multiple epiphyseal dysplasia (EDM1), and up-regulated expression of COMP are observed in rheumatoid arthritis and certain carcinomas.