Recombinant Protein Technical Manual

Recombinant Mouse CHST3/C6ST Protein (His Tag)

RPES1053

Product Data:

Product SKU: RPES1053

Size: 20µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_058083.2

Protein Information:

Molecular Mass: 52 kDa

AP Molecular Mass: 55-75 kDa

Tag: N-His

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein 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: C6ST;C6ST;GST-0

Immunogen Information:

Sequence: Glu 39-Thr 472

Background:

Carbohydrate sulfotransferase 3, also known as Chondroitin 6-O-sulfotransferase 1, Chondroitin 6-sulfotransferase and CHST3, is a single-pass type I I membrane protein which belongs to the sulfotransferase 1 family and Gal / GlcNAc / GalNAc subfamily. CHST3 is widely expressed in adult tissues. It is expressed in heart, placenta, skeletal muscle and pancreas. CHST3 is also expressed in various immune tissues such as spleen, lymph node, thymus and appendix. CHST3 catalyzes the transfer of sulfate to position 6 of the N-acetylgalactosamine (GalNAc) residue of chondroitin. It is a chondroitin sulfate which constitutes the predominant proteoglycan present in cartilage and is distributed on the surfaces of many cells and extracellular matrices. It can also sulfate Gal residues of keratan sulfate, another glycosaminoglycan, and the Gal residues in sialyl N-acetyllactosamine (sialyl LacNAc) oligosaccharides. It may play a role in the maintenance of naive T-lymphocytes in the spleen. Defects in CHST3 are the cause of spondyloepiphyseal dysplasia Omani type (SED Omani type) which is an autosomal recessive disorder characterized by normal length at birth but severely reduced adult height (11030 cm), severe progressive kyphoscoliosis, arthritic changes with joint dislocations, genu valgum, cubitus valgus, mild brachydactyly, camptodactyly, microdontia and normal intelligence. As a consequence of the arthropathy and the contractures, affected individuals develop restricted joint movement. Defects in CHST3 are also a cause of humerospinal dysostosis (HSD) which is characterized by bifurcation of the ends of the humerus, subluxation in the elbow joints, widened iliac bones, talipes equinovarus and coronal cleft vertebrae. Congenital, progressive heart disease, possibly with fatal outcome, is observed in some patients.