Recombinant Mouse CHST3/C6ST-1 Protein (His Tag)

Catalog Number: PKSM040601

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

Description	
Species	Mouse
Source	HEK293 Cells-derived Mouse CHST3/C6ST-1 protein Glu 39-Thr 472, with an N-
	terminal His
Calculated MW	52.0 kDa
Observed MW	55-75 kDa
Accession	NP_058083.2
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
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}C$ 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
	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	
	KDa MK R



> 95 % as determined by reducing SDS-PAGE.

Background

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Carbohydrate sulfotransferase 3, also known as Chondroitin 6-O-sulfotransferase 1, Chondroitin 6-sulfotransferase and CHST3, is a single-pass type II membrane protein which belongs to thesulfotransferase 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 (110-130 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.