

Summary

Production Name	CHST6 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF,ELISA
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	CHST6		
Alternative Names	CHST6; Carbohydrate sulfotransferase 6; Corneal N-acetylglucosamine-6-O-		
	sulfotransferase; C-GlcNAc6ST; hCGn6ST; Galactose/N-acetylglucosamine/N-		
	acetylglucosamine 6-O-sulfotransferase 4-beta; GST4-beta; N-acetylglucosamine 6-O-		
	sulfotransfera		
Gene ID	4166.0		
SwissProt ID	Q9GZX3. The antiserum was produced against synthesized peptide derived from human		
	CHST6. AA range:331-380		

Application

Dilution Ratio IF 1:200-1:1000. ELISA: 1:20000.

Molecular Weight



Background

The protein encoded by this gene is an enzyme that catalyzes the transfer of a sulfate group to the GlcNAc residues of keratan. Keratan sulfate helps maintain corneal transparency. Defects in this gene are a cause of macular corneal dystrophy (MCD). [provided by RefSeq, Jan 2010], caution: PubMed: 12824236 reported a Gly-204 variant, however according to their results reported in figure 1, it is a GIn-204 variant., disease: Defects in CHST6 are the cause of macular corneal dystrophy (MCD) [MIM:217800]. MCD is an autosomal recessive disease characterized by corneal opacities. Onset occurs in the first decade, usually between ages 5 and 9. The disorder is progressive. Minute, gray, punctate opacities develop. Corneal sensitivity is usually reduced. Painful attacks with photophobia, foreign body sensations, and recurrent erosions occur in most patients. There are different types of MCD: MCD type I, in which there is a virtual absence of sulfated keratan sulfate (KS) in the serum and cornea, as determined by KS-specific antibodies; and MCD type II, in which the normal sulfated KSantibody response is present in cornea and serum. MCD type I patients usually have a homozygous missense mutation, while MCD type II patients show a large deletion and replacement in the upstream region of CHST6. The only missense mutation for type II is Cys-50, which is heterozygous with a replacement in the upstream region on the other allele of CHST6., function: Catalyzes the transfer of sulfate to position 6 of non-reducing N-acetylglucosamine (GlcNAc) residues of keratan. Mediates sulfation of keratan in cornea. Keratan sulfate plays a central role in maintaining corneal transparency. Acts on the non-reducing terminal GlcNAc of short and long carbohydrate substrates that have poly-N-acetyllactosamine structures., online information: GlycoGene database, similarity: Belongs to the sulfotransferase 1 family. Gal/GlcNAc/GalNAc subfamily., tissue specificity: Expressed in cornea. Mainly expressed in brain. Also expressed in spinal cord and trachea.,

Research Area

Keratan sulfate biosynthesis;

Image Data



Immunofluorescence analysis of A549 cells, using CHST6 Antibody. The picture on the right is blocked with the synthesized peptide.



Note

For research use only.