

Product Data Sheet

CHST5 Protein, Mouse (HEK293, Fc)

Cat. No.:	HY-P76823
Synonyms:	Carbohydrate sulfotransferase 5; GST4; I-GlcNAc6ST; Gn6st-3
Species:	Mouse
Source:	HEK293
Accession:	Q9QUP4 (S27-S395)
Gene ID:	56773
Molecular Weight:	Approximately 70.1 kDa.

PROPERTIES	
TROTERIES	
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu\text{g}/\text{mL}$ in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION	
Background	CHST5 protein, a sulfotransferase utilizing 3'-phospho-5'-adenylyl sulfate (PAPS) as its sulfonate donor, plays a pivotal role in catalyzing the transfer of sulfate to position 6 of non-reducing N-acetylglucosamine (GlcNAc) residues of keratan, particularly in the cornea. This sulfonation process is crucial for mediating the sulfation of keratan, a key component that contributes to maintaining corneal transparency. CHST5 acts on both short and long carbohydrate substrates with poly-N- acetyllactosamine structures, targeting the non-reducing terminal GlcNAc. Additionally, this sulfotransferase may exhibit activity toward O-linked sugars of mucin-type acceptors. The specific enzymatic actions of CHST5 underscore its importance in the intricate processes involved in corneal function, emphasizing its role in the sulfation of keratan sulfate and its contribution to the maintenance of corneal transparency.

Caution: Product has not been fully validated for medical applications. For research use only.

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