

# Mouse Carbohydrate Sulfotransferase 7/CHST7 Antibody

Antigen Affinity-purified Polyclonal Goat IgG  
Catalog Number: AF5108

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Sulfotransferase 7/CHST7 in direct ELISAs and Western blots. In direct ELISA, less than 1% cross-reactivity with recombinant mouse (rm) CHST1, recombinant human CHST2, rmCHST5, and rmCHST3 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant mouse CHST7 Ser34-Val484 Accession # Q9EP78
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	Recombinant Mouse Carbohydrate Sulfotransferase 7/CHST7 (Catalog # <a href="#">5108-ST</a> )
<b>Immunoprecipitation</b>	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Mouse Carbohydrate Sulfotransferase 7/CHST7 (Catalog # <a href="#">5108-ST</a> ), <a href="#">see our available Western blot detection antibodies</a>

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

The CHST family is comprised of 14 genes in both human and mouse. All members of this family are Golgi-localized type II membrane proteins. Only the luminal and enzymatic domain is expressed in each of our recombinant CHST proteins. These enzymes transfer sulfate (i.e., sulfonate) onto the 6-O or 4-O positions of GalNAc, Gal and GlcNAc residues on glycoproteins, proteoglycans and glycolipids (1). This sulfation often creates specific epitopes that can be recognized by extracellular matrix proteins, cell surface receptors and viruses (2). CHST7, also designated as chondroitin 6-O-sulfotransferase (C6ST-2), N-acetylglucosamine-6-O-sulfotransferase (GlcNAc6ST-4) and Gal/GalNAc/GlcNAc 6-O-sulfotransferase (GST-5), was previously shown to act on chondroitin sulfate, mannose-linked GlcNAc and mucin associated GlcNAc residues (3-5). The amino acid sequence of mouse CHST7 is 87% identical to that of the human counterpart.

## References:

- Hemmerich, S. and Rosen, S. (2000) *Glycobiology* **10**:849.
- Bowman, K. G. and Bertozzi, C. R. (1999) *Chem. Biol.* **5**:447.
- Kitagawa, H. *et al.* (2000) *J. Biol. Chem.* **275**:21075.
- Uchimura, K. *et al.* (2000) *Biochem. Biophys. Res. Commun.* **274**:291.
- Bhakta, S. *et al.* (2000) *J. Biol. Chem.* **275**:40226.
- Robbins, P.W. (1962) *Methods in Enzymology*, Vol. V, Academic Press, Inc., New York, p.964.
- MacRae, I.J. *et al.* (2000) *Biochemistry* **39**:1613.
- Wu, Z.L. *et al.* (2002) *FASEB J.* **16**:539.