

#### GAL3ST1 Antibody (Center) Blocking Peptide Synthetic peptide

Catalog # BP8884c

## Specification

# GAL3ST1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>Q99999</u>

# GAL3ST1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 9514

**Other Names** 

Galactosylceramide sulfotransferase, GalCer sulfotransferase, 3'-phosphoadenosine-5'-phosphosulfate:GalCer sulfotransferase, 3'-phosphoadenylylsulfate:galactosylceramide 3'-sulfotransferase, Cerebroside sulfotransferase, GAL3ST1, CST

## Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP8884c>AP8884c</a> was selected from the Center region of human GAL3ST1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# GAL3ST1 Antibody (Center) Blocking Peptide - Protein Information

#### Name GAL3ST1 (HGNC:24240)

#### Function

Catalyzes the transfer of a sulfate group to position 3 of non-reducing beta-galactosyl residues in glycerolipids and sphingolipids, therefore participates in the biosynthesis of sulfoglycolipids (PubMed:<a href="http://www.uniprot.org/citations/9030544" target="\_blank">9030544</a>, PubMed:<a href="http://www.uniprot.org/citations/8830034" target="\_blank">8830034</a>). Catalyzes the synthesis of galactosylceramide sulfate (sulfatide), a major lipid component of the myelin sheath and of monogalactosylalkylacylglycerol sulfate (seminolipid), present in spermatocytes (PubMed:<a href="http://www.uniprot.org/citations/8830034" target="\_blank">8830034" target="\_blank">8830034</a>). Catalyzes the synthesis of galactosylceramide sulfate (sulfatide), a major lipid component of the myelin sheath and of monogalactosylalkylacylglycerol sulfate (seminolipid), present in spermatocytes (PubMed:<a href="http://www.uniprot.org/citations/8830034" target="\_blank">8830034</a>). Seems to prefer beta-glycosides at the non-reducing termini of sugar chains attached to a lipid moiety (PubMed:<a



href="http://www.uniprot.org/citations/8830034" target="\_blank">8830034</a>). Also acts on lactosylceramide, galactosyl 1-alkyl-2-sn-glycerol and galactosyl diacylglycerol (in vitro) (PubMed:<a href="http://www.uniprot.org/citations/8830034" target="\_blank">8830034</a>).

#### **Cellular Location**

Golgi apparatus membrane; Single- pass type II membrane protein

**Tissue Location** Expressed in kidney proximal tubule, gastric mucosa and adenocarcinoma (PubMed:9030544, PubMed:10785389). Highly expressed in renal cell carcinoma cell lines (PubMed:9030544, PubMed:8830034)

### GAL3ST1 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

<u>Blocking Peptides</u>

#### GAL3ST1 Antibody (Center) Blocking Peptide - Images

#### GAL3ST1 Antibody (Center) Blocking Peptide - Background

Sulfonation, an important step in the metabolism of many drugs, xenobiotics, hormones, and neurotransmitters, is catalyzed by sulfotransferases. GAL3ST1 is galactosylceramide sulfotransferase which catalyzes the conversion between 3'-phosphoadenylylsulfate + a galactosylceramide to adenosine 3',5'-bisphosphate + galactosylceramide sulfate. Activity of this sulfotransferase is enhanced in renal cell carcinoma.

#### GAL3ST1 Antibody (Center) Blocking Peptide - References

Siegrist, H.P., et.al., Biochim. Biophys. Acta 489 (1), 58-63 (1977)Stein, C., et.al., J. Biol. Chem. 264 (2), 1252-1259 (1989)