

GAL3ST1 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP8884c

Specification

GAL3ST1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

099999

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 AP8884c 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:9030544, PubMed:8830034). Catalyzes the synthesis of galactosylceramide sulfate (sulfatide), a major lipid component of the myelin sheath and of monogalactosylalkylacylglycerol sulfate (seminolipid), present in spermatocytes (PubMed:8830034). Seems to prefer beta-glycosides at the non-reducing termini of sugar chains attached to a lipid moiety (PubMed:<a



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

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.

• Blocking Peptides

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)