

ST3GAL2 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21060a**Specification**

ST3GAL2 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	Q16842
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	40173

ST3GAL2 Antibody (N-term) - Additional Information**Gene ID** 6483**Other Names**

CMP-N-acetylneuraminate-beta-galactosamide-alpha-2, 3-sialyltransferase 2, Alpha 2, 3-ST 2, Beta-galactoside alpha-2, 3-sialyltransferase 2, Gal-NAc6S, Gal-beta-1, 3-GalNAc-alpha-2, 3-sialyltransferase, ST3Gal II, ST3GalIII, ST3GalA2, Sialyltransferase 4B, SIAT4-B, ST3GAL2, SIAT4B

Target/Specificity

This ST3GAL2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 55-89 amino acids from the N-terminal region of human ST3GAL2.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ST3GAL2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ST3GAL2 Antibody (N-term) - Protein Information**Name** ST3GAL2 ([HGNC:10863](#))**Synonyms** SIAT4B

Function A beta-galactoside alpha2-3 sialyltransferase primarily involved in terminal sialylation of ganglio and globo series glycolipids (PubMed:[8920913](#), PubMed:[9266697](#)). Catalyzes the transfer of sialic acid (N-acetyl-neuraminic acid; Neu5Ac) from the nucleotide sugar donor CMP-Neu5Ac onto acceptor Galbeta-(1->3)-GalNAc-terminated glycoconjugates through an alpha2-3 linkage (PubMed:[25916169](#), PubMed:[8920913](#), PubMed:[9266697](#)). Sialylates GM1/GM1a, GA1/asialo-GM1 and GD1b gangliosides to form GD1a, GM1b and GT1b, respectively (PubMed:[8920913](#), PubMed:[9266697](#)). Together with ST3GAL3, primarily responsible for biosynthesis of brain GD1a and GT1b that function as ligands for myelin-associated glycoprotein MAG on axons, regulating MAG expression and axonal myelin stability and regeneration (By similarity). Via GT1b regulates TLR2 signaling in spinal cord microglia in response to nerve injury (By similarity). Responsible for the sialylation of the pluripotent stem cell- and cancer stem cell- associated antigen SSEA3, forming SSEA4 (PubMed:[12716912](#)). Sialylates with low efficiency asialofetuin, presumably onto O-glycosidically linked Galbeta-(1->3)-GalNAc-O-Ser (PubMed:[25916169](#), PubMed:[9266697](#)).

Cellular Location

Golgi apparatus, Golgi stack membrane; Single-pass type II membrane protein. Secreted. Note=Membrane-bound form distributed along the Golgi cisternae, mainly in proximal compartments (PubMed:25916169). Secreted into the body fluid. {ECO:0000250, ECO:0000269|PubMed:25916169}

Tissue Location

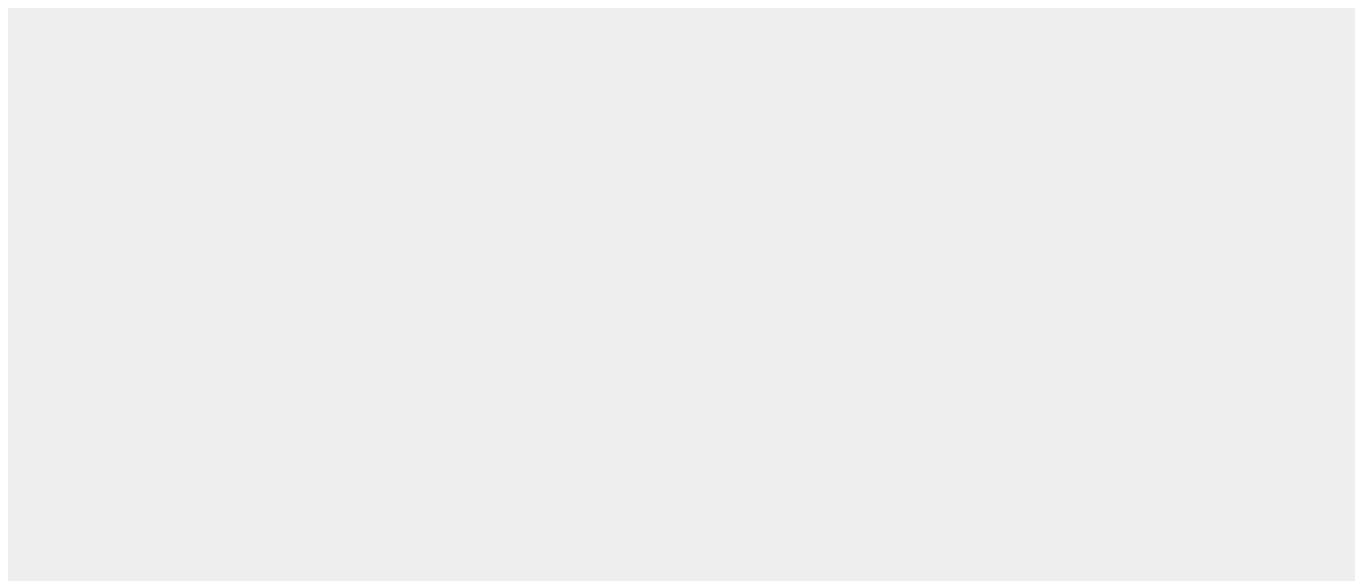
Highly expressed in skeletal muscle and heart and to a much lesser extent in brain, placenta, liver and pancreas Scarcely detectable in lung and kidney.

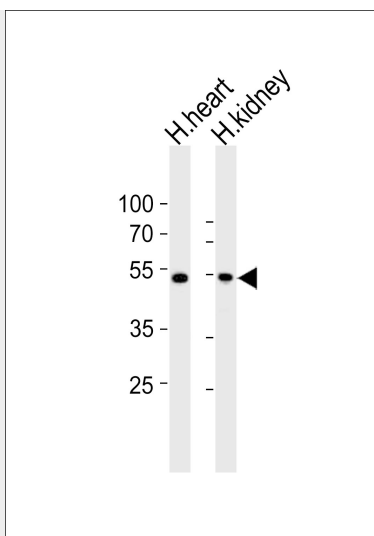
ST3GAL2 Antibody (N-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ST3GAL2 Antibody (N-term) - Images





Western blot analysis of lysates from human heart and human kidney tissue (from left to right), using ST3GAL2 Antibody (Nterm)(Cat. #AP21060a). AP21060a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.

ST3GAL2 Antibody (N-term) - Background

It may be responsible for the synthesis of the sequence NeuAc-alpha-2,3-Gal-beta-1,3-GalNAc- found in terminal carbohydrate groups of certain glycoproteins, oligosaccharides and glycolipids. SIAT4A and SIAT4B sialylate the same acceptor substrates but exhibit different Km values.

ST3GAL2 Antibody (N-term) - References

Kim Y.-J.,et al.Biochem. Biophys. Res. Commun. 228:324-327(1996).
Giordanengo V.,et al.Eur. J. Biochem. 247:558-566(1997).