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ST8SIA1 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22258a

Specification

ST8SIA1 Antibody (N-Term) - Product Information

Application	**WB, FC,E**
Primary Accession	Q92185
Other Accession	P61642
Reactivity	**Human**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**40519**

ST8SIA1 Antibody (N-Term) - Additional Information

Gene ID 6489

Other Names
Alpha-N-acetylneuraminide alpha-2, 8-sialyltransferase, 2.4.99.8, Alpha-2, 8-sialyltransferase 8A, Ganglioside GD3 synthase, Ganglioside GT3 synthase, Sialyltransferase 8A, SIAT8-A, Sialyltransferase St8Sia I, ST8SiaI, ST8SIA1, SIAT8, SIAT8A

Target/Specificity
This ST8SIA1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 53-84 amino acids from human ST8SIA1.

Dilution
WB~~1:1000-1:2000
FC~~1:25

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
ST8SIA1 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

ST8SIA1 Antibody (N-Term) - Protein Information

Name ST8SIA1 (HGNC:10869)

Synonyms SIAT8, SIAT8A

Function Catalyzes the addition of sialic acid in alpha 2,8-linkage to the sialic acid moiety of the ganglioside GM3 to form ganglioside GD3; gangliosides are a subfamily of complex glycosphingolipds that contain one or more residues of sialic acid (PubMed:7937974, PubMed:8058740, PubMed:8195250, PubMed:8631981, PubMed:8706663, PubMed:18348864, PubMed:22885356). Can catalyze the addition of a second alpha-2,8- sialic acid to GD3 to form GT3 (PubMed:8631981). Can use GM1b, GD1a and GT1b as acceptor substrates to synthesize GD1c, GT1a and GQ1b respectively (PubMed:8706663). Can synthesize unusual tetra- and pentasialylated lactosylceramide derivatives identified as GQ3 (II3Neu5Ac4-Gg2Cer) and GP3 (II3Neu5Ac5-Gg2Cer) in breast cancer cells (PubMed:22885356).

Cellular Location
Golgi apparatus membrane; Single- pass type II membrane protein

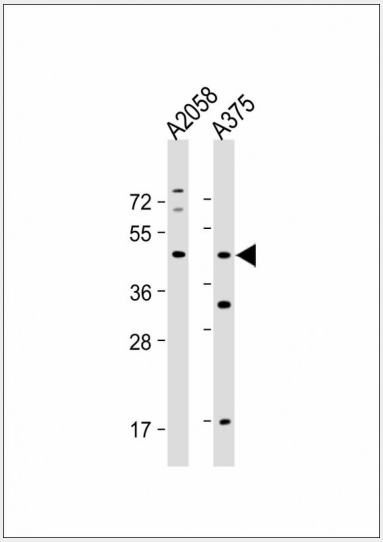
Tissue Location
Strongly expressed in melanoma cell lines, adult and fetal brain and to a lesser extent in adult and fetal lung

ST8SIA1 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 Cytomety
- Cell Culture

ST8SIA1 Antibody (N-Term) - Images



All lanes : Anti-ST8SIA1 Antibody (N-Term) at 1:1000-1:2000 dilution Lane 1: A2058 whole cell lysate Lane 2: A375 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 41 kDa

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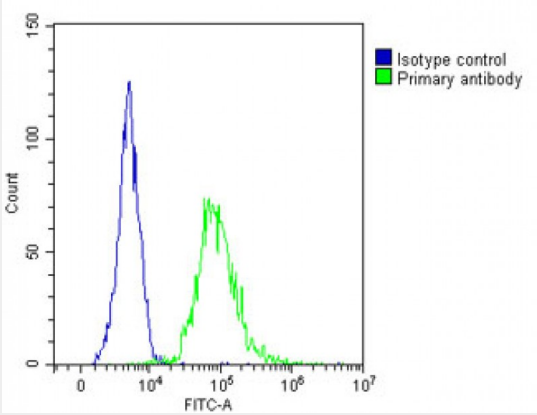
Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing A2058 cells stained with AP22258a(green line). The cells were fixed with 2% paraformaldehyde and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/200 dilution for 40 min at Room temperature. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

ST8SIA1 Antibody (N-Term) - Background

Involved in the production of gangliosides GD3 and GT3 from GM3; gangliosides are a subfamily of complex glycosphinglolipds that contain one or more residues of sialic acid.

ST8SIA1 Antibody (N-Term) - References

Sasaki K.,et al.J. Biol. Chem. 269:15950-15956(1994).
Nara K.,et al.Proc. Natl. Acad. Sci. U.S.A. 91:7952-7956(1994).
Haraguchi M.,et al.Proc. Natl. Acad. Sci. U.S.A. 91:10455-10459(1994).
Nakayama J.,et al.J. Biol. Chem. 271:3684-3691(1996).
Rimoldi S.,et al.Submitted (MAR-2004) to the EMBL/GenBank/DDBJ databases.