

#### ST8SIA1 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22258a

### **Specification**

## ST8SIA1 Antibody (N-Term) - Product Information

**Application** WB, FC, E **Primary Accession** 092185 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

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**

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 (<u>HGNC:10869</u>)



## 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:18348864, PubMed:22885356, PubMed:7937974, PubMed:8058740, PubMed:8195250, PubMed:8631981, PubMed:8706663). 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**

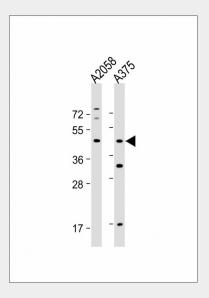
Strongly expressed in melanoma cell lines, adult and fetal brain and to a lesser extent in adult and fetal lung

#### 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

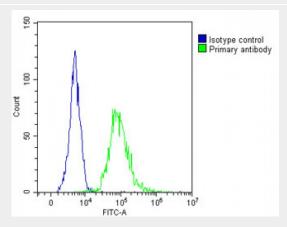
### ST8SIA1 Antibody (N-Term) - Images



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  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 41 kDa



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  $37^{\circ}$ C. 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.