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ST8SIA1 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22258a

Product Information

Application	WB, FC, E
Primary Accession	Q92185
Other Accession	P61642
Reactivity	Human, Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB55301
Calculated MW	40519

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.

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: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

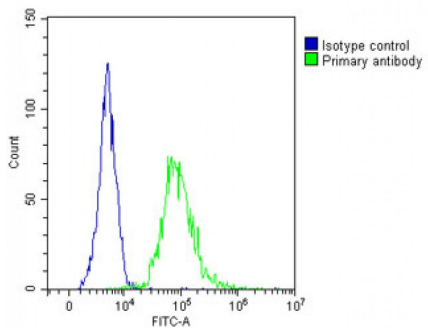
Background

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.

References

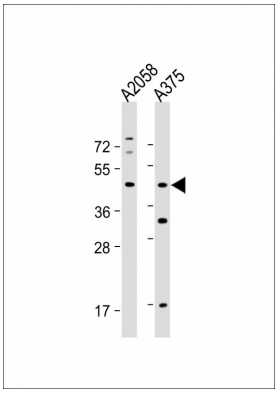
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Images



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°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.

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 Blocking/Dilution buffer: 5% NFDM/TBST.



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