

Rabbit anti-Human CDw75/ST6GAL1 Polyclonal Antibody | anti-CDw75/ST6GAL1 antibody

Anti-CDw75/ST6GAL1 Antibody Picoband

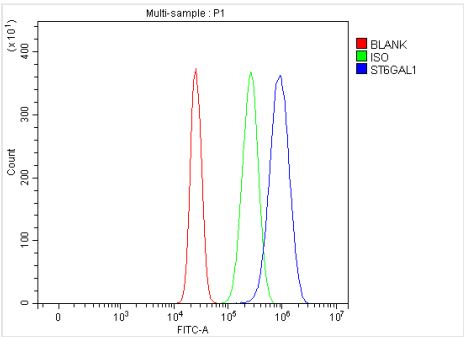
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127165	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

CDw75/ST6GAL1; Polyclonal Antibody; Anti-CDw75/ST6GAL1 Antibody Picoband; Glutamate decarboxylase 2; glycogen synthase kinase 3 alpha; Glycogen synthase kinase-3 alpha; GSK-3 alpha; Serine/threonine-protein kinase GSK3A; GSK3A; anti-CDw75/ST6GAL1 antibody

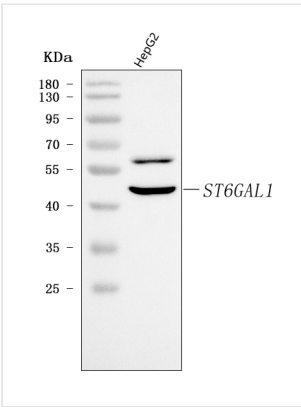
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Wide tissue distribution (highest in the pancreas and very low in brain). Closely associated with the basal layer of cells in epithelia and the endothelium of blood vessel walls.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-CDw75/ST6GAL1 antibody	ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E coli-derived human CDw75/ST6GAL1 recombinant protein (Position: M1-C406).
Subcellular Localization	Microtubule. Cytosol. Mitochondrion. Nucleus.
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Constitutively active protein kinase that acts as a negative regulator in the hormonal control of glucose homeostasis, Wnt signaling and regulation of transcription factors and microtubules, by phosphorylating and inactivating glycogen synthase (GYS1 or GYS2), CTNNB1/beta-catenin, APC and AXIN1. Requires primed phosphorylation of the majority of its substrates. Contributes to insulin regulation of glycogen synthesis by phosphorylating and inhibiting GYS1 activity and hence glycogen synthesis. Regulates glycogen metabolism in liver, but not in muscle. May also mediate the development of insulin resistance by regulating activation of transcription factors. In Wnt signaling, regulates the level and transcriptional activity of nuclear CTNNB1/beta-catenin. Facilitates amyloid precursor protein (APP) processing and the generation of APP-derived amyloid plaques found in Alzheimer disease. May be involved in the regulation of replication in pancreatic beta-cells. Is necessary for the establishment of neuronal polarity and axon outgrowth. Through phosphorylation of the anti-apoptotic protein MCL1, may control cell apoptosis in response to growth factors deprivation. Acts as a regulator of autophagy by mediating phosphorylation of KAT5/TIP60 under starvation conditions, leading to activate KAT5/TIP60 acetyltransferase activity and promote acetylation of key autophagy regulators, such as ULK1 and RUBCNL/Pacer.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of HepG2 cells using anti-CDw75/ST6GAL1 antibody (AAA127165).Overlay histogram showing HepG2 cells stained with AAA127165 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CDw75/ST6GAL1 Antibody (AAA127165, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



WB (Western Blot)

Figure 1. Western blot analysis of CDw75/ST6GAL1 using anti-CDw75/ST6GAL1 antibody (AAA127165).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human HepG2 whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CDw75/ST6GAL1 antigen affinity purified polyclonal antibody (#AAA127165) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CDw75/ST6GAL1 at approximately 47 kDa. The expected band size for CDw75/ST6GAL1 is at 47 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-CDw75/ST6GAL1 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-CDw75/ST6GAL1 antibody	Primary Antibodies; Adaptive Immunity; Immunology; T Cells
References	1. Grundmann, U., Nerlich, C., Rein, T., Zettlmeissl, G. Complete cDNA sequence encoding human beta-galactoside alpha-2,6-sialyltransferase. Nucleic Acids Res. 18: 667 only, 1990. 2. Kitagawa, H., Paulson, J. C. Differential expression of five sialyltransferase genes in human tissues. J. Biol. Chem. 269: 17872-17878, 1994.3. Nicholls, J. M., Chan, M. C. W., Chan, W. Y., Wong, H. K., Cheung, C. Y., Kwong, D. L. W., Wong, M. P., Chui, W. H., Poon, L. L. M., Tsao, S. W., Guan, Y., Peiris, J. S. M. Tropism of avian influenza A (H5N1) in the upper and lower respiratory tract. Nature Med. 13: 147-149, 2007.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4506949
NCBI GeneID	6480
NCBI Accession #	NP_003023.1
NCBI GenBank Nucleotide #	NM_003032.2
UniProt Accession #	P15907; A8KA14; D3DNV3
Molecular Weight	46,605 Da
NCBI Official Full Name	beta-galactoside alpha-2,6-sialyltransferase 1 isoform a
NCBI Official Synonym Full Names	ST6 beta-galactosamide alpha-2,6-sialyltranferase 1
NCBI Official Symbol	ST6GAL1

NCBI Official Synonym Symbols	ST6N; SIAT1; ST6Gal
NCBI Protein Information	beta-galactoside alpha-2,6-sialyltransferase 1; ST6Gal I; alpha 2,6-ST 1; B-cell antigen CD75; sialyltransferase 1 (beta-galactoside alpha-2,6-sialyltransferase); CMP-N-acetylneuraminate beta-galactosamide alpha-2,6-sialyltransferase; CMP-N-acetylneuramin
UniProt Protein Name	Beta-galactoside alpha-2,6-sialyltransferase 1
UniProt Gene Name	ST6GAL1
UniProt Synonym Gene Names	SIAT1; Alpha 2,6-ST 1; ST6Gal
UniProt Entry Name	SIAT1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://www.aaabiotech.com/polyclonal/cdw75-st6gal1-antibody-flow-cytometry-western-blot-elisa/127165>