

Mouse Monoclonal Antibody to B3GAT1

Purified Mouse Monoclonal Antibody

Catalog # AO2390a

Product Information

Application	WB, FC, E
Primary Accession	Q9P2W7
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	3B8B10
Isotype	Mouse IgG1
Calculated MW	38256
Description	The protein encoded by this gene is a member of the glucuronyltransferase gene family. These enzymes exhibit strict acceptor specificity, recognizing nonreducing terminal sugars and their anomeric linkages. This gene product functions as the key enzyme in a glucuronyl transfer reaction during the biosynthesis of the carbohydrate epitope HNK-1 (human natural killer-1, also known as CD57 and LEU7). Alternate transcriptional splice variants have been characterized.;
Immunogen	Purified recombinant fragment of human B3GAT1 (AA: 193-334) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide
Application Note	ELISA: 1/10000; WB: 1/500 - 1/2000; FCM: 1/200 - 1/400

Additional Information

Gene ID	27087
Other Names	NK1; CD57; HNK1; LEU7; NK-1; GLCATP; GLCUATP
Dilution	WB~~1:1000 FC~~1:10~50 E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse Monoclonal Antibody to B3GAT1 is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	B3GAT1 (HGNC:921)
-------------	-------------------------------------

Synonyms

GLCATP

Function

Involved in the biosynthesis of L2/HNK-1 carbohydrate epitope on glycoproteins. Can also play a role in glycosaminoglycan biosynthesis. Substrates include asialo-orosomucoid (ASOR), asialo-fetuin, and asialo-neural cell adhesion molecule. Requires sphingomyelin for activity: stearyl-sphingomyelin was the most effective, followed by palmitoyl-sphingomyelin and lignoceroyl-sphingomyelin. Activity was demonstrated only for sphingomyelin with a saturated fatty acid and not for that with an unsaturated fatty acid, regardless of the length of the acyl group.

Cellular Location

[Isoform 1]: Golgi apparatus membrane {ECO:0000250|UniProtKB:O35789}; Single-pass type II membrane protein {ECO:0000250|UniProtKB:O35789}. Secreted {ECO:0000250|UniProtKB:O35789}

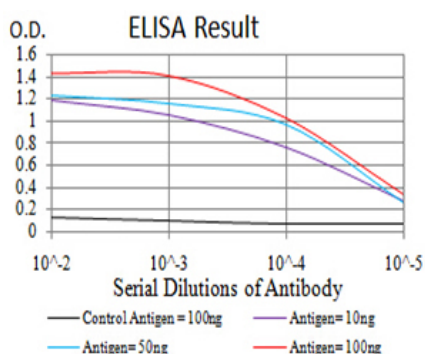
Tissue Location

Mainly expressed in the brain.

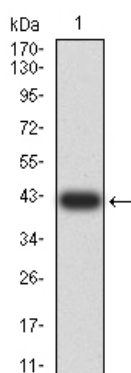
References

1.Biomed Res Int. 2014;2014:356427. ; 2.PLoS One. 2013;8(2):e52144.;

Images

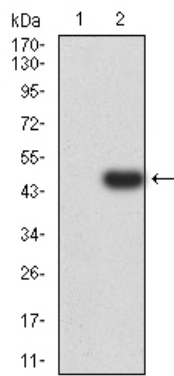


Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

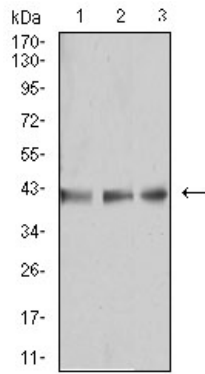


Western blot analysis using B3GAT1 mAb against human B3GAT1 (AA: 193-334) recombinant protein. (Expected MW is 41.5 kDa)

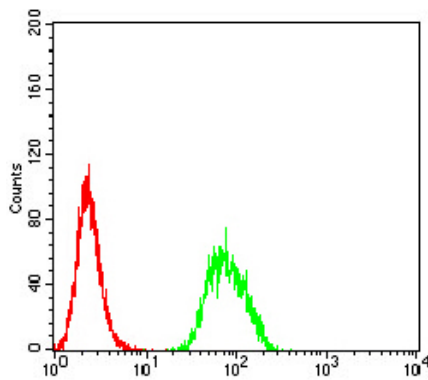
Western blot analysis using B3GAT1 mAb against HEK293 (1) and B3GAT1 (AA: 193-334)-hIgGFc transfected HEK293 (2) cell lysate.



Western blot analysis using B3GAT1 mouse mAb against MOLT4 (1), Raji (2), and Ramos (3) cell lysate.



Flow cytometric analysis of Hela cells using B3GAT1 mouse mAb (green) and negative control (red).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.