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Mouse Monoclonal Antibody to B3GAT1

Purified Mouse Monoclonal Antibody
Catalog # AO2391a

Specification

Mouse Monoclonal Antibody to B3GAT1 - Product Information

Application	**E, WB, FC**
Primary Accession	Q9P2W7
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1**
Calculated MW	**38.2kDa KDa**

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

Mouse Monoclonal Antibody to B3GAT1 - Additional Information

Gene ID 27087

Other Names
NK1; CD57; HNK1; LEU7; NK-1; GLCATP; GLCUATP

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.

Mouse Monoclonal Antibody to B3GAT1 - 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: stearoyl-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}

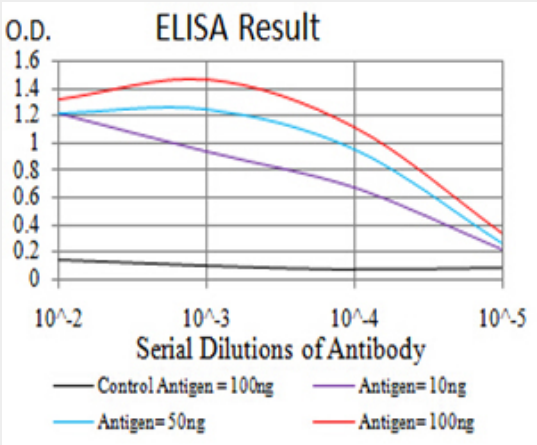
Tissue Location
Mainly expressed in the brain.

Mouse Monoclonal Antibody to B3GAT1 - 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

Mouse Monoclonal Antibody to B3GAT1 - Images



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

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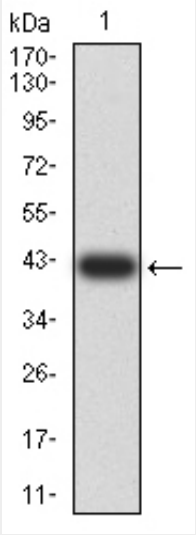
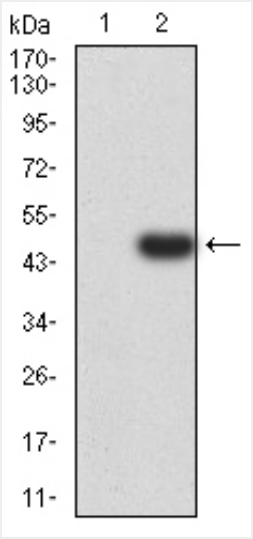
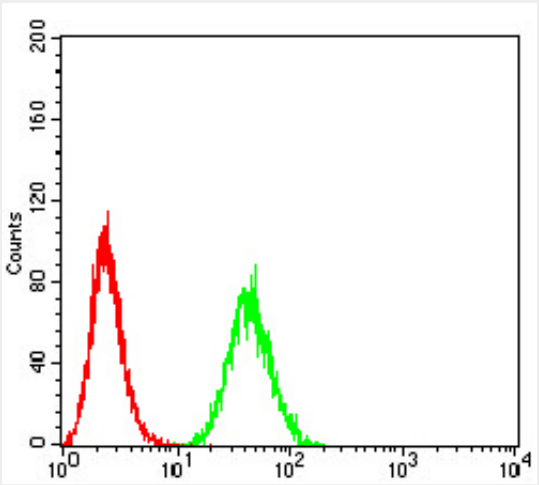


Western blot analysis using B3GAT1 mAb against human B3GAT1 (AA: 193-334) recombinant protein. (Expected MW is 41.5 kDa)



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



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

(red).

Mouse Monoclonal Antibody to B3GAT1 - References

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