

**Mouse Monoclonal Antibody to B3GAT1**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2390a****Specification**

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**Mouse Monoclonal Antibody to B3GAT1 - Product Information**

Application	E, WB, FC
Primary Accession	<a href="#">O9P2W7</a>
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: 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

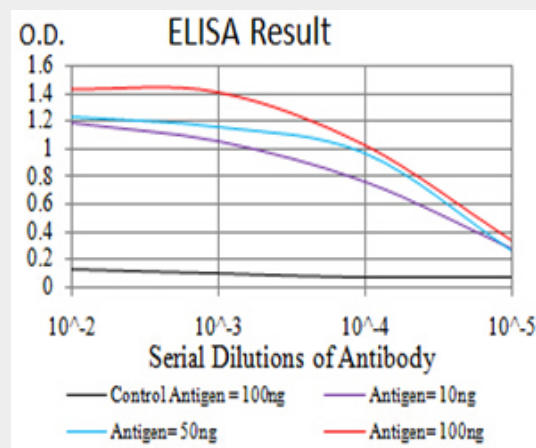
Mainly expressed in the brain.

## Mouse Monoclonal Antibody to B3GAT1 - Protocols

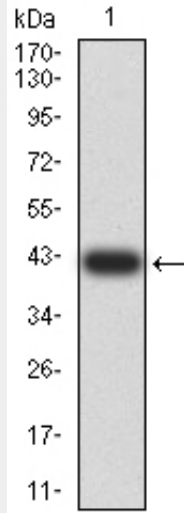
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

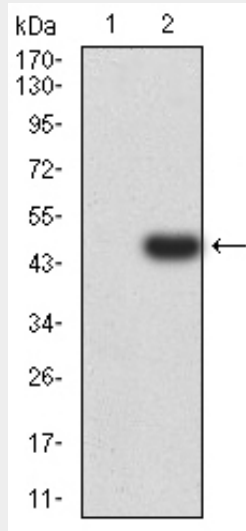
## Mouse Monoclonal Antibody to B3GAT1 - Images



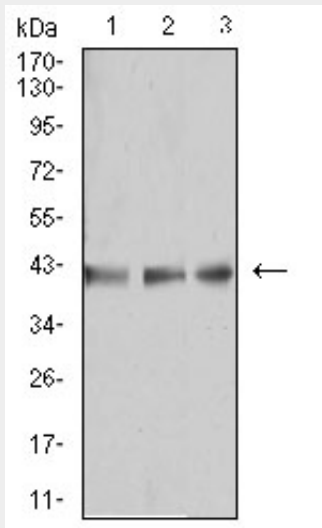
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



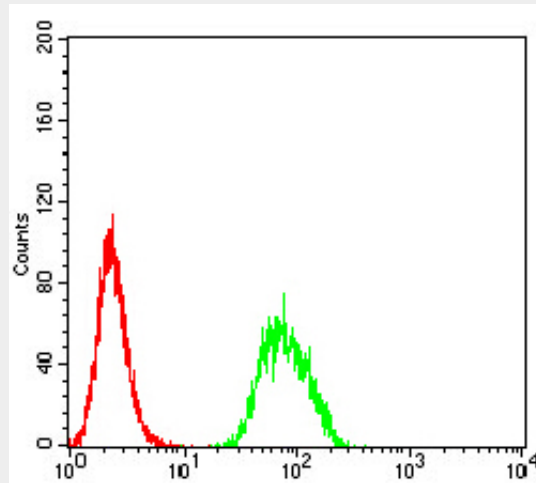
Western blot analysis using B3GAT1 mAb against human B3GAT1 (AA: 193-334) recombinant protein. (Expected MW is 41.5 kDa)



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).

#### Mouse Monoclonal Antibody to B3GAT1 - References

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