

# Mouse Monoclonal Antibody to B3GAT1

Purified Mouse Monoclonal Antibody Catalog # AO2390a

#### **Product Information**

**Application** WB, FC, E **Primary Accession Q9P2W7** Reactivity Human Host Mouse Monoclonal Clonality **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:

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}.

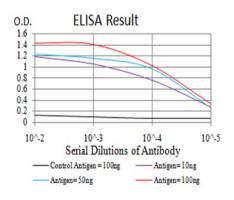
Secreted {ECO:0000250 | UniProtKB:O35789}

**Tissue Location** Mainly expressed in the brain.

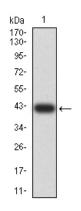
#### References

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

## **Images**

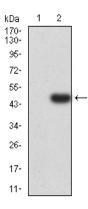


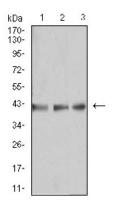
Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)



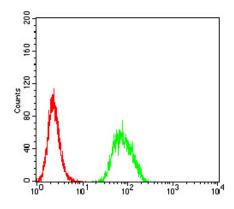
Western blot analysis using B3GAT1 mAb against human B3GAT1 (AA: 193-334) recombinant protein. (Expected MW is 41.5 kDa)

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'.