

## anti-Human, Mouse Beta Dystroglycan Antibody | anti-DAG1 antibody

Anti-Beta Dystroglycan [P38G1]

|                              |                                   |                                                                |
|------------------------------|-----------------------------------|----------------------------------------------------------------|
| CATALOG #<br><b>AAA72414</b> | REACTIVITY<br><b>Human, Mouse</b> | APPLICATIONS<br><b>Flow Cytometry, Functional Assay, ELISA</b> |
|------------------------------|-----------------------------------|----------------------------------------------------------------|

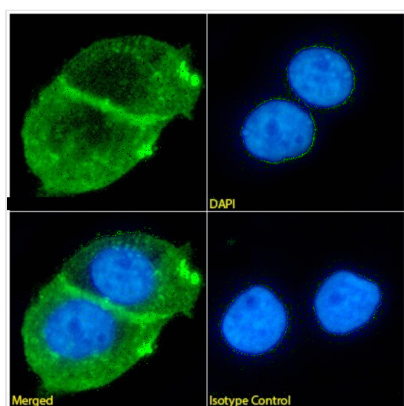
### PRODUCT SYNONYMS

Beta Dystroglycan; Anti-Beta Dystroglycan [P38G1]; Dystroglycan 1; Dag1; Beta-DG; beta-DAG; BETA DAG; Dystroglycan; Dystrophin-associated glycoprotein 1; B-Dystroglycan; B Dystroglycan; Beta-dystroglycan; beta dystroglycan; beta-dystroglycan; anti-DAG1 antibody

### PRODUCT SPECIFICATIONS

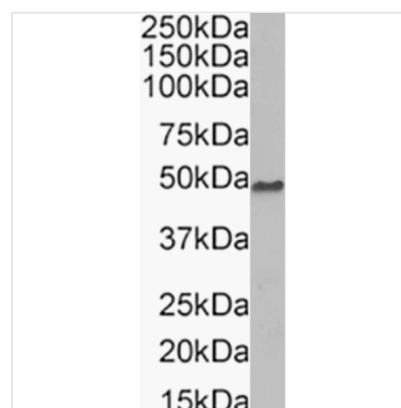
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|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity                                     | Human, Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Isotype                                        | Mouse IgG1 kappa                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Clone Number                                   | P38G1                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Specificity                                    | This antibody recognizes human and mouse beta dystroglycan (beta-DAG). Beta-dystroglycan is a transmembrane protein that plays an important role in connecting the extracellular matrix to the cytoskeleton. It plays an important role in linking dystrophin to the laminin-binding alpha-dystroglycan. It acts as a cell adhesion receptor in both muscle and non-muscle tissues. It also functions in cell adhesion-mediated signaling and implicated in cell polarity. |
| Purity/Purification                            | Purified. Protein A affinity purified                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Form/Format                                    | PBS with 0.02% Proclin 300.                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Concentration                                  | 1mg/ml (varies by lot)                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Applicable Applications for anti-DAG1 antibody | FCM/FACS (Flow Cytometry), ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Preparation and Storage                        | Store at 4 degree C for up to 3 months. For longer storage, aliquot and store at -20 degree C.                                                                                                                                                                                                                                                                                                                                                                             |

### IMAGES



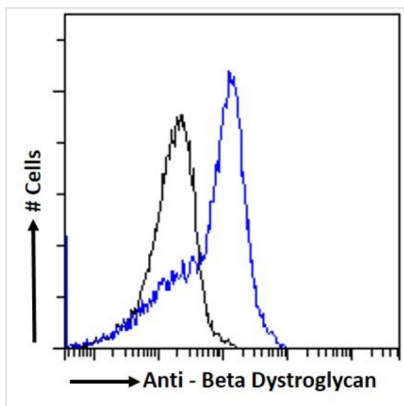
#### IF (Immunofluorescence)

Immunofluorescence staining of A431 cells with anti-Beta Dystroglycan antibody P38G1 . Immunofluorescence analysis of paraformaldehyde fixed A431 cells on Shi-fix™ coverslips stained with the chimeric rabbit IgG version of P38G1 (1:100 dilution) for 1h followed by Alexa Fluor 488 secondary antibody (1:1000 dilution), showing cell membrane/junction and cytoplasmic staining. The nuclear stain is DAPI (blue). Panels show, from left-right, top-bottom,, DAPI, merged channels, and an isotype control. The isotype control was an unknown specificity antibody followed by staining with Alexa Fluor 488 secondary antibody.



#### WB (Western Blot)

Western blot using anti-Beta Dystroglycan antibody P38G1 . Human skeletal muscle tissue lysate (35ug protein in RIPA buffer) was resolved on an SDS-PAGE gel, and blots were probed with the chimeric rabbit version of P38G1 at 0.1ug/ml before detection using an anti-rabbit secondary antibody. A primary incubation of 1 hour was used, and protein was detected by chemiluminescence.



#### FCM/FACS (Flow Cytometry)

Flow cytometry using anti-Beta Dystroglycan antibody P38G1 . MCF7 cells were stained with the anti-unknown specificity antibody (isotype control, black line) or the rabbit IgG version of P38G1 at a dilution of 1:100 for 1h at RT. After washing, the bound antibody was detected using a goat anti-rabbit IgG AlexaFluor 488 antibody at a dilution of 1:1000, and the cells were analyzed using a FACSCanto flow-cytometer.

### ADDITIONAL INFORMATION

|                                                    |                                                                                                                                                |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-DAG1 antibody | The original antibody was generated by immunizing BALB/c mice with a mixture of transfected HEK 293 cells expressing human and mouse beta-DAG. |
| Product Categories/Family for anti-DAG1 antibody   | <a href="#">cell adhesion</a> ; <a href="#">muscle</a> ; <a href="#">dystroglycanopathy</a> ; <a href="#">muscular dystrophy</a>               |

### NCBI AND UNIPROT INFORMATION

|                                  |                                                       |
|----------------------------------|-------------------------------------------------------|
| NCBI GI #                        | <a href="#">229462879</a>                             |
| NCBI GeneID                      | <a href="#">1605</a>                                  |
| UniProt Accession #              | <a href="#">Q14118</a> ; <a href="#">Q62165</a>       |
| Molecular Weight                 | 97,441 Da                                             |
| NCBI Official Full Name          | Dystroglycan                                          |
| NCBI Official Synonym Full Names | dystroglycan 1 (dystrophin-associated glycoprotein 1) |
| NCBI Official Symbol             | DAG1                                                  |
| NCBI Official Synonym Symbols    | A3a; DAG; AGRNR; 156DAG; MDDGC7; MDDGC9               |
| NCBI Protein Information         | dystroglycan                                          |
| UniProt Protein Name             | Dystroglycan                                          |
| UniProt Gene Name                | <b>DAG1</b>                                           |
| UniProt Synonym Gene Names       | Alpha-DG; Beta-DG                                     |
| UniProt Entry Name               | DAG1_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.