

## Rabbit DAG1 Polyclonal Antibody | anti-DAG1 antibody

DAG1 Antibody (C-term)

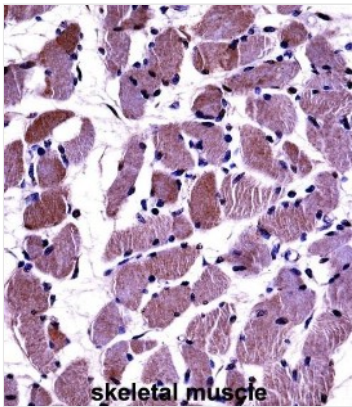
| CATALOG # | HOST   | REACTIVITY                                       | APPLICATIONS                              |
|-----------|--------|--------------------------------------------------|-------------------------------------------|
| AAA285635 | Rabbit | Human, mouse (Predicted Reactivity: Pig, Rabbit) | Immunohistochemistry, ELISA, Western Blot |

### PRODUCT SYNONYMS

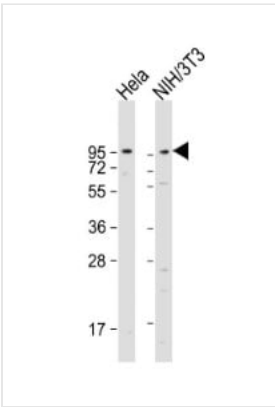
DAG1; Polyclonal Antibody; DAG1 Antibody (C-term); Dystroglycan; Dystrophin-associated glycoprotein 1; Alpha-dystroglycan; Alpha-DG; Beta-dystroglycan; Beta-DG; anti-DAG1 antibody

### PRODUCT SPECIFICATIONS

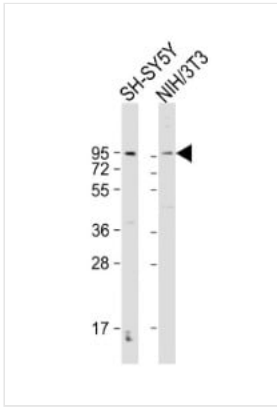
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Reactivity                                     | Human, mouse (Predicted Reactivity: Pig, Rabbit)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Clonality                                      | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Isotype                                        | Rabbit Ig                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Specificity                                    | This DAG1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 718-747 amino acids from the C-terminal region of human DAG1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Purity/Purification                            | Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Form/Format                                    | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Sequence Positions                             | 718-747                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Sequence Length                                | 895                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Applicable Applications for anti-DAG1 antibody | IHC (Immunohistochemistry), ELISA, WB (Western Blot)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Function                                       | The dystroglycan complex is involved in a number of processes including laminin and basement membrane assembly, sarcolemmal stability, cell survival, peripheral nerve myelination, nodal structure, cell migration, and epithelial polarization. [Beta-dystroglycan]: Transmembrane protein that plays important roles in connecting the extracellular matrix to the cytoskeleton. Acts as a cell adhesion receptor in both muscle and non- muscle tissues. Receptor for both DMD and UTRN and, through these interactions, scaffolds axin to the cytoskeleton. Also functions in cell adhesion-mediated signaling and implicated in cell polarity. |
| Cellular Location                              | [Alpha-dystroglycan]: Secreted, extracellular space                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Tissue Location                                | Expressed in a variety of fetal and adult tissues. In epidermal tissue, located to the basement membrane. Also expressed in keratinocytes and fibroblasts.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Preparation and Storage                        | Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |



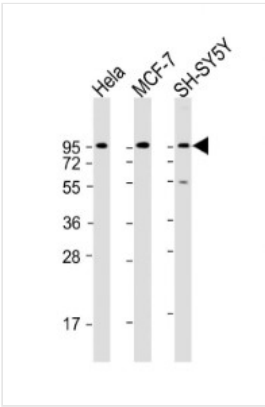
**IHC (Immunohistochemistry)**  
DAG1 Antibody (C-term) (AAA285635) immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of DAG1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



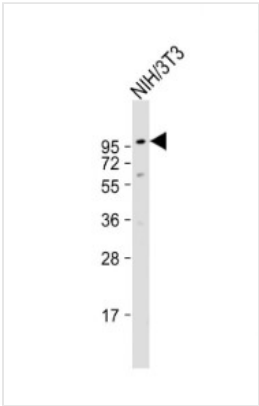
**WB (Western Blot)**  
All lanes : Anti-DAG1 Antibody (C-term) at 1:1000-1:2000 dilution Lane 1: HeLa whole cell lysate Lane 2: NIH/3T3 whole cell lysate Lysates/proteins at 20 ug per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 97 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



**WB (Western Blot)**  
All lanes : Anti-DAG1 Antibody (C-term) at 1:2000 dilution Lane 1: SH-SY5Y whole cell lysate Lane 2: NIH/3T3 whole cell lysate Lysates/proteins at 20 ug per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 97 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



**WB (Western Blot)**  
All lanes : Anti-DAG1 Antibody (C-term) at 1:2000 dilution Lane 1: HeLa whole cell lysate Lane 2: MCF-7 whole cell lysate Lane 3: SH-SY5Y whole cell lysate Lysates/proteins at 20 ug per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 97 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



**WB (Western Blot)**  
Anti-DAG1 Antibody (C-term) at 1:1000 dilution + NIH/3T3 whole cell lysate Lysates/proteins at 20ug per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 97 kDa Blocking/Dilution buffer: 5% NFDm/TBST.

## ADDITIONAL INFORMATION

|                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Related Product Information for anti-DAG1 antibody</b> | Dystroglycan is a laminin binding component of the dystrophin-glycoprotein complex which provides a linkage between the subsarcolemmal cytoskeleton and the extracellular matrix. Dystroglycan 1 is a candidate gene for the site of the mutation in autosomal recessive muscular dystrophies. The dramatic reduction of dystroglycan 1 in Duchenne muscular dystrophy leads to a loss of linkage between the sarcolemma and extracellular matrix, rendering muscle fibers more susceptible to necrosis. Dystroglycan also functions as dual receptor for agrin and laminin-2 in the Schwann cell membrane. The muscle and nonmuscle isoforms of dystroglycan differ by carbohydrate moieties but not protein sequence. Alternative splicing results in multiple transcript variants all encoding the same protein. |
| <b>Product Categories/Family for anti-DAG1 antibody</b>   | <a href="#">Neuroscience</a> ; <a href="#">Signal Transduction</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>References</b>                                         | Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)<br>Nilsson, J., et al. Glycobiology 20(9):1160-1169(2010)<br>Lara-Chacon, B., et al. J. Cell. Biochem. 110(3):706-717(2010)<br>Sgambato, A., et al. Pathology 42(3):248-254(2010)<br>Masaki, T., et al. J. Biomed. Biotechnol. 2010, 740403 (2010) :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

## NCBI AND UNIPROT INFORMATION

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NCBI GI #</b>                        | <a href="#">294997284</a>                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>NCBI GeneID</b>                      | <a href="#">1605</a>                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>NCBI Accession #</b>                 | <a href="#">NP_001159400.2</a> ; <a href="#">NP_001171105.1</a> ; <a href="#">NP_001171106.1</a> ; <a href="#">NP_001171107.1</a> ; <a href="#">NP_001171108.1</a> ; <a href="#">NP_001171109.1</a> ; <a href="#">NP_001171110.1</a> ; <a href="#">NP_001171111.1</a> ; <a href="#">NP_001171112.1</a> ; <a href="#">NP_001171113.1</a> ; <a href="#">NP_001171114.1</a> ; <a href="#">NP_001171115.1</a> ; <a href="#">NP_004384.4</a> |
| <b>NCBI GenBank Nucleotide #</b>        | <a href="#">NM_001165928.3</a>                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>UniProt Accession #</b>              | <a href="#">Q14118</a> ; <a href="#">Q969J9</a> ; <a href="#">A8K6M7</a>                                                                                                                                                                                                                                                                                                                                                                |
| <b>NCBI Official Full Name</b>          | dystroglycan preproprotein                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>NCBI Official Synonym Full Names</b> | dystroglycan 1 (dystrophin-associated glycoprotein 1)                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>NCBI Official Symbol</b>             | DAG1                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>NCBI Official Synonym Symbols</b>    | A3a; DAG; AGRNR; 156DAG; MDDGC7; MDDGC9                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>NCBI Protein Information</b>         | dystroglycan                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>UniProt Protein Name</b>             | Dystroglycan                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>UniProt Gene Name</b>                | <b>DAG1</b>                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>UniProt Synonym Gene Names</b>       | Alpha-DG; Beta-DG                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>UniProt Entry Name</b>               | 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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/dag1-antibody-immunohistochemistry-western-blot-elisa/285635>