

**DAG1 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP14101b****Specification**

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**DAG1 Antibody (C-term) - Product Information**

Application	IHC-P, WB,E
Primary Accession	<a href="#">Q14118</a>
Other Accession	<a href="#">Q28685</a> , <a href="#">Q29243</a> , <a href="#">NP_001171107.1</a> , <a href="#">NP_001171111.1</a> , <a href="#">NP_004384.4</a>
Reactivity	Human, Mouse
Predicted	Pig, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	718-747

**DAG1 Antibody (C-term) - Additional Information****Gene ID** 1605**Other Names**

Dystroglycan, Dystrophin-associated glycoprotein 1, Alpha-dystroglycan, Alpha-DG, Beta-dystroglycan, Beta-DG, DAG1

**Target/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.

**Dilution**

IHC-P~~1:10~50

WB~~1:1000-1:2000

E~~Use at an assay dependent concentration.

**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.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

DAG1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**DAG1 Antibody (C-term) - Protein Information**

**Name** DAG1 ([HGNC:2666](#))

**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

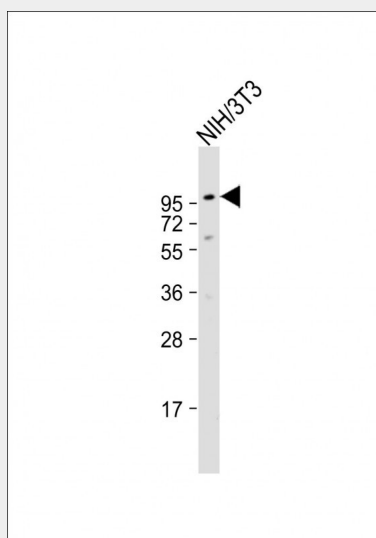
**Tissue Location**

Expressed in a variety of fetal and adult tissues. In epidermal tissue, located to the basement membrane. Also expressed in keratinocytes and fibroblasts.

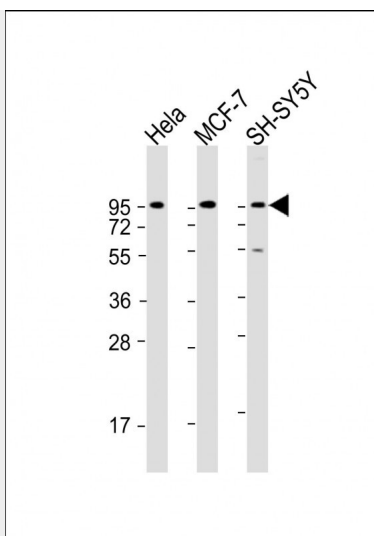
**DAG1 Antibody (C-term) - Protocols**

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

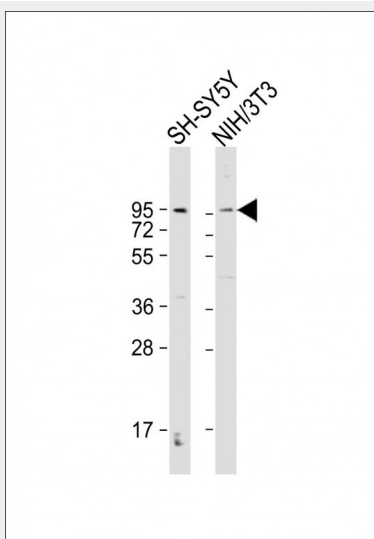
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**DAG1 Antibody (C-term) - Images**

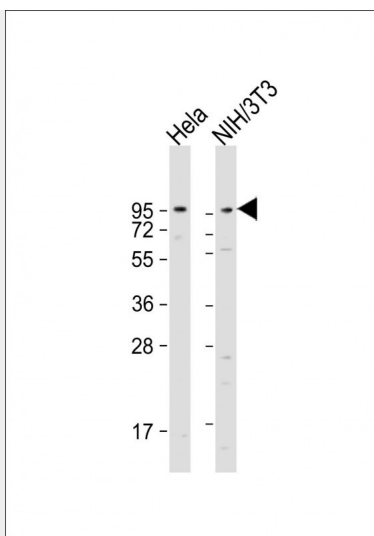
Anti-DAG1 Antibody (C-term) at 1:1000 dilution + NIH/3T3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 97 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



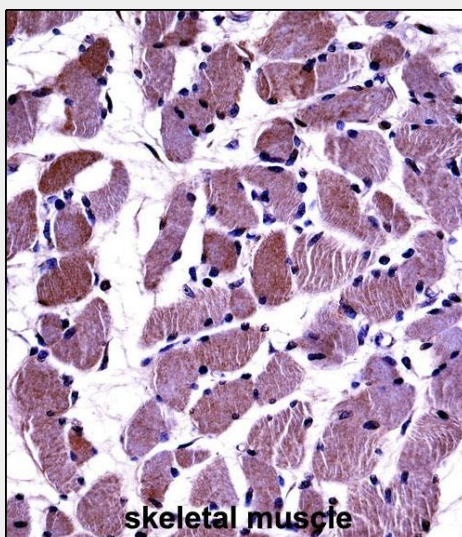
All lanes : Anti-DAG1 Antibody (C-term) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: MCF-7 whole cell lysate Lane 3: SH-SY5Y whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 97 kDa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



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 µg 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.



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 µg 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.



DAG1 Antibody (C-term) (AP14101b) 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.

### **DAG1 Antibody (C-term) - Background**

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.

#### **DAG1 Antibody (C-term) - References**

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Lara-Chacon, B., et al. J. Cell. Biochem. 110(3):706-717(2010)  
Sgambato, A., et al. Pathology 42(3):248-254(2010)  
Masaki, T., et al. J. Biomed. Biotechnol. 2010, 740403 (2010) :