10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DAG1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14101b

Specification

DAG1 Antibody (C-term) - Product Information

Application	**IHC-P, WB,E**
Primary Accession	Q14118
Other Accession	Q28685, Q29243, NP_001171107.1, NP_001171111.1, NP_004384.4
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

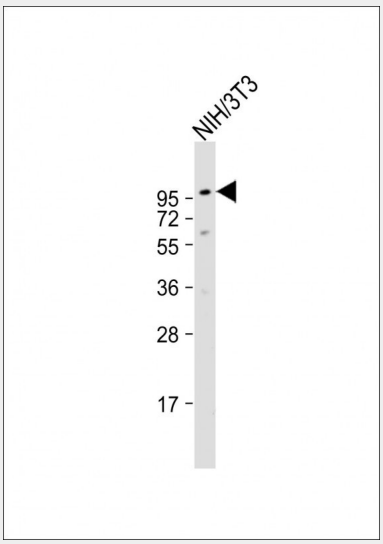
Tissue Location
Expressed in a variety of fetal and adult tissues. In epidermal tissue, located to the basement membrane. Also expressed in keratinocytes and fibroblasts.

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 Cytomety
- 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.

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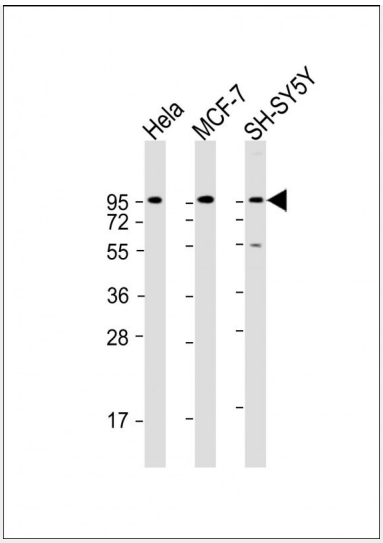
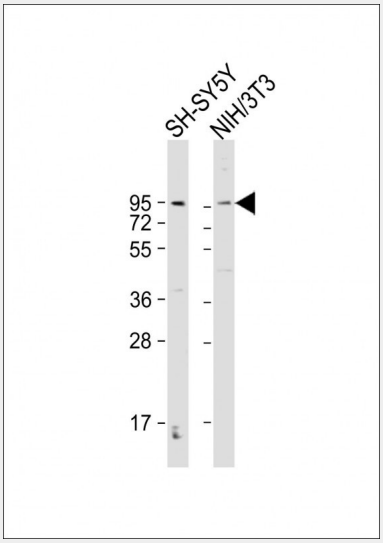


All lanes : Anti-DAG1 Antibody (C-term) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: MCF-7 whole cell lysate Lane 3: SH-SY5Y whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 97 kDa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



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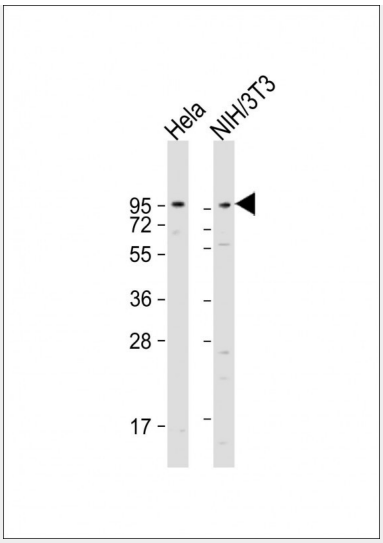

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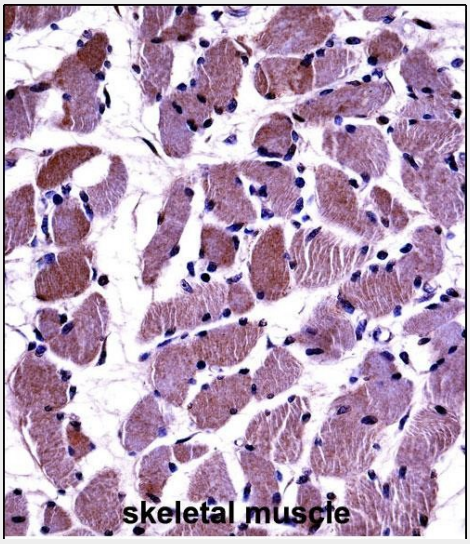

DAG1 Antibody (C-term) (AP14101b)immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of DAG1 Antibody (C-term) for immunohistochemistry. Clinical relevance 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

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
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