

**DAG1 Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP14101b****Specification**

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**DAG1 Antibody (C-term) Blocking peptide - Product Information**Primary Accession [Q14118](#)**DAG1 Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 1605**Other Names**

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

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody AP14101b was selected from the C-term region of DAG1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

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

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

- [Blocking Peptides](#)

### **DAG1 Antibody (C-term) Blocking peptide - Images**

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

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Nilsson, J., et al. Glycobiology 20(9):1160-1169(2010) 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) :