For Research Use Only

## Dystroglycan Monoclonal antibody, PBS Only



**Purification Method:** 

Protein A purification

CloneNo.:

2B1G12

Catalog Number:66735-1-PBS

Featured Product

**Basic Information** 

Catalog Number: GenBank Accession Number: BC012740

66735-1-PBS

Size:

GeneID (NCBI): 1mg/ml

**UNIPROT ID:** Source: Mouse Q14118 Full Name: Isotype:

lgG1 dystroglycan 1 (dystrophin-associated glycoprotein 1)

Immunogen Catalog Number: AG27222 Calculated MW: 97 kDa

Observed MW: 43 kDa, 30 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, Indirect ELISA

Species Specificity: human, mouse, rat, pig

## **Background Information**

Dystroglycan, also known as DAG1 or DG, was originally isolated from skeletal muscle as an integral membrane component of the dystrophin-glycoprotein complex (DGC). In addition to skeletal muscle, dystroglycan is strongly expressed in heart and smooth muscle, as well as many non-muscle tissues including brain and peripheral nerve (PMID: 12556455). The dystroglycan 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. Dystroglycan consists of two subunits (alpha and beta), which are translated from a single mRNA as a propeptide that is proteolytically cleaved into two noncovalently associated proteins (PMID: 16410545). Alpha-dystroglycan is a 156-kDa extracellular peripheral glycoprotein, while beta-dystroglycan is a 43-kDa transmembrane protein (PMID: 9858474). The 43-kDa beta-dystroglycan can be cleaved into a ~30-kDa form (PMID: 14678802; 18458097; 17255331).

Storage

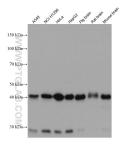
Storage:

Store at -80°C.

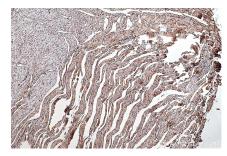
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C Storage Buffer:

PBS Only

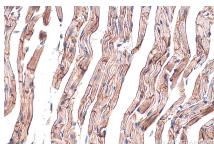
## Selected Validation Data



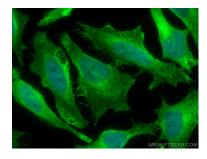
Various lysates were subjected to SDS PAGE followed by western blot with 66735-1-1g (Dystroglycan antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66735-1-PBS in a different storage buffer formulation



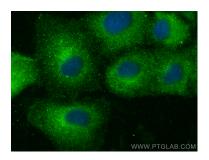
Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 66735-1-Ig (Dystroglycan antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66735-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 66735-1-Ig (Dystroglycan antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66735-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Dystroglycan antibody (66735-1-Ig, Clone: 2B1G12) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66735-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed A549 cells using Dystroglycan antibody (66735-1-1g, Clone: 2B1G12) at dilution of 1:1000 and Multi-rAb Coralite ® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002). This data was developed using the same antibody clone with 66735-1-PBS in a different storage buffer formulation.

Immunohistochemical analysis of paraffinembedded human colon tissue slide using 66735-1- Ig (Dystroglycan antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66735-1-PBS in a different storage buffer formulation.