#### For Research Use Only

# Dystroglycan Polyclonal antibody

Catalog Number: 11017-1-AP

Featured Product

11 Publications



**Basic Information** 

 Catalog Number:
 GenBank Accession Number:

 11017-1-AP
 BC012740

 Size:
 GeneID (NCBI):

 450 μg/ml
 1605

 Source:
 UNIPROT ID:

 Rabbit
 Q14118

Isotype: Full Name:
IgG dystroglycan 1 (dystrophin-associated

Immunogen Catalog Number: glycoprotein 1)
AG1456 Calculated MW:
97 kDa

Observed MW: 40-43 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications: WB, IHC, CoIP, IF Species Specificity: human, mouse, rat Cited Species: human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 **Positive Controls:** 

WB: HepG2 cells, mouse skeletal muscle tissue, mouse brain tissue, HeLa cells

**Purification Method:** 

WB 1:5000-1:50000

protein lysate

IHC 1:50-1:500

IF/ICC 1:10-1:100

Antigen affinity purification

IP 0.5-4.0 ug for 1.0-3.0 mg of total

Recommended Dilutions:

IP: mouse brain tissue.

IHC: mouse heart tissue, mouse skeletal muscle

tissue, mouse brain tissue

IF/ICC : HeLa cells.

## **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).

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Yuko Matsuura-Hachiya	29124203	Biochem Biophys Rep	IF
Shao-Wei Lu	32929072	Nat Commun	IHC
Katie L Skeffington	35355976	Front Cardiovasc Med	IHC

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

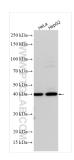
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

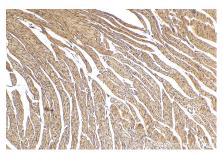
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

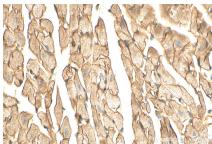
## Selected Validation Data



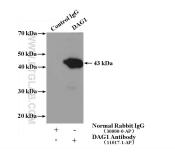
Various lysates were subjected to SDS PAGE followed by western blot with 11017-1-AP (Dystroglycan antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours.



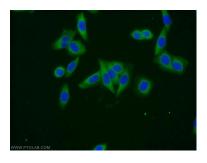
Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 11017-1-AP (Dystroglycan antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



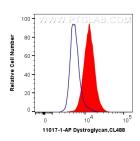
Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 11017-1-AP (Dystroglycan antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-Dystroglycan (IP:11017-1-AP, 4ug; Detection:11017-1-AP 1:500) with mouse brain tissue lysate 2640ug.



Immunofluorescent analysis of HeLa cells using 11017-1-AP (Dystroglycan antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit  $\lg G(H+L)$ .



1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human Dystroglycan (11017-1-AP) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit I gG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).