For Research Use Only

Dystroglycan Polyclonal antibody

Catalog Number:11017-1-AP Featured Product 11 Publications

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Basic Information

Catalog Number:
11017-1-AP

Size:
150ul , Concentration: 450 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG1456

GenBank Accession Number:
BC012740

GeneID (NCBI):
1605

UNIPROT ID:
Q14118

Full Name:
dystroglycan 1 (dystrophin-associated glycoprotein 1)

Calculated MW:
97 kDa

Observed MW:
40-43 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:5000-1:50000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500
IF/ICC 1:10-1:100

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

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

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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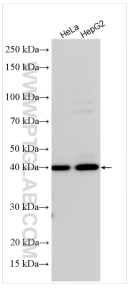
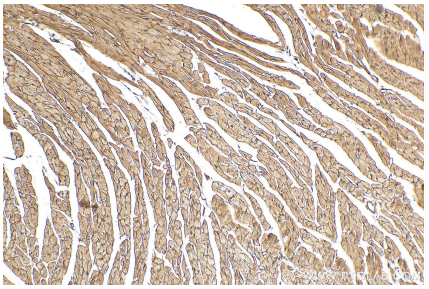
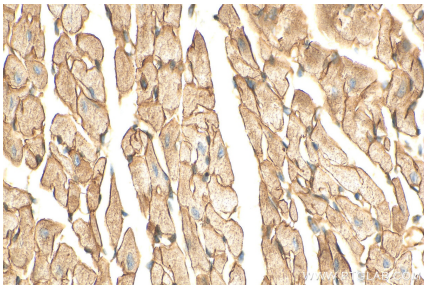
Selected Validation Data



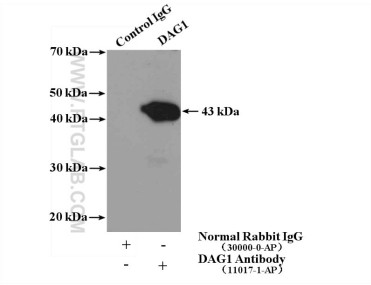
Various lysates were subjected to SDS PAGE followed by western blot with 11017-1-AP (Dystroglycan antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours.



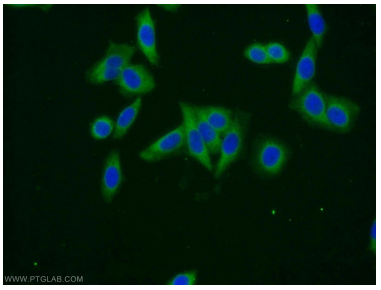
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 11017-1-AP (Dystroglycan antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



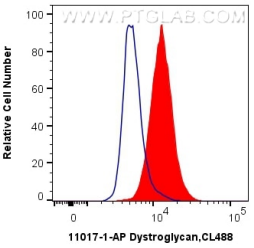
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 11017-1-AP (Dystroglycan antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 Goat Anti-Rabbit IgG(H+L).



1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human Dystroglycan (11017-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(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).