For Research Use Only

Dystroglycan Polyclonal antibody

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Catalog Number:11017-1-AP 4 Publications

Basic Information

Catalog Number:
11017-1-AP

Size:
150ul , Concentration: 240 μg/ml by Nanodrop and 133 μg/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG1456

GenBank Accession Number:
BC012740

GeneID (NCBI):
1605

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

Calculated MW:
97 kDa

Observed MW:
43 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:1000
IP 0.5-4.0 ug for IP and 1:500-1:1000 for WB
IHC 1:50-1:500
IF 1:10-1:100

Applications

Tested Applications:
IF, IHC, IP, WB, ELISA

Cited Applications:
IF, IHC, WB

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

IP : mouse brain tissue,

IHC : mouse heart tissue, mouse skeletal muscle tissue, human lung cancer tissue

IF : 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
Vanessa Dietinger	32586342	Cell Commun Signal	WB

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: 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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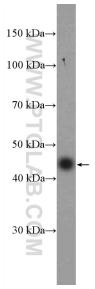
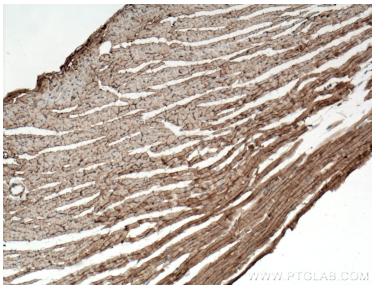
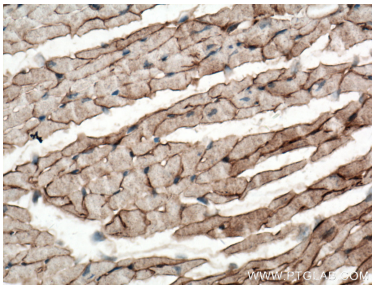
Selected Validation Data



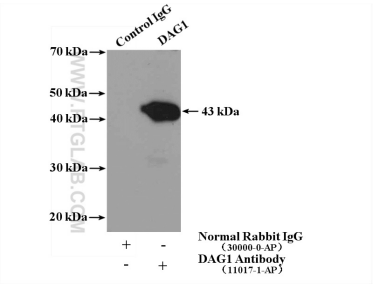
mouse brain tissue were subjected to SDS PAGE followed by western blot with 11017-1-AP (Dystroglycan antibody at dilution of 1:600 incubated at room temperature for 1.5 hours.



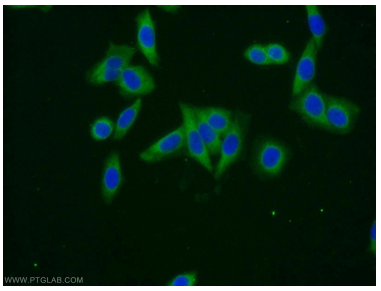
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 11017-1-AP (Dystroglycan antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 AffiniPure Goat Anti-Rabbit IgG(H+L).