**BACKGROUND**

Dystroglycan (DG) is a cell surface receptor for several extracellular matrix molecules including laminins, Agrin and Perlecain. Dystroglycan function is required for the formation of basement membranes in early development and the organization of Laminin on the cell surface. α-dystroglycan is a membrane-associated, extracellular glycoprotein that is anchored to the cell-membrane by binding to the transmembrane glycoprotein β-dystroglycan to form an α/β-dystroglycan-complex. Additionally, dystroglycan is part of a multimolecular complex, where it associates with dystrophin, at the sarcolemma, to form the dystrophin-associated protein complex, or with utrophin, at the neuromuscular junction, to form the utrophin-associated protein complex. Dystroglycan is also thought to participate in the clustering of nicotinic acetylcholine receptors at the neuromuscular junction.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: DAG1 (human) mapping to 3p21.31; Dag1 (mouse) mapping 9 F2.

**SOURCE**

α-dystroglycan (IIH6) is a mouse monoclonal antibody raised against purified dystrophin-glycoprotein complex of rabbit origin.

**PRODUCT**

Each vial contains 200 µg lgM in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

α-dystroglycan (IIH6) is available conjugated to agarose (sc-53987 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53987 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; and to either phycoerythrin (sc-53987 PE), fluorescein (sc-53987 FITC), Alexa Fluor® 488 (sc-53987 AF488) or Alexa Fluor® 647 (sc-53987 AF647), 200 µg/ml, for IF, IHC(P) and FCM.

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**STORAGE**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

α-dystroglycan (IIH6) is recommended for detection of α-dystroglycan of mouse, rat, human, rabbit and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for α/β-dystroglycan siRNA (h): sc-43488, α/β-dystroglycan siRNA (m): sc-43489, α/β-dystroglycan shRNA Plasmid (h): sc-43488-SH, α/β-dystroglycan shRNA Plasmid (m): sc-43489-SH, α/β-dystroglycan shRNA (h) Lentiviral Particles: sc-43488-V and α/β-dystroglycan shRNA (m) Lentiviral Particles: sc-43489-V.

Molecular Weight of α-dystroglycan skeletal muscle: 156 kDa.

Molecular Weight of α-dystroglycan brain: 120 kDa.

Positive Controls: rat skeletal muscle extract: sc-364810, mouse skeletal muscle extract: sc-364250 or human skeletal muscle extract: sc-363776.

**DATA**

α-dystroglycan (IIH6): sc-53987 Western blot analysis of α-dystroglycan expression in mouse skeletal muscle (A), rat skeletal muscle (B) and human skeletal muscle (C) tissue extracts.

α-dystroglycan (IIH6): sc-53987 Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing membrane staining of trophoblastic cells.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.