**α-dystroglycan (IIH6): sc-53987**

**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 multi-molecular 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.

**CHROMOSOMAL LOCATION**

Genetic locus: DAG1 (human) mapping to 3p21.31; Dag1 (mouse) mapping to 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 IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**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 shRNA (m): sc-43488; **α**/**β**-dystroglycan shRNA Plasmid (m): sc-43488-SH, **α**/**β**-dystroglycan shRNA Plasmid (h): sc-43488-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.

**STORAGE**

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

**RESEARCH USE**

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

**DATA**

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

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.