

γ-sarcoglycan (3C5): sc-293469

BACKGROUND

The sarcoglycan transmembrane proteins are members of the dystrophin complex. Sarcoglycans cluster together to form a complex, which is localized in the cell membrane of skeletal, cardiac and smooth muscle fibers. Four sarcoglycan subunit proteins, designated α -, β -, γ - and δ -sarcoglycan, form a complex on the skeletal muscle cell surface membrane. A genetic defect in any one of these proteins causes the loss or marked decrease of the whole sarcoglycan complex, which is observed in the autosomal recessive muscular dystrophy, sarcoglycanopathy. In smooth muscle, β - and δ -sarcoglycans are associated with ϵ -sarcoglycan, a glycoprotein homologous to α -sarcoglycan. Additionally, a complete deficiency in δ -sarcoglycan is the cause of the Syrian hamster BIO.14 cardiomyopathy.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SGCG (human) mapping to 13q12.12.

SOURCE

γ -sarcoglycan (3C5) is a mouse monoclonal antibody raised against amino acids 191-290 representing partial length γ -sarcoglycan of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

γ -sarcoglycan (3C5) is recommended for detection of γ -sarcoglycan of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

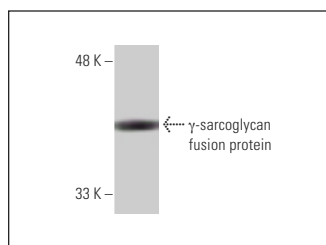
Suitable for use as control antibody for γ -sarcoglycan siRNA (h): sc-43424, γ -sarcoglycan shRNA Plasmid (h): sc-43424-SH and γ -sarcoglycan shRNA (h) Lentiviral Particles: sc-43424-V.

Molecular Weight of γ -sarcoglycan: 35 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



γ -sarcoglycan (3C5): sc-293469. Western blot analysis of human recombinant γ -sarcoglycan fusion protein.

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.

PROTOCOLS

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