

ε-sarcoglycan (H-67): sc-28282

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: SGCE (human) mapping to 7q21.3; Sgce (mouse) mapping to 6 A1.

SOURCE

ϵ -sarcoglycan (H-67) is a rabbit polyclonal antibody raised against amino acids 24-90 mapping within an extracellular domain of ϵ -sarcoglycan of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

ϵ -sarcoglycan (H-67) is recommended for detection of ϵ -sarcoglycan of mouse, rat and 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ϵ -sarcoglycan (H-67) is also recommended for detection of ϵ -sarcoglycan in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ϵ -sarcoglycan siRNA (h): sc-43422, ϵ -sarcoglycan siRNA (m): sc-43423, ϵ -sarcoglycan shRNA Plasmid (h): sc-43422-SH, ϵ -sarcoglycan shRNA Plasmid (m): sc-43423-SH, ϵ -sarcoglycan shRNA (h) Lentiviral Particles: sc-43422-V and ϵ -sarcoglycan shRNA (m) Lentiviral Particles: sc-43423-V.

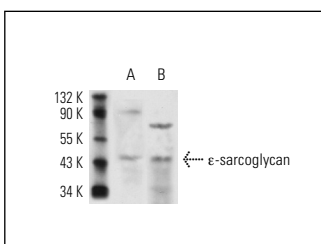
Molecular Weight of ϵ -sarcoglycan: 44 kDa.

Positive Controls: mouse brain extract: sc-2253, A549 cell lysate: sc-2413 or mouse heart extract: sc-2254.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ϵ -sarcoglycan (H-67): sc-28282. Western blot analysis of ϵ -sarcoglycan expression in A549 whole cell lysate (A) and mouse heart tissue extract (B).

RESEARCH USE

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

PROTOCOLS

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