SANTA CRUZ BIOTECHNOLOGY, INC.

myomegalin (T-16): sc-74689

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Myomegalin, also known as PDE4DIP (phosphodiesterase 4D-interacting protein), CMYA2 (cardiomyopathy-associated protein 2) or MMGL, is a 2, 346 amino acid protein that contains one NBPF domain and localizes to the nucleus, cytoplasm, centrosome and Golgi apparatus. Expressed at high levels in fetal and adult heart and at lower levels in brain and placenta, myomegalin is thought to function as an anchoring protein that sequesters members of the cAMP-dependent pathway to the Golgi and to centrosomes, thereby mediating cAMP pathway dynamics. Translocations in the gene that encodes myomegalin are associated with myeloproliferative disorders (MBDs), a group of diseases caused by an overproduction of blood cells.

CHROMOSOMAL LOCATION

Genetic locus: PDE4DIP (human) mapping to 1q21.1; Pde4dip (mouse) mapping to 3 F2.2.

SOURCE

myomegalin (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of myomegalin of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-74689 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

myomegalin (T-16) is recommended for detection of myomegalin of mouse, rat and human 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

myomegalin (T-16) is also recommended for detection of myomegalin in additional species, including equine.

Suitable for use as control antibody for myomegalin siRNA (h): sc-75849, myomegalin siRNA (m): sc-75850, myomegalin shRNA Plasmid (h): sc-75849-SH, myomegalin shRNA Plasmid (m): sc-75850-SH, myomegalin shRNA (h) Lentiviral Particles: sc-75849-V and myomegalin shRNA (m) Lentiviral Particles: sc-75850-V.

Molecular Weight of testis myomegalin: 62 kDa.

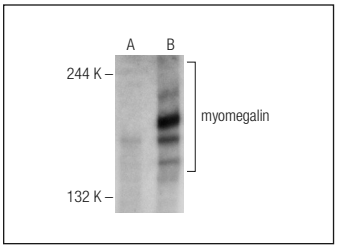
Molecular Weight of heart and skeletal muscle myomegalin: 230-250 kDa.

Positive Controls: myomegalin (h): 293T Lysate: sc-372427.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



myomegalin (T-16): sc-74689. Western blot analysis of myomegalin expression in non-transfected: sc-117752 (**A**) and human myomegalin transfected: sc-372427 (**B**) 293T whole cell lysates.

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.

MONOS Satisfaction Guaranteed

Try **myomegalin (S-17): sc-100921**, our highly recommended monoclonal alternative to myomegalin (T-16).