

JP-45 (G-14): sc-139145

BACKGROUND

JP-45 (junctional-face membrane protein of 45 kDa homolog), also known as JSRP1 (junctional sarcoplasmic reticulum protein 1), is a 331 amino acid sarcoplasmic and endoplasmic reticulum membrane protein. Interacting with L-type Ca⁺⁺ CP α 1S, L-type Ca⁺⁺ CP β 1B and calsequestrin, JP-45 may participate in the regulation of the L-type Ca⁺⁺ CP α 1S voltage-sensitive calcium channel as well as the regulation of L-type Ca⁺⁺ CP α 1S membrane targeting and activity. JP-45 may also have a role in the excitation and contraction coupling of muscle cells via interactions with key proteins present in the sarcoplasmic reticulum (SR). JP-45's interaction with SR proteins make it an important component to skeletal muscle development and maintenance. The gene encoding JP-45 maps to human chromosome 19p13.3, silencing of this gene, while having no effect on postnatal development, may result in decreased muscle strength.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: JSRP1 (human) mapping to 19p13.3.

SOURCE

JP-45 (G-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of JP-45 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139145 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

JP-45 (G-14) is recommended for detection of JP-45 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for JP-45 siRNA (h): sc-97676, JP-45 shRNA Plasmid (h): sc-97676-SH and JP-45 shRNA (h) Lentiviral Particles: sc-97676-V.

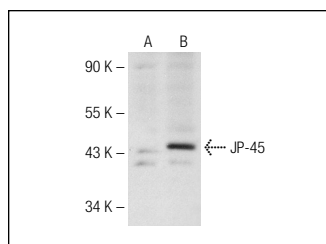
Molecular Weight (predicted) of JP-45 isoforms 1/2 in human: 54/40 kDa.

Molecular Weight (predicted) of JP-45 isoforms 1/2 in mouse: 36/31 kDa.

Molecular Weight (observed) of JP-45 in mouse: 50 kDa.

Positive Controls: JP-45 (h): 293T Lysate: sc-177413.

DATA



JP-45 (G-14): sc-139145. Western blot analysis of JP-45 expression in non-transfected: sc-117752 (A) and human JP-45 transfected: sc-177413 (B) 293T whole cell lysates.

STORAGE

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

PROTOCOLS

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