calsequestrin 2 (C-16): sc-16576

BACKGROUND
Calsequestrin (CS), also known as CSQ, is the major calcium-binding protein of cardiac and skeletal muscle whose function is to sequester calcium in the lumen of the sarcoplasmic reticulum (SR). In mammals, there are two forms of this protein, calsequestrin 1 and calsequestrin 2, which encode fast-twitch skeletal muscle and cardiac calsequestrin, respectively. The form of calsequestrin 1, known as Calmitin, is located in the terminal cisternae luminal spaces of the SR of fast skeletal muscle cells. Calsequestrin 2 is present in the terminal cisternae luminal spaces of the SR in both cardiac and slow skeletal muscle cells. In addition, calsequestrin regulates the ryanodine receptor signalling (RyR) through Triadin and Junctin.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: CASQ2 (human) mapping to 1p13.1; Casq2 (mouse) mapping to 3 F2.2.

SOURCE
calsequestrin 2 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of calsequestrin 2 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-16576 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.

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

APPLICATIONS
calsequestrin 2 (C-16) is recommended for detection of calsequestrin 2 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

calsequestrin 2 (C-16) is also recommended for detection of calsequestrin 2 in additional species, including equine, canine, bovine, porcine and avian.


Molecular Weight of calsequestrin 2: 40-46 kDa.

Positive Controls: rat heart extract: sc-2393 or mouse heart extract: sc-2254.

DATA

SELECT PRODUCT CITATIONS

Try calsequestrin 2 (E-12): sc-390999, our highly recommended monoclonal alternative to calsequestrin 2 (C-16).