SANTA CRUZ BIOTECHNOLOGY, INC.

SCARA3 (G-16): sc-87421



BACKGROUND

SCARA3 (scavenger receptor class A, member 3), also known as CSR, APC7, CSR1, MSLR1 or MSRL1, is a ubiquitously expressed 606 amino acid singlepass type II membrane protein. Localized to the membrane of the endoplasmic reticulum (ER) and the Golgi apparatus, SCARA3 functions as a macrophage scavenger receptor-like protein that removes oxidative molecules or oxidation by-products from the cell. Via its ability to deplete reactive oxygen species, SCARA3 plays an important role in preventing oxidative stress within the cell. Expression of SCARA3 is upregulated in response to UV damage, further supporting its role as an oxidative scavenger. In addition, SCARA3 is downregulated in prostate tumor cells, suggesting a possible role in tumor suppression. SCARA3 contains two collagen-like domains and is expressed as multiple isoforms due to alternative splicing events.

CHROMOSOMAL LOCATION

Genetic locus: SCARA3 (human) mapping to 8p21.1; Scara3 (mouse) mapping to 14 D1.

SOURCE

SCARA3 (G-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of SCARA3 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-87421 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SCARA3 (G-16) is recommended for detection of SCARA3 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); non cross-reactive with SCARA5.

SCARA3 (G-16) is also recommended for detection of SCARA3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SCARA3 siRNA (h): sc-77804, SCARA3 siRNA (m): sc-153248, SCARA3 shRNA Plasmid (h): sc-77804-SH, SCARA3 shRNA Plasmid (m): sc-153248-SH, SCARA3 shRNA (h) Lentiviral Particles: sc-77804-V and SCARA3 shRNA (m) Lentiviral Particles: sc-153248-V.

Molecular Weight (predicted) of SCARA3 isoforms: 65/52 kDa.

Molecular Weight (observed) of SCARA3: 50 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, Hep G2 cell lysate: sc-2227 or HEK293 whole cell lysate: sc-45136.

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) Immunofluo-rescence: 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



SCARA3 (G-16): sc-87421. Western blot analysis of SCARA3 expression in Hep G2 (**A**) and HEK293 (**B**) whole cell lysates.

STORAGE

Store at 4° C, **D0 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 or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try **SCARA3 (10-L): sc-100310**, our highly recommended monoclonal alternative to SCARA3 (G-16).