

HSCARG (Q-15): sc-164609

BACKGROUND

HSCARG, also known as NMRAL1 (NmrA-like family domain-containing protein 1), is a 299 amino acid redox sensor protein that belongs to the NmrA-type oxidoreductase family. Localizing primarily to the cytoplasm and perinuclear region, HSCARG localization to the nucleus may occur with increased intracellular nitric oxide and reduced NADPH/NADP⁺ ratios. Existing as a homodimer, HSCARG interacts with ASS1, inhibiting ASS1 activity in the presence of low NADPH/NADP⁺ ratios. HSCARG gets induced by nitric oxide, cGMP and proinflammatory cytokines. The gene encoding HSCARG maps to human chromosome 16p13.3 and mouse chromosome 16 A1. Overexpression of the gene encoding HSCARG results in increased cell viability.

CHROMOSOMAL LOCATION

Genetic locus: NMRAL1 (human) mapping to 16p13.3; Nmr1 (mouse) mapping to 16 A1.

SOURCE

HSCARG (Q-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HSCARG 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-164609 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

HSCARG (Q-15) is recommended for detection of HSCARG of human origin and NMRAL1 of mouse 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).

HSCARG (Q-15) is also recommended for detection of HSCARG in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for HSCARG siRNA (h): sc-93304, NMRAL1 siRNA (m): sc-150010, HSCARG shRNA Plasmid (h): sc-93304-SH, NMRAL1 shRNA Plasmid (m): sc-150010-SH, HSCARG shRNA (h) Lentiviral Particles: sc-93304-V and NMRAL1 shRNA (m) Lentiviral Particles: sc-150010-V.

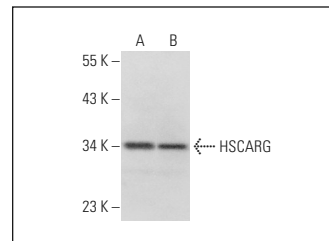
Molecular Weight of HSCARG: 33 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

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



HSCARG (Q-15): sc-164609. Western blot analysis of HSCARG expression in Jurkat (A) and K-562 (B) 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.


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Try **HSCARG (D-1): sc-514369**, our highly recommended monoclonal alternative to HSCARG (Q-15).