

Grim19 (C-14): sc-47027

BACKGROUND

The Grim family of proteins appear to be novel types of tumor suppressors. Grim19, which stands for gene associated with retinoic-interferon-induced mortality 19 protein, is also designated cell death-regulatory protein Grim19 or NADH dehydrogenase ubiquinone 1 α subcomplex subunit 13. The Grim19 protein plays two roles within the cell. As a member of the interferon- β and retinoic acid-induced pathway of cell death, Grim19 induces apoptosis. As part of the mitochondrial complex I, Grim19 is essential for its assembly and electron transfer activity. It transfers electrons to the respiratory chain from NADH and plays a role in the interferon/all-*trans*-retinoic acid (IFN/RA) cell death pathway. It localizes primarily to the mitochondrion, but may translocate to the nucleus upon IFN/RA treatment. Grim19 may also be useful as a biological marker or target for drug development.

REFERENCES

1. Brzustowicz, L.M., et al. 1992. Fine-mapping of the spinal muscular atrophy locus to a region flanked by MAP1B and D5S6. *Genomics* 13: 991-998.
2. Angell, J.E., et al. 2000. Identification of Grim19, a novel cell death-regulatory gene induced by the interferon- β and retinoic acid combination, using a genetic approach. *J. Biol. Chem.* 275: 33416-33426.

CHROMOSOMAL LOCATION

Genetic locus: Ndufa13 (mouse) mapping to 8 B3.3.

SOURCE

Grim19 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Grim19 of mouse origin.

PRODUCT

Each vial contains 200 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-47027 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Grim19 (C-14) is recommended for detection of Grim19 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Grim19 (C-14) is also recommended for detection of Grim19 in additional species, including equine, canine, bovine and porcine.

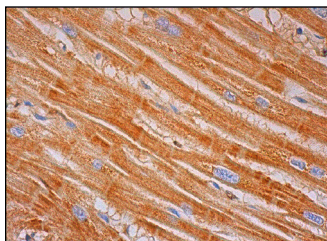
Suitable for use as control antibody for Grim19 siRNA (m): sc-60766, Grim19 shRNA Plasmid (m): sc-60766-SH and Grim19 shRNA (m) Lentiviral Particles: sc-60766-V.

Molecular Weight of Grim19: 16 kDa.

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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Grim19 (C-14): sc-47027. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

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.

PROTOCOLS

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


 MONOS
Satisfaction
Guaranteed

Try **Grim19 (F-10): sc-365978** or **Grim19 (H-10): sc-514111**, our highly recommended monoclonal alternatives to Grim19 (C-14).