SANTA CRUZ BIOTECHNOLOGY, INC.

RASSF6 (W-14): sc-104643

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The Power to Question

BACKGROUND

Ras is a small GTP-binding protein involved in many cellular processes, including proliferation, differentiation and apoptosis. Ras transmits signals of cell surface receptors by binding to a variety of effector molecules. In addition to the well characterized effectors Raf and PI 3-kinase, Ras also interacts with members of the RASSF family, including RASSF1, RASSF2, RASSF3, RASSF4, RASSF6 and Nore1. Members of the RASSF family contain a highly conserved Ras association domain (Ral GDS/AF-6 or RA) and function as Ras effectors/tumor suppressors. RASSF6 (Ras association (RalGDS/AF-6) domain family member 6) is a 369 amino acid protein that contains one Ras-associating domain and one SARAH domain and is thought to function as a Ras effector protein. Multiple isoforms of RASSF6 exist due to alternative splicing events.

REFERENCES

1. Eckfeld, K., et al. 2004. RASSF4/AD037 is a potential ras effector/tumor suppressor of the RASSF family. Cancer Res. 64: 8688-8693.
2. van der Weyden, L. and Adams, D.J. 2007. The Ras-association domain family (RASSF) members and their role in human tumourigenesis. Biochim. Biophys. Acta 1776: 58-85.
3. Ikeda, M., et al. 2007. Ras-association domain family protein 6 induces apoptosis via both caspase-dependent and caspase-independent pathways. Exp. Cell Res. 313: 1484-1495.
4. Allen, N.P., et al. 2007. RASSF6 is a novel member of the RASSF family of tumor suppressors. Oncogene 26: 6203-6211.
5. Avruch, J., et al. 2009. RASSF family of tumor suppressor polypeptides. J. Biol. Chem. 284: 11001-11005.
6. Richter, A.M., et al. 2009. The RASSF proteins in cancer; from epigenetic silencing to functional characterization. Biochim. Biophys. Acta. 1796: 114-128.
7. Online Mendelian Inheritance in Man, OMIM™. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 612620. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: RASSF6 (human) mapping to 4q13.3; Rassf6 (mouse) mapping to 5 E1.

SOURCE

RASSF6 (W-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RASSF6 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-104643 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RASSF6 (W-14) is recommended for detection of RASSF6 of mouse, rat and human 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other RASSF family members.

RASSF6 (W-14) is also recommended for detection of RASSF6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RASSF6 siRNA (h): sc-89270, RASSF6 siRNA (m): sc-106485, RASSF6 shRNA Plasmid (h): sc-89270-SH, RASSF6 shRNA Plasmid (m): sc-106485-SH, RASSF6 shRNA (h) Lentiviral Particles: sc-89270-V and RASSF6 shRNA (m) Lentiviral Particles: sc-106485-V.

Molecular Weight of RASSF6: 43 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.

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.