

RASSF8 (4B1): sc-81934

BACKGROUND

RASSF8 (Ras association (RalGDS/AF-6 or RA) domain (N-terminal) family member 8), also known as HoJ-1 (carcinoma-associated protein HoJ-1), is an evolutionarily conserved member of the N-terminal RASSF family which is also comprised of RASSF7, PAMCI (or RASSF9) and RASSF10. RASSF8 contains an N-terminal RA domain and is believed to participate in the Ras signaling pathway. A reciprocal chromosomal translocation involving the genes encoding RASSF8 and Fibulin-1 is associated with a complex form of synpolydactyly, a condition in which there are typically more than five digits on a hand or foot and patients exhibit webbing or fusion of fingers and toes. In addition, RASSF8 is capable of acting as a tumor suppressor in lung cancer, as is suggested by the ectopic expression of RASSF8 inhibiting anchorage-independent growth. This implies that the loss of functional RASSF8 may be implicated in the development of lung cancer.

REFERENCES

1. Debeer, P., et al. 2002. The Fibulin-1 gene (FBLN1) is disrupted in a t(12;22) associated with a complex type of synpolydactyly. *J. Med. Genet.* 39: 98-104.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 608180. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Falvella, F.S., et al. 2006. Identification of RASSF8 as a candidate lung tumor suppressor gene. *Oncogene* 25: 3934-3938.
4. Falvella, F.S., et al. 2007. Common polymorphisms in D12S1034 flanking genes RASSF8 and BHLHB3 are not associated with lung adenocarcinoma risk. *Lung Cancer* 56: 1-7.
5. Sherwood, V., et al. 2008. RASSF7 is a member of a new family of Ras association domain-containing proteins and is required for completing mitosis. *Mol. Biol. Cell* 19: 1772-1782.

CHROMOSOMAL LOCATION

Genetic locus: RASSF8 (human) mapping to 12p12.1; Rassf8 (mouse) mapping to 6 G3.

SOURCE

RASSF8 (4B1) is a mouse monoclonal antibody raised against recombinant RASSF8 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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

ASSF8 (4B1) is recommended for detection of RASSF8 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).

Suitable for use as control antibody for RASSF8 siRNA (h): sc-76357, RASSF8 siRNA (m): sc-76358, RASSF8 shRNA Plasmid (h): sc-76357-SH, RASSF8 shRNA Plasmid (m): sc-76358-SH, RASSF8 shRNA (h) Lentiviral Particles: sc-76357-V and RASSF8 shRNA (m) Lentiviral Particles: sc-76358-V.

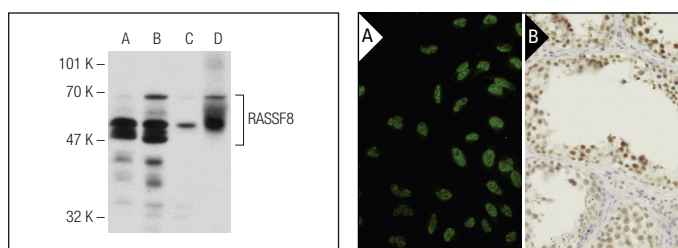
Molecular Weight of RASSF8: 48 kDa.

Positive Controls: HeLa cell lysate: sc-2200, F9 cell lysate: sc-2245 or mouse testis extract: sc-2405.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



RASSF8 (4B1): sc-81934. Western blot analysis of RASSF8 expression in HeLa (A), NIH/3T3 (B) and F9 (C) whole cell lysates and mouse testis tissue extract (D).

RASSF8 (4B1): sc-81934. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells (A) and immunoperoxidase staining of formalin-fixed, paraffin-embedded human testis tissue (B) showing nuclear localization.

PROTOCOLS

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