# RASSF7 (L-14): sc-132781



The Power to Question

#### **BACKGROUND**

Activated Ras proteins may induce senescence, apoptosis and terminal differentiation, though they are often associated with stimulating growth and transformation. Members of the RASSF family contain a highly conserved Ras association domain (RalGDS/AF-6 or RA) and function as Ras effectors/tumor suppressors. RASSF7 (Ras association domain-containing protein 7), also designated HRAS1-related cluster protein 1, is a 373 amino acid protein that localizes to the centrosome. RASSF7, RASSF8, RASSF9 and RASSF10 are four evolutionary conserved proteins that are collectively known as the N-terminal RASSF family. Expressed in skin, neural tube and eye, RASSF7 is believed to play an essential role in mitosis. Further supporting its mitotic role, knockdown of *Xenopus* RASSF7 has been shown to influence cell failure to form mitotic spindle and also cause nuclear breakdown and apoptosis. As a result of alternative splicing events, there are three characterized isoforms of RASSF7 that primarily differ in the C-terminus.

### **REFERENCES**

- Weitzel, J.N., Kasperczyk, A., Mohan, C. and Krontiris, T.G. 1992. The HRAS1 gene cluster: two upstream regions recognizing transcripts and a third encoding a gene with a leucine zipper domain. Genomics 14: 309-319.
- Weitzel, J.N. and Patel, J. 1994. A single P<sub>1</sub> clone bearing three genes from human chromosome 11p15.5: HRC1, HRAS1, and RNH. Genet. Anal. Tech. Appl. 11: 165-170.
- 3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 143023. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Song, M.S., Chang, J.S., Song, S.J., Yang, T.H., Lee, H. and Lim, D.S. 2005. The centrosomal protein RAS association domain family protein 1A (RASSF1A)-binding protein 1 regulates mitotic progression by recruiting RASSF1A to spindle poles. J. Biol. Chem. 280: 3920-3927.

#### CHROMOSOMAL LOCATION

Genetic locus: RASSF7 (human) mapping to 11p15.5; Rassf7 (mouse) mapping to 7 F5.

# SOURCE

RASSF7 (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RASSF7 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-132781 P, (100  $\mu$ g 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**

RASSF7 (L-14) is recommended for detection of RASSF7 isoforms 1 and 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 other RASSF family members.

Suitable for use as control antibody for RASSF7 siRNA (h): sc-96878, RASSF7 siRNA (m): sc-152716, RASSF7 shRNA Plasmid (h): sc-96878-SH, RASSF7 shRNA Plasmid (m): sc-152716-SH, RASSF7 shRNA (h) Lentiviral Particles: sc-96878-V and RASSF7 shRNA (m) Lentiviral Particles: sc-152716-V.

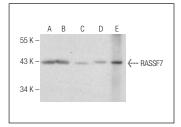
Molecular Weight of RASSF7: 40 kDa.

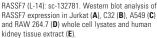
Positive Controls: C32 whole cell lysate: sc-2205, Jurkat whole cell lysate: sc-2204 or human kidney extract: sc-363764.

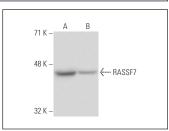
#### **RECOMMENDED SECONDARY REAGENTS**

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**







RASSF7 (L-14): sc-132781. Western blot analysis of RASSF7 expression in C32 (**A**) and Hs 294T (**B**) whole cell lysates.

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.



Try **RASSF7 (C-6): sc-374431**, our highly recommended monoclonal alternative to RASSF7 (L-14).