

# RASSF2 (E-11): sc-376347

## 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 a group of homologous, noncatalytic proteins composed of RASSF1, RASSF2, RASSF3, AD037 and Nore1. RASSF1 is a potential tumor suppressor gene that plays an important role in tumor pathogenesis. Nore1 binds to Ras in response to EGF or serum stimulation, but its function has yet to be determined. RASSF2 is a nuclear protein containing a Ras-associating domain and a SARAH domain. RASSF2 isoform A is inactivated in colorectal cancer cells by CpG island promoter hypermethylation.

## CHROMOSOMAL LOCATION

Genetic locus: RASSF2 (human) mapping to 20p13; Rassf2 (mouse) mapping to 2 F2.

## SOURCE

RASSF2 (E-11) is a mouse monoclonal antibody raised against amino acids 86-138 mapping within an internal region of RASSF2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RASSF2 (E-11) is available conjugated to agarose (sc-376347 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376347 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376347 PE), fluorescein (sc-376347 FITC), Alexa Fluor® 488 (sc-376347 AF488), Alexa Fluor® 546 (sc-376347 AF546), Alexa Fluor® 594 (sc-376347 AF594) or Alexa Fluor® 647 (sc-376347 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376347 AF680) or Alexa Fluor® 790 (sc-376347 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

RASSF2 (E-11) is recommended for detection of RASSF2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 RASSF2 siRNA (h): sc-45722, RASSF2 siRNA (m): sc-45723, RASSF2 shRNA Plasmid (h): sc-45722-SH, RASSF2 shRNA Plasmid (m): sc-45723-SH, RASSF2 shRNA (h) Lentiviral Particles: sc-45722-V and RASSF2 shRNA (m) Lentiviral Particles: sc-45723-V.

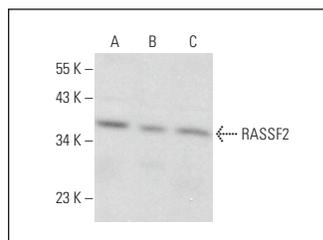
Molecular Weight of RASSF2: 38 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, AN3 CA cell lysate: sc-24662 or Hep G2 cell lysate: sc-2227.

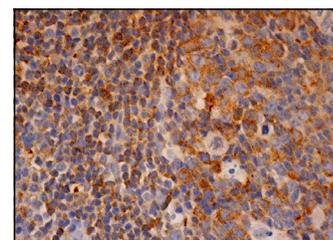
## RECOMMENDED SUPPORT REAGENTS

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, UltraCruz® Blocking Reagent: sc-516214 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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



RASSF2 (E-11): sc-376347. Western blot analysis of RASSF2 expression in HL-60 (A), AN3 CA (B) and Hep G2 (C) whole cell lysates. Detection reagent used: m-IgGκ BP-HRP: sc-516102.



RASSF2 (E-11): sc-376347. Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing cytoplasmic staining of cells in germinal and non-germinal centers.

## SELECT PRODUCT CITATIONS

- Guo, W., et al. 2016. Decreased expression and frequent promoter hypermethylation of RASSF2 and RASSF6 correlate with malignant progression and poor prognosis of gastric cardia adenocarcinoma. *Mol. Carcinog.* 55: 1655-1666.
- Guo, W., et al. 2016. Aberrant hypermethylation of RASSF2 in tumors and peripheral blood DNA as a biomarker for malignant progression and poor prognosis of esophageal squamous cell carcinoma. *Clin. Exp. Metastasis* 33: 73-85.

## 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](http://www.scbt.com) for detailed protocols and support products.