**BACKGROUND**

H-, K- and N-Ras represent the prototype members of a family of small G proteins that are frequently activated to an oncogenic state in a wide variety of human tumors. Activation is due to point mutations at either position 12 or 61 within their coding sequence. Such mutations cause these proteins to be constitutively converted to their active, rather than the inactive, GDP-bound state. The related human R-Ras gene was initially cloned by low stringency hybridization methods. The R-Ras protein has been shown to interact with the Bcl-2 gene product involved in a signaling pathway that intervenes with apoptosis. Positions 38 and 87 (analogous to positions 12 and 61 in H-Ras) mutants of R-Ras have been shown to be capable of activating oncogenic function. Data has been obtained indicating that R-Ras may exert its biological effect by means of modulating the activity of the Raf-1 kinase on its direct downstream effectors.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: RRAS (human) mapping to 19q13.33; Rras (mouse) mapping to 7 B4.

**SOURCE**

R-Ras (C-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 49-82 within an internal region of R-Ras of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Blocking peptide available for competition studies, sc-166221 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**STORAGE**

Store at 4° C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

R-Ras (C-8) is recommended for detection of R-Ras p23 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for R-Ras siRNA (h): sc-36336, R-Ras siRNA (m): sc-36337, R-Ras shRNA Plasmid (h): sc-36336-SH, R-Ras shRNA Plasmid (m): sc-36337-SH, R-Ras shRNA (h) Lentiviral Particles: sc-36336-V and R-Ras shRNA (m) Lentiviral Particles: sc-36337-V.

Molecular Weight of R-Ras: 28 kDa.

Positive Controls: CCD-1064Sk cell lysate: sc-2263, HeLa whole cell lysate: sc-2230 or HeLa whole cell lysate: sc-2200.

**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: 1:100-1:1000), 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-2033 (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® Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**PROTOCOLS**

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