

R-Ras (C-19): sc-523

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 GTP-bound 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. Position 38 or 87 (analogous to positions 12 and 61 in H-Ras) mutants of R-Ras have been shown to be capable of activating oncogenic function and 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.

CHROMOSOMAL LOCATION

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

SOURCE

R-Ras (C-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of R-Ras of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-523 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

R-Ras (C-19) is recommended for detection of R-Ras p23 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).

R-Ras (C-19) is also recommended for detection of R-Ras p23 in additional species, including equine, canine and bovine.

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.

Positive Controls: R-Ras (h): 293 Lysate: sc-111894, CCD-1064Sk cell lysate: sc-2263 or Hs68 cell lysate: sc-2230.

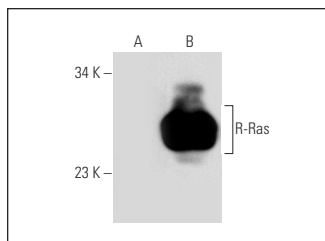
STORAGE

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

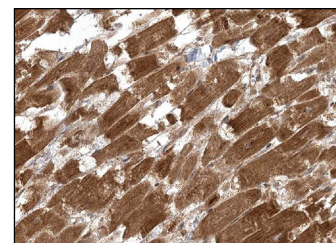
RESEARCH USE

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

DATA



R-Ras (C-19): sc-523. Western blot analysis of R-Ras expression in non-transfected: sc-117752 (A) and human R-Ras transfected: sc-111894 (B) 293T whole cell lysates.



R-Ras (C-19): sc-523. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

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- Augsten, M., et al. 2006. Live-cell imaging of endogenous Ras-GTP illustrates predominant Ras activation at the plasma membrane. *EMBO Rep.* 7: 46-51.
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Try **R-Ras (C-8): sc-166221**, our highly recommended monoclonal alternative to R-Ras (C-19).