

Raf-1 (H-71): sc-7198

BACKGROUND

Several serine/threonine protein kinases have been implicated as intermediates in signal transduction pathways. These include ERK/MAP kinases, ribosomal S6 kinase (Rsk) and Raf-1. Raf-1 is a cytoplasmic protein with intrinsic serine/threonine activity. It is broadly expressed in nearly all cell lines tested to date and is the cellular homolog of v-Raf, the product of the transforming gene of the 3611 strain of murine sarcoma virus. The unregulated kinase activity of the v-Raf protein has been associated with transformation and mitogenesis while the activity of Raf-1 is normally suppressed by a regulatory N-terminal domain. Raf-1 is activated in response to activation of a variety of tyrosine kinase receptors as well as in response to pp60v-Src expression. There is accumulating evidence that Ras p21 may play a role in activation of Raf-1 and may play the role of the messenger from membrane tyrosine kinases to Raf-1.

CHROMOSOMAL LOCATION

Genetic locus: RAF1 (human) mapping to 3p25.2; Raf1 (mouse) mapping to 6 E3.

SOURCE

Raf-1 (H-71) is a rabbit polyclonal antibody raised against amino acids 180-250 mapping within an internal region of Raf-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Raf-1 (H-71) is recommended for detection of Raf-1 of mouse, rat, human and *Xenopus laevis* 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).

Raf-1 (H-71) is also recommended for detection of Raf-1 in additional species, including equine, canine and avian.

Suitable for use as control antibody for Raf-1 siRNA (h): sc-29462, Raf-1 siRNA (m): sc-29463, Raf-1 shRNA Plasmid (h): sc-29462-SH, Raf-1 shRNA Plasmid (m): sc-29463-SH, Raf-1 shRNA (h) Lentiviral Particles: sc-29462-V and Raf-1 shRNA (m) Lentiviral Particles: sc-29463-V.

Molecular Weight of Raf-1: 80 kDa.

Positive Controls: Raf-1 (h2): 293T Lysate: sc-113164, HeLa whole cell lysate: sc-2200 or KNRK whole cell lysate: sc-2214.

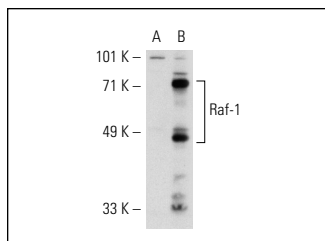
STORAGE

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

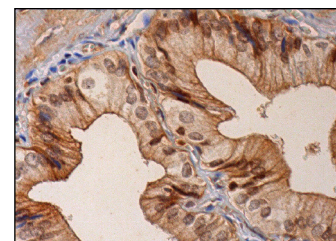
RESEARCH USE

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

DATA



Raf-1 (H-71): sc-7198. Western blot analysis of Raf-1 expression in non-transfected: sc-117752 (A) and human Raf-1 transfected: sc-113164 (B) 293T whole cell lysates.



Raf-1 (H-71): sc-7198. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic, membrane and nuclear staining of glandular cells.

SELECT PRODUCT CITATIONS

- Balasubramanian, S., et al. 2002. Green tea polyphenol stimulates a Ras, MEK1, MEK-3, and p38 cascade to increase activator protein 1 factor-dependent involucrin gene expression in normal human keratinocytes. *J. Biol. Chem.* 277: 1828-1836.
- Rosenhagen, M.C., et al. 2003. The heat shock protein 90-targeting drug cisplatin selectively inhibits steroid receptor activation. *Mol. Endocrinol.* 17: 1991-2001.
- Tucker, A.E., et al. 2003. Decreased glycogen synthase kinase 3-β levels and related physiological changes in *Bacillus anthracis* lethal toxin-treated macrophages. *Cell. Microbiol.* 5: 523-532.
- Jirakulaporn, T., et al. 2004. Cation diffusion facilitator proteins modulate Raf-1 Activity. *J. Biol. Chem.* 279: 27807-27815.
- Wang, Y., et al. 2004. Entire mitogen activated protein kinase (MAPK) pathway is present in preimplantation mouse embryos. *Dev. Dyn.* 231: 72-87.
- Liu, J., et al. 2004. Serine-threonine kinases and transcription factors active in signal transduction are detected at high levels of phosphorylation during mitosis in preimplantation embryos and trophoblast stem cells. *Reproduction* 128: 643-654.

PROTOCOLS

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



Try **Raf-1 (E-10): sc-7267** or **Raf-1 (H-8): sc-376142**, our highly recommended monoclonal alternatives to Raf-1 (H-71). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Raf-1 (E-10): sc-7267**.