

Rak (C-20): sc-6377

BACKGROUND

Src is the human homolog of the v-src gene of the Rous sarcoma virus, also known as avian sarcoma virus or ASV. Src is the first proto-oncogenic non-receptor tyrosine kinase characterized in human. By virtue of common structural motifs, the Src family is composed of nine members in vertebrates, including Src, Yes, Fgr, Frk, Fyn, Lyn, Hck, Lck and Blk. Src-family kinases transduce signals that are involved in the control of a variety of cellular processes, including proliferation, differentiation, motility, and adhesion. Src-family kinases contain an amino-terminal cell membrane anchor followed by an SH3 domain (involved in modular association) and an SH2 domain (involved in activation). Rak (also designated GTK, PTK5 and Frk, for fyn-related kinase) is an epithelial tissue-specific kinase. The human Rak gene maps to chromosome 6q22.1 and encodes a 505 amino acid protein.

REFERENCES

1. Sakaguchi, A.Y., et al. 1982. Organization of human proto-oncogenes. *Am. J. Hum. Genet.* 34: 175.
2. Tronick, S.R., et al. 1985. Isolation and chromosomal localization of the human Fgr protooncogene, a distinct member of the tyrosine kinase gene family. *Proc. Natl. Acad. Sci. USA* 82: 6595-6599.

CHROMOSOMAL LOCATION

Genetic locus: FRK (human) mapping to 6q22.1; Frk (mouse) mapping to 10 B1.

SOURCE

Rak (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Rak 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.

Blocking peptide available for competition studies, sc-6377 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Rak (C-20) is recommended for detection of Rak 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Rak siRNA (h): sc-39231, Rak siRNA (m): sc-39232, Rak shRNA Plasmid (h): sc-39231-SH, Rak shRNA Plasmid (m): sc-39232-SH, Rak shRNA (h) Lentiviral Particles: sc-39231-V and Rak shRNA (m) Lentiviral Particles: sc-39232-V.

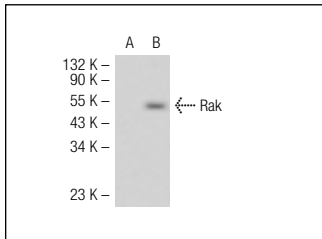
Molecular Weight of Rak: 54 kDa.

Positive Controls: Rak (m): 293T Lysate: sc-122951.

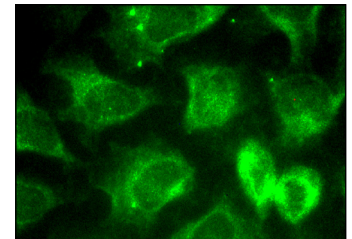
RECOMMENDED SECONDARY REAGENTS

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



Rak (C-20): sc-6377. Western blot analysis of Rak expression in non-transfected: sc-117752 (A) and mouse Rak transfected: sc-122951 (B) 293T whole cell lysates



Rak (C-20): sc-6377. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **Rak (H-12): sc-166478**, our highly recommended monoclonal alternative to Rak (C-20).