

Ros (C-20): sc-6347

BACKGROUND

LTK, ALK and Ros have been identified as receptor tyrosine kinases having sequence similarity to the Insulin receptor subfamily of kinases. LTK, leukocyte tyrosine kinase, is expressed in murine B-lymphocyte precursors and has also been found in forebrain neurons. ALK, anaplastic lymphoma kinase, is normally highly expressed specifically in the nervous system. A truncated form containing the catalytic domain of ALK is expressed as the result of a translocation occurring in many non-Hodgkin's lymphomas. The c-Ros gene was originally identified in mutant form as an oncogene. Ros is normally expressed in a small number of epithelial cell types and may play a role in epithelial development.

REFERENCES

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- Haase, V.H., et al. 1991. Alternatively spliced LTK mRNA in neurons predicts a receptor with a larger putative extracellular domain. *Oncogene* 6: 2319-2325.
- Morris, S.W., et al. 1994. Fusion of a kinase gene, ALK, to a nucleolar protein gene, NPM, in non-Hodgkin's lymphoma. *Science* 263: 1281-1284.
- Kanwar, Y.S., et al. 1995. Cloning of mouse c-Ros renal cDNA, its role in development and relationship to extracellular matrix glycoproteins. *Kidney Int.* 48: 1646-1659.
- Sonnenberg-Riethmacher, E., et al. 1996. The c-Ros tyrosine kinase receptor controls regionalization and differentiation of epithelial cells in the epidermis. *Genes Dev.* 10: 1184-1193.
- Ueno, H., et al. 1996. Growth and survival signals transmitted via two distinct NPXY motifs within leukocyte tyrosine kinase, an Insulin receptor-related tyrosine kinase. *J. Biol. Chem.* 271: 27707-27714.
- Iwahara, T., et al. 1997. Molecular characterization of ALK, a receptor tyrosine kinase expressed specifically in the nervous system. *Oncogene* 14: 439-449.

CHROMOSOMAL LOCATION

Genetic locus: ROS1 (human) mapping to 6q22.1.

SOURCE

Ros (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Ros 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-6347 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Ros (C-20) is recommended for detection of Ros of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Ros (C-20) is also recommended for detection of Ros in additional species, including equine and canine.

Suitable for use as control antibody for Ros siRNA (h): sc-40087, Ros shRNA Plasmid (h): sc-40087-SH and Ros shRNA (h) Lentiviral Particles: sc-40087-V.

Molecular Weight of Ros: 250 kDa.

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) 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.

STORAGE

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

PROTOCOLS

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