

# ALK (M-19): sc-6343

## 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

1. Birchmeier, C., et al. 1990. Characterization of Ros1 cDNA from a human glioblastoma cell line. *Proc. Natl. Acad. Sci. USA* 87: 4799-4803.
2. 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.
3. 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.
4. Kanwar, Y.S., et al. 1995. Cloning of mouse c-Ros renal cDNA, its role in development a relationship to extracellular matrix glycoproteins. *Kidney Int.* 48: 1646-1659.
5. Sonnenberg-Riethmacher, E., et al. 1996. The c-Ros tyrosine kinase receptor controls regionalization and differentiation of epithelial cells in the epididymis. *Genes and Dev.* 10: 1184-1193.
6. 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.

## CHROMOSOMAL LOCATION

Genetic locus: Alk (mouse) mapping to 17 E1.3.

## SOURCE

ALK (M-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ALK of mouse 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-6343 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

ALK (M-19) is recommended for detection of ALK of mouse and rat 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).

Suitable for use as control antibody for ALK siRNA (m): sc-40084, ALK siRNA (r): sc-108078, ALK shRNA Plasmid (m): sc-40084-SH, ALK shRNA Plasmid (r): sc-108078-SH, ALK shRNA (m) Lentiviral Particles: sc-40084-V and ALK shRNA (r) Lentiviral Particles: sc-108078-V.

Molecular Weight of ALK precursor: 176 kDa.

Molecular Weight of B23-ALK fusion protein: 80 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.

## RESEARCH USE

This antibody is covered under U.S. Patent No. 6,696,548 and is for research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **ALK (F-12): sc-398791** or **ALK (5A4): sc-57024**, our highly recommended monoclonal alternatives to ALK (M-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **ALK (F-12): sc-398791**.