

ALK (C-19): sc-6344



The Power to Question

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.

CHROMOSOMAL LOCATION

Genetic locus: ALK (human) mapping to 2p23.2.

SOURCE

ALK (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ALK 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-6344 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ALK (C-19) is recommended for detection of ALK of 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 ALK siRNA (h): sc-40083, ALK shRNA Plasmid (h): sc-40083-SH and ALK shRNA (h) Lentiviral Particles: sc-40083-V.

Molecular Weight of ALK precursor: 176 kDa.

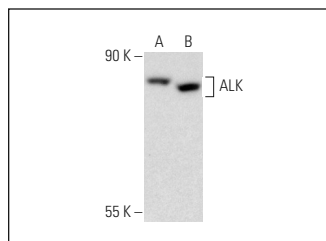
Molecular Weight of B23-ALK fusion protein: 80 kDa.

Positive Controls: Raji whole cell lysate: sc-364236, U-937 cell lysate: sc-2239 or HuT 78 whole cell lysate: sc-2208.

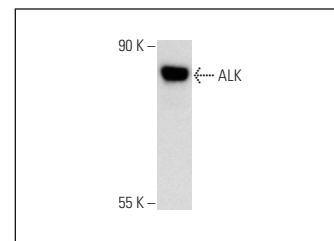
STORAGE

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

DATA



ALK (C-19): sc-6344. Western blot analysis of ALK expression in Raji (A) and U-937 (B) whole cell lysates.



ALK (C-19): sc-6344. Western blot analysis of ALK expression in HUT 78 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Miyake, I., et al. 2002. Activation of anaplastic lymphoma kinase is responsible for hyperphosphorylation of ShcC in neuroblastoma cell lines. *Oncogene* 21: 5823-5834.
2. Nishikori, M., et al. 2003. High-level expression of Bcl-3 differentiates t(2;5)(p23;q35)-positive anaplastic large cell lymphoma from Hodgkin disease. *Blood* 101: 2789-2796.
3. Crockett, D.K., et al. 2004. Identification of NPM-ALK interacting proteins by tandem mass spectrometry. *Oncogene* 23: 2617-2629.
4. Lu, K.V., et al. 2005. Differential induction of glioblastoma migration and growth by two forms of pleiotrophin. *J. Biol. Chem.* 280: 26953-26964.
5. Elenitoba-Johnson, K.S., et al. 2006. Proteomic identification of oncogenic chromosomal translocation partners encoding chimeric anaplastic lymphoma kinase fusion proteins. *Proc. Natl. Acad. Sci. USA* 103: 7402-7407.
6. Sjöström, C., et al. 2007. Global proteome profiling of NPM/ALK-positive anaplastic large cell lymphoma. *Exp. Hematol.* 35: 1240-1248.
7. Watanabe, M., et al. 2012. Ets-1 activates overexpression of JunB and CD30 in Hodgkin's lymphoma and anaplastic large-cell lymphoma. *Am. J. Pathol.* 180: 831-838.

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.



Try **ALK (F-12): sc-398791** or **ALK (ALK1): sc-53157**, our highly recommended monoclonal alternatives to ALK (C-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **ALK (F-12): sc-398791**.