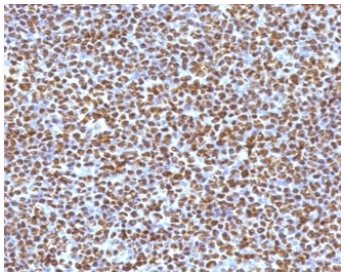
ALK Antibody / Anaplastic Lymphoma Kinase [clone ATKR-1] (V3818)

Catalog No.	Formulation	Size
V3818-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3818-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3818SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	ATKR-1
Purity	Protein G affinity
UniProt	Q9UM73
Localization	Cytoplasmic, nuclear
Applications	IHC (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This ALK antibody is available for research use only.



ALK Antibody Lymphoma Cell Marker IHC. Immunohistochemistry staining of FFPE human anaplastic large-cell lymphoma tissue using monoclonal clone ATKR-1 demonstrates extensive nuclear and cytoplasmic HRP-DAB brown staining in neoplastic lymphoid cells, highlighting the characteristic ALK-associated staining profile observed in ALK-positive lymphoma. The intense tumor cell labeling supports detection of oncogenic ALK fusion protein expression within lymphoma-associated cellular populations. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at room temperature for 20 min.

Description

Neuronal receptor tyrosine kinase that is essentially and transiently expressed in specific regions of the central and peripheral nervous systems and plays an important role in the genesis and differentiation of the nervous system. Transduces signals from ligands at the cell surface, through specific activation of the mitogen-activated protein kinase (MAPK) pathway. Phosphorylates almost exclusively at the first tyrosine of the Y-x-x-x-Y-Y motif. Following activation by ligand, ALK induces tyrosine phosphorylation of CBL, FRS2, IRS1 and SHC1, as well as of the MAP kinases MAPK1/ERK2 and MAPK3/ERK1. Acts as a receptor for ligands pleiotrophin (PTN), a secreted growth factor, and midkine (MDK), a PTN-related factor, thus participating in PTN and MDK signal transduction. PTN-binding induces MAPK pathway activation, which is important for the anti-apoptotic signaling of PTN and regulation of cell proliferation. MDK-binding induces phosphorylation of the ALK target insulin receptor substrate (IRS1), activates mitogen-activated protein kinases (MAPKs) and PI3-kinase, resulting also in cell proliferation induction. Drives NF-kappa-B activation, probably through IRS1 and the activation of the AKT serine/threonine kinase. Recruitment of IRS1 to activated ALK and the activation of NF-kappa-B are essential for the autocrine growth and survival signaling of MDK. [UniProt]

For additional ALK and oncogenic kinase research antibodies targeting fusion protein signaling, lung cancer biomarkers, and lymphoma-associated receptor tyrosine kinase pathways, explore the broader ALK Antibody page featuring recombinant rabbit monoclonal clone ALK1/6698R.

Application Notes

Optimal dilution of the ALK antibody should be determined by the researcher.

Immunogen

A portion of amino acids 200-335 from the human protein was used as the immunogen for this ALK antibody.

Storage

Store the ALK antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

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