

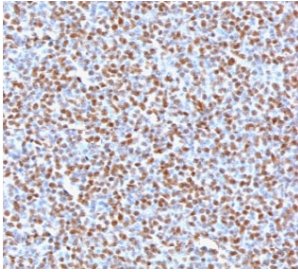
Recombinant ALK Antibody / Anaplastic Lymphoma Kinase [clone ATKR-2R] (V3998)

Catalog No.	Formulation	Size
V3998-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3998-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3998SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3998IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Recombinant **RABBIT MONOCLONAL**

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	ATKR-2R
Purity	Protein A affinity
UniProt	Q9UM73
Localization	Cytoplasmic, nuclear
Applications	IHC (FFPE) : 1-2ug/ml for 30 min at RT Prediluted IHC Only Format : incubate for 30 min at RT (1)
Limitations	This recombinant ALK antibody is available for research use only.



ALK Antibody Neoplastic Lymphoid Cell IHC. Immunohistochemistry staining of FFPE human anaplastic large-cell lymphoma tissue using recombinant monoclonal clone ATKR-2R demonstrates strong nuclear and cytoplasmic HRP-DAB brown staining in malignant lymphoid cells, supporting detection of ALK fusion-associated oncogenic kinase expression within lymphoma-derived tumor tissue. The staining pattern is characteristic of ALK-positive anaplastic large-cell lymphoma and associated receptor tyrosine kinase pathway activation. HIER: boil tissue sections in 10mM Tris buffer with 1mM EDTA, pH 9, 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 recombinant ALK antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant full length human protein was used as the immunogen for this recombinant ALK antibody.

Storage

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