10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# ALK antibody
**Mouse Monoclonal Antibody (Mab)**
**Catalog # AD80508**

## Specification

### ALK antibody - Product info

| | |
|---|---|
| Application | **IHC** |
| Primary Accession | Q9UM73 |
| Reactivity | **Human** |
| Host | **Mouse** |
| Clonality | **Monoclonal** |
| Calculated MW | **176442 Da** |

### ALK antibody - Additional info

Gene ID **238**

**Other Names**
ALK tyrosine kinase receptor, 2.7.10.1, Anaplastic lymphoma kinase, CD246, ALK (<a href="http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=427" target="_blank">HGNC:427</a>)

**Dilution**
IHC~~1:100~500

**Storage**
Maintain refrigerated at 2-8°C

Precautions **ALK antibody is for research use only and not for use in diagnostic or therapeutic procedures.**

### ALK antibody - Protein Information

**Name** ALK {ECO:0000303|PubMed:9174053, ECO:0000312|HGNC:HGNC:427}

Function **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. Thinness gene involved in the resistance to weight gain: in hypothalamic neurons, controls energy expenditure acting as a negative regulator of white adipose tissue lipolysis and sympathetic tone to fine-tune energy homeostasis (By similarity).** |
| Cellular Location | **Cell membrane; Single-pass type I membrane protein Note=Membrane attachment was crucial for promotion of neuron-like differentiation and cell proliferation arrest through specific activation of the MAP kinase pathway** |
| Tissue Location | **Expressed in brain and CNS. Also expressed in the small intestine and testis, but not in normal lymphoid cells** |

**ALK antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

**ALK antibody - Images**