

Mouse Alk Antibody (P1517)

Catalog no: AB3262

Reactivity: M

Category: 抗原抗体

Size: $100\mu L/50\mu L$

Immunogen: HUMAN

Specificity: This Mouse Alk antibody is generated from a rabbit immunized with a KLH conjugated

synthetic peptide between 1517-1550 amino acids Mouse Alk.

Dilution: WB,1:2000;

Other name: ALK tyrosine kinase receptor, Anaplastic lymphoma kinase, CD246, Alk

Isotype: Rabbit Ig

Background: Neuronal orphan 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-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 mitogenactivated 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.

reference: Iwahara T., et al. Oncogene 14:439-449(1997). Church D.M., et al. PLoS Biol.

7:E1000112-E1000112(2009). Motegi A., et al.J. Cell Sci. 117:3319-3329(2004). Vernersson E., et al.Gene Expr. Patterns 6:448-461(2006). Kuo A.H., et al.Oncogene 26:859-869(2007).