

ALK (Phospho-Tyr1507) Antibody

Catalog No: #11966



Package Size: #11966-1 50ul #11966-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

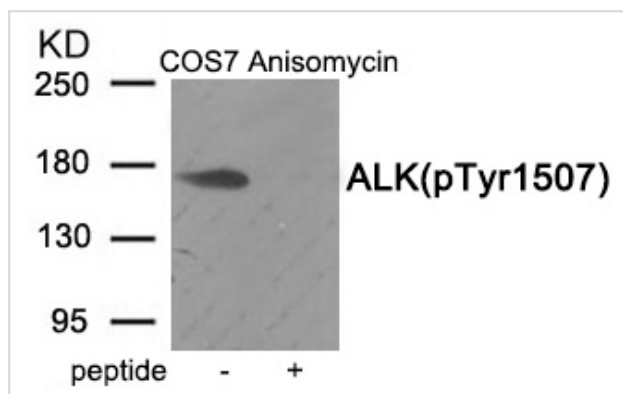
Description

Product Name	ALK (Phospho-Tyr1507) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB
Species Reactivity	Human;Mouse
Specificity	The antibody detects endogenous level of ALK only when phosphorylated at tyrosine 1507.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of Tyrosine 1507 (P-T-Y(p)-G-S) derived from Human ALK.
Conjugates	Unconjugated
Target Name	ALK
Modification	Phospho
Other Names	kinase ALK; Anaplastic lymphoma kinase; CD246; ALK tyrosine kinase receptor precursor;
Accession No.	Swiss-Prot#: Q9UM73; NCBI Gene#: 238; NCBI Protein#: NP_004295.2
SDS-PAGE MW	176kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C/1 year

Application Details

Western blotting: 1:500~1:1000

Images



Western blot analysis of extracts from COS7 cells treated with Anisomycin using Phospho-ALK (Tyr1507) antibody #11966. The lane on the right is treated with the antigen-specific peptide.

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-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.

Degoutin J, Vigny M, Gouzi JY (2007) FEBS Lett 581, 727-34.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.