



ALK (phospho Tyr1096) Polyclonal Antibody

Catalog No	YP-Ab-13071
Isotype	IgG
Reactivity	Human;Mouse
Applications	IHC;IF;ELISA
Gene Name	ALK
Protein Name	ALK tyrosine kinase receptor
Immunogen	The antiserum was produced against synthesized peptide derived from human ALK around the phosphorylation site of Tyr1096. AA range:1062-1111
Specificity	Phospho-ALK (Y1096) Polyclonal Antibody detects endogenous levels of ALK protein only when phosphorylated at Y1096.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ALK; ALK tyrosine kinase receptor; Anaplastic lymphoma kinase; CD antigen CD246
Observed Band	150-240kD
Cell Pathway	Cell membrane ; Single-pass type I membrane protein . Membrane attachment is essential for promotion of neuron-like differentiation and cell proliferation arrest through specific activation of the MAP kinase pathway. .
Tissue Specificity	Expressed in brain and CNS. Also expressed in the small intestine and testis, but not in normal lymphoid cells.
Function	catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,disease:A chromosomal aberration involving ALK is associated with anaplastic large-cell lymphoma (ALCL). Translocation t(2;17)(p23;q25) with ALO17.,disease:A chromosomal aberration involving ALK is associated with inflammatory myofibroblastic tumors (IMTs). Translocation t(2;11)(p23;p15) with CARS; translocation t(2;4)(p23;q21) with SEC31A.,disease:A chromosomal aberration involving ALK is found in a form of non-Hodgkin lymphoma. Translocation t(2;5)(p23;q35) with NPM1. The resulting chimeric NPM1-ALK protein homodimerize and the kinase becomes constitutively activated. The constitutively active fusion proteins are responsible for 5-10% of non-Hodgkin lymphomas.,function:Orphan receptor with a tyrosine-protein kinase activity. Appears to play an important role in the normal development and function



Background

This gene encodes a receptor tyrosine kinase, which belongs to the insulin receptor superfamily. This protein comprises an extracellular domain, an hydrophobic stretch corresponding to a single pass transmembrane region, and an intracellular kinase domain. It plays an important role in the development of the brain and exerts its effects on specific neurons in the nervous system. This gene has been found to be rearranged, mutated, or amplified in a series of tumours including anaplastic large cell lymphomas, neuroblastoma, and non-small cell lung cancer. The chromosomal rearrangements are the most common genetic alterations in this gene, which result in creation of multiple fusion genes in tumourigenesis, including ALK (chromosome 2)/EML4 (chromosome 2), ALK/RANBP2 (chromosome 2), ALK/ATIC (chromosome 2), ALK/TFG (chromosome 3), ALK/NPM1 (chromosome 5), ALK/SQSTM1 (chromosome

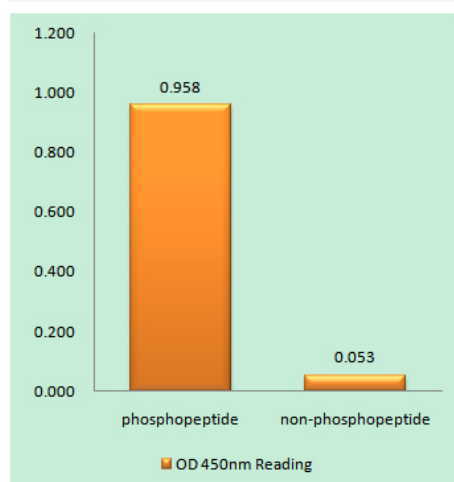
matters needing attention

Avoid repeated freezing and thawing!

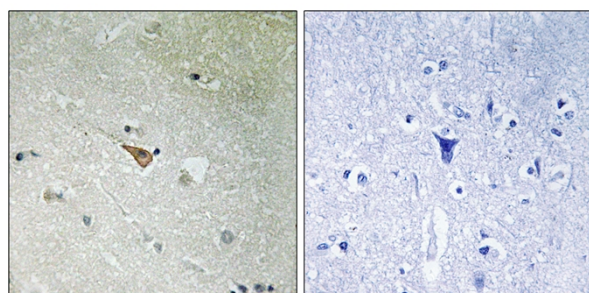
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using ALK (Phospho-Tyr1096) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using ALK (Phospho-Tyr1096) Antibody. The picture on the right is blocked with the phosphopeptide.