Best Tools for immunology Research

ALK (phospho Tyr1096) Polyclonal Antibody

Catalog No :	YP1036
Reactivity :	Human;Mouse
Applications :	IHC;IF;ELISA
Target :	ALK
Fields :	>>Pathways in cancer;>>Non-small cell lung cancer;>>PD-L1 expression and PD-1 checkpoint pathway in cancer
Gene Name :	ALK
Protein Name :	ALK tyrosine kinase receptor
Human Gene Id :	238
Human Swiss Prot No :	Q9UM73
Mouse Gene Id :	11682
Mouse Swiss Prot No :	P97793
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
Dilution :	IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 176kD

Observed Band : 150-240kD

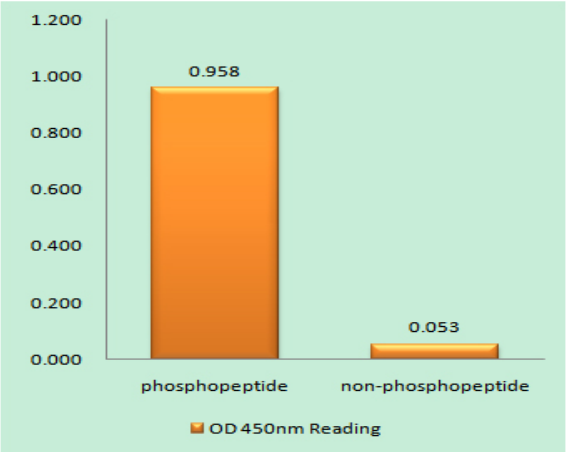
Background : This gene encodes a receptor tyrosine kinase, which belongs to the insulin receptor superfamily. This protein comprises an extracellular domain, an hydrophobic stretch corresponding to a single pass transmembrane region, and an intracellular kinase domain. It plays an important role in the 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

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

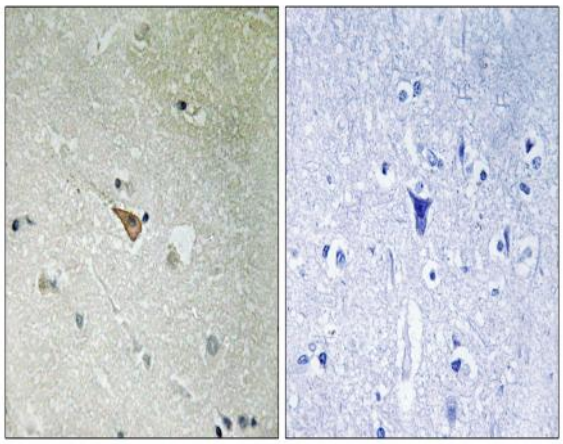
Subcellular Location : Cell membrane ; Single-pass type I membrane protein . Membrane attachment is essential for promotion of neuron-like differentiation and cell proliferation arrest through specific activation of the MAP kinase pathway. .

Expression : Expressed in brain and CNS. Also expressed in the small intestine and testis, but not in normal lymphoid cells.

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 phospho peptide.