

ALK (phospho Tyr1604) Polyclonal Antibody

Catalog No: YP0898

Reactivity: Human; Rat; Mouse;

Applications: WB;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

P97793

Human Gene Id: 238

Human Swiss Prot Q9UM73

No:

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

ALK around the phosphorylation site of Tyr1604. AA range:1570-1619

Specificity: Phospho-ALK (Y1604) Polyclonal Antibody detects endogenous levels of ALK

protein only when phosphorylated at Y1604.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not

yet tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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

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

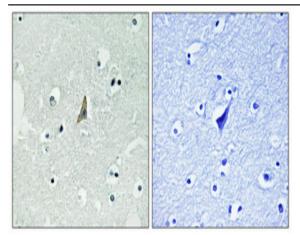
through specific activation of the MAP kinase pathway. .

Expression: Expressed in brain and CNS. Also expressed in the small intestine and testis,

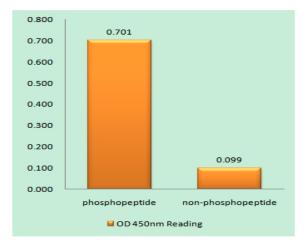
but not in normal lymphoid cells.

Products Images

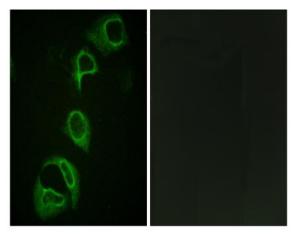
2/4



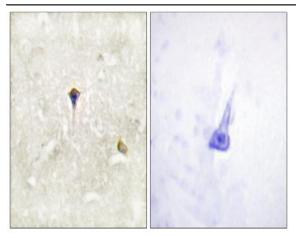
Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using ALK (Phospho-Tyr1604) Antibody



Immunofluorescence analysis of HeLa cells, using ALK (Phospho-Tyr1604) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human brain, using ALK (Phospho-Tyr1604) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HepG2 cells, using ALK (Phospho-Tyr1604) Antibody. The lane on the right is blocked with the phospho peptide.