

# Summary

Production Name	ALK (phospho Tyr1604) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	ELISA,IF,IHC,WB
Reactivity	Human,Rat,Mouse

#### Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

### Immunogen

Gene Name	ALK
Alternative Names	ALK; ALK tyrosine kinase receptor; Anaplastic lymphoma kinase; CD antigen CD246
Gene ID	238.0
SwissProt ID	Q9UM73. The antiserum was produced against synthesized peptide derived from
	human ALK around the phosphorylation site of Tyr1604. AA range:1570-1619

# Application

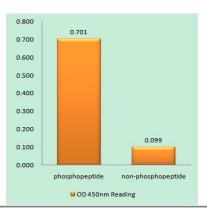
Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in
	other applications.
Molecular Weight	150-240kD



### 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 (chromosomecatalytic 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 of the nervous system. Phosphorylates almost exclusively at the first tyrosine of the Y-xx-x-Y-Y motif.,PTM:N-glycosylated.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. Insulin receptor subfamily., similarity: Contains 1 LDL-receptor class A domain., similarity: Contains 1 protein kinase domain.,similarity:Contains 2 MAM domains.,subunit:Homodimer. When bound to ligand.,tissue specificity:Expressed in brain and CNS. Also expressed in the small intestine and testis, but not in normal lymphoid cells.,

#### **Research Area**

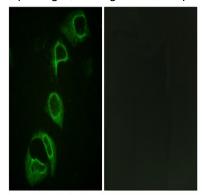


## Image Data

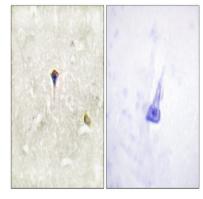
## Product Name: ALK (phospho Tyr1604) Rabbit Polyclonal Antibody Catalog #: APRab04222



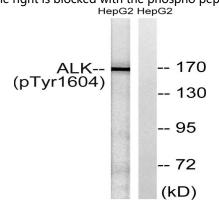
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using ALK (Phospho-Tyr1604) Antibody



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

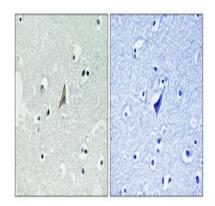


Immunohistochemistry analysis of paraffin-embedded human brain, using ALK (Phospho-Tyr1604) Antibody. The picture on the right is blocked with the phospho peptide.



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





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

**Note** For research use only.