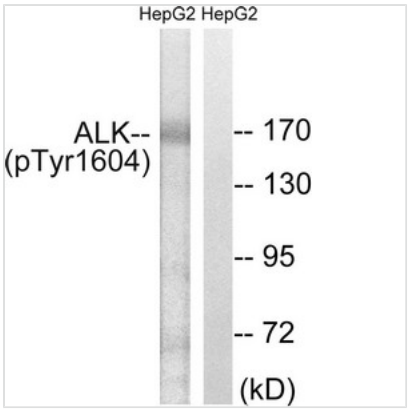
Phospho-ALK (Tyr1604) Antibody

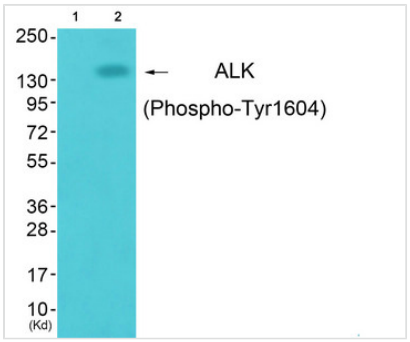
Product Code	CSB-PA154906
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q9UM73
Immunogen	Peptide sequence around phosphorylation site of tyrosine 1604 (G-H-Y(p)-E-D) derived from Human ALK.
Raised In	Rabbit
Species Reactivity	Human
Specificity	The antibody detects endogenous levels of ALK only when phosphorylated at tyrosine 1604.
Tested Applications	ELISA,WB,IHC,IF;WB:1:500-1:1000,IHC:1:50-1:100,IF:1:100-1:200
Relevance	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.
Form	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	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 chromatogramphy usi
Clonality	Polyclonal
Alias	ALK tyrosine kinase receptor precursor; Anaplastic lymphoma kinase; CD246; EC 2.7.10.1; kinase ALK
Product Type	Polyclonal Antibody
Species	Homo sapiens (Human)

Target Names ALK

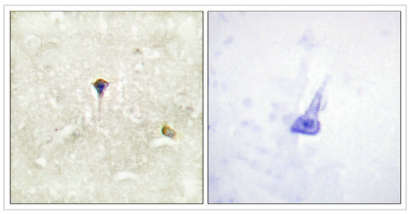
Image



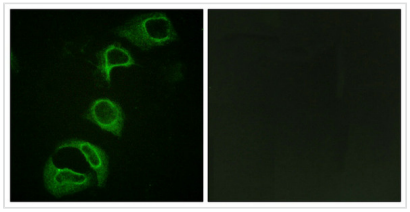
Western blot analysis of extracts from HepG2 cells, using ALK (Phospho-Tyr1604) antibody. The lane on the right is treated with the synthesized peptide.



Western blot analysis of extracts from cos-7 cells (Lane 2), using ALK (Phospho-Tyr1604) Antibody. The lane on the left is treated with synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using ALK (Phospho-Tyr1604) antibody. The picture on the right is treated with the synthesized peptide.



Immunofluorescence analysis of HeLa cells, using ALK (Phospho-Tyr1604) antibody. The picture on the right is treated with the synthesized peptide.

Product Modify Phospho-Tyr1604