Data Sheet (Cat.No.TMAC-00145)

Anti-Phospho-ALK (Tyr1604) Polyclonal Antibody

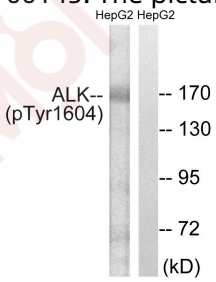
Product Details

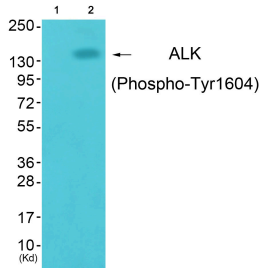
Ig Type:	IgG
Reactivity:	Human
Conjugation:	Unconjugated
Molecular Weight:	Actual: 176 kDa.
Purification:	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.

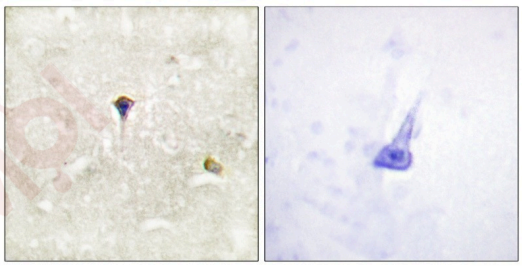
Applications

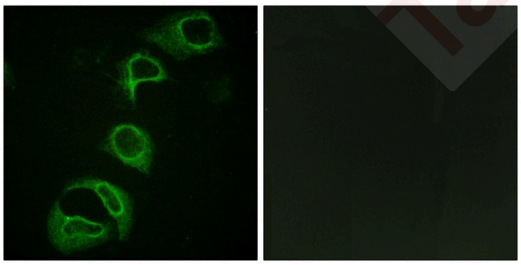
Verified Activity:

1. Western blot analysis of extracts from HepG2 cells, using ALK (Phospho-Tyr1604) antibody TMAC-00145. The lane on the right is treated with the synthesized peptide.
2. Western blot analysis of extracts from cos-7 cells (Lane 2), using ALK (Phospho-Tyr1604) Antibody TMAC-00145. The lane on the left is treated with synthesized peptide.
3. Immunohistochemistry analysis of paraffin-embedded human brain tissue, using ALK (Phospho-Tyr1604) antibody TMAC-00145. The picture on the right is treated with the synthesized peptide.
4. Immunofluorescence analysis of HeLa cells, using ALK (Phospho-Tyr1604) antibody TMAC-00145. The picture on the right is treated with the synthesized peptide.









Application:	IF,IHC,WB
Recommended	WB: 1:500-3000; IHC: 1:50-100; IF: 1:100-500

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Peptide sequence around phosphorylation site of tyrosine 1604 (G-H-Y(p)-E-D) derived from Human ALK
Antigen Species:	human
Uniprot ID:	Q9UM73
Synonyms:	p-ALK (Y1604);p-ALK (Tyr1604);ALK (p-Y1604);ALK (p-Tyr1604)

Research Background

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 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.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481