10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

LTK Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP53353

Product Information

Application	WB
Primary Accession	P29376
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	91681

Additional Information

Gene ID	4058
Other Names	Leukocyte tyrosine kinase receptor, 2.7.10.1, Protein tyrosine kinase 1, LTK, TYK1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human LTK. The exact sequence is proprietary.
Dilution	WB~~ 1:1000
Format	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	LTK {ECO:0000303|PubMed:1655406, ECO:0000312|HGNC:HGNC:6721}
Function	Receptor with a tyrosine-protein kinase activity (PubMed: 10445845, PubMed:20548102, PubMed:30061385). Following activation by ALKAL1 or ALKAL2 ligands at the cell surface, transduces an extracellular signal into an intracellular response (PubMed:30061385, PubMed:34646012). Ligand-binding to the extracellular domain induces tyrosine kinase activation, leading to activation of the mitogen-activated protein kinase (MAPK) pathway (PubMed:20548102). Phosphorylates almost exclusively at the first tyrosine of the Y-x-x-x- Y-Y motif (By similarity). The exact function of this protein is not known; studies with chimeric proteins demonstrate its ability to promote growth and specifically neurite outgrowth, and cell survival (PubMed:18849880, PubMed:9223670). Involved in regulation of the secretory pathway involving endoplasmic reticulum (ER) export sites (ERESs) and ER to Golgi transport (PubMed:20548102).

Cellular Location	Cell membrane; Single-pass type I membrane protein
Tissue Location	Expressed in non-hematopoietic cell lines and T- and B-cell lines.

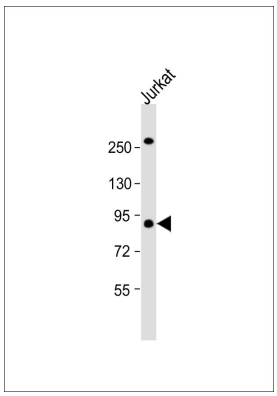
Background

Orphan receptor with a tyrosine-protein kinase activity. The exact function of this protein is not known. Studies with chimeric proteins (replacing its extracellular region with that of several known growth factor receptors, such as EGFR and CSFIR) demonstrate its ability to promote growth and specifically neurite outgrowth, and cell survival. Signaling appears to involve the PI3 kinase pathway. Involved in regulation of the secretory pathway involving endoplasmic reticulum (ER) export sites (ERESs) and ER to Golgi transport.

References

Toyoshima H.,et al.Proc. Natl. Acad. Sci. U.S.A. 90:5404-5408(1993).
Krolewski J.J.,et al.EMBO J. 10:2911-2919(1991).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Zody M.C.,et al.Nature 440:671-675(2006).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.

Images



Anti-LTK Antibody at 1:1000 dilution + Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution. Predicted band size : 92 kDa Blocking/Dilution buffer: 5% NFDM/TBST.