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Anti-LTK Antibody

Catalog # AP53353

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P29376
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	91681

Additional Information

Gene ID	4058
Other Names	TYK1; Leukocyte tyrosine kinase receptor; Protein tyrosine kinase 1
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 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

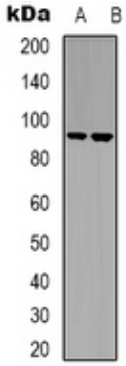
Name	LTK {ECO:0000303|PubMed:1655406, ECO:0000312|HGNC:HGNC:6721}
Function	Receptor with a tyrosine-protein kinase activity (PubMed: 10445845, PubMed:20548102, PubMed:30061385). Following activation by ALKAL1 or ALKAL2 ligands at the cell surface, transduces an extracellular signal into an intracellular 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.

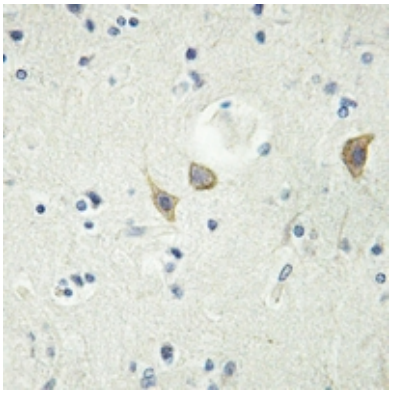
References

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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.

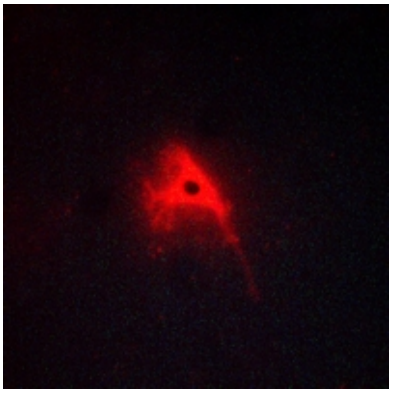
Images



Western blot analysis of LTK expression in Raji (A), Jurkat (B) whole cell lysates. (Predicted band size: 91 kD; Observed band size: 92 kD)



Immunohistochemical analysis of LTK staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of LTK staining in NIH-3T3 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

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