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

LTK Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7658a

Product Information

Application	WB, E
Primary Accession	P29376
Reactivity	Human
Predicted	Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB1528
Calculated MW	91681
Antigen Region	42-72

Additional Information

Gene ID	4058
Other Names	Leukocyte tyrosine kinase receptor, Protein tyrosine kinase 1, LTK, TYK1
Target/Specificity	This LTK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 42-72 amino acids from the N-terminal region of human LTK.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	LTK Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

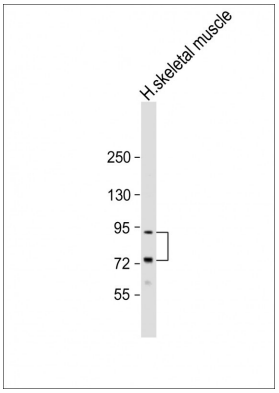
Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The tyrosine kinase (TK) group is mainly involved in the regulation of cell-cell interactions such as differentiation, adhesion, motility and death. There are currently about 90 TK genes sequenced, 58 are of receptor protein TK (e.g. EGFR, EPH, FGFR, PDGFR, TRK, and VEGFR families), and 32 of cytosolic TK (e.g. ABL, FAK, JAK, and SRC families).

References

Toyoshima, H., et al., Proc. Natl. Acad. Sci. U.S.A. 90(12):5404-5408 (1993).
Krolewski, J.J., et al., EMBO J. 10(10):2911-2919 (1991).
Maru, Y., et al., Oncogene Res. 5(3):199-204 (1990).

Images



Anti-LTK Antibody (S57) at 1:2000 dilution + human skeletal muscle 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.