

# LTK Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7658a

# **Specification**

# LTK Antibody (N-term) - Product Information

Application

Primary Accession

Reactivity

Host

Clonality

Isotype

Antigen Region

WB,E

P29376

Human

Rabbit

Polyclonal

Rabbit IgG

42-72

# LTK Antibody (N-term) - 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~~1:2000

E~~Use at an assay dependent concentration.

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation 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.

# LTK Antibody (N-term) - 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-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**

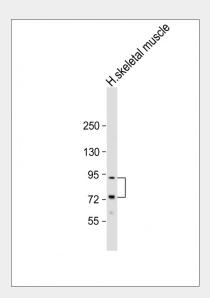
Expressed in non-hematopoietic cell lines and T- and B-cell lines.

# LTK Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# LTK Antibody (N-term) - 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.

# LTK Antibody (N-term) - 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





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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 seguenced, 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).

# LTK Antibody (N-term) - 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).