

Anti-LTK Antibody

Catalog # ABO11298

Specification

Anti-LTK Antibody - Product Information

ApplicationWBPrimary AccessionP29376HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Leukocyte tyrosine kinase receptor(LTK) detection. Tested withWB in Human.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-LTK Antibody - Additional Information

Gene ID 4058

Other Names Leukocyte tyrosine kinase receptor, 2.7.10.1, Protein tyrosine kinase 1, LTK, TYK1

Calculated MW 91681 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human

Subcellular Localization Membrane; Single-pass type I membrane protein.

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

Protein Name Leukocyte tyrosine kinase receptor

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen A synthetic peptide corresponding to a sequence at the C-terminus of human LTK(850-864aa RGLQPQNLWNPTYRS).

Purification Immunogen affinity purified.



Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the protein kinase superfamily. Tyr protein kinase family. Insulin receptor subfamily.

Anti-LTK Antibody - 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.

Anti-LTK Antibody - Protocols

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

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



Anti-LTK Antibody - Images



Anti-LTK antibody, ABO11298, Western blottingRecombinant Protein Detection Source: E.coli derived -recombinant Human LTK,33.1KD(162aa tag+ N729-S864)Lane 1: Recombinant Human LTK Protein 10ngLane 2: Recombinant Human LTK Protein 5ngLane 3: Recombinant Human LTK Protein 2.5ngLane 4: Recombinant Human LTK Protein 1.25ng

Anti-LTK Antibody - Background

LTK(Leukocyte Tyrosine Kinase), also known as TYK1, is an enzyme that in humans is encoded by the LTK gene. The protein encoded by this gene is a member of the ALK/LTK receptor family of receptor tyrosine kinases(RTKs) whose ligand is unknown. Toyoshima et al.(1993) cloned a set of cDNAs representing differently spliced human LTK mRNAs. Liao et al.(1996) found that the mouse Ltk gene is closely linked to the Tyro3 gene which maps to mouse chromosome 2. Thus, the LTK gene produces not only the putative receptor tyrosine kinase for an unknown ligand but also multiple protein products that may have different functions.