

Active Recombinant Human LTK protein, His-tagged

Cat. No. LTK-189H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human LTK(Ser20-Pro424) fused with His tag at C-terminal was expressed in NS0.
Species	Human
Source	Mammalian Cells
ProteinLength	20-424 a.a.
Description	LTK, also known as Leukocyte tyrosine kinase receptor and protein tyrosine kinase 1, is a type I transmembrane protein and shares a high degree of sequence similarity with kinases in the insulin receptor family. Alternative splicing generates several isoforms of 50-100 kDa. LTK contains a 408 aa extracellular domain, 25 aa transmembrane domain, and 415 aa cytoplasmic domain. The cytoplasmic region has several phosphotyrosines that interact with downstream signaling molecules. LTK is reported to undergo dimerand trimerization when under certain conditions. The extracellular domain of human LTK shares 75% homology with mouse LTK. It is expressed in preB lymphocytes, B lymphocytes, and other hematopoietic cells, as well as brain and placenta. Human LTK can bind to PLCgamma 1, PI3K, GAP and Raf1 in vivo. LTK promotes neurite outgrowth via PI3K/AKT and Ras/MAPK pathways. FAM150A and FAM150B can both bind to the extracellular domain of LTK, but only FAM150A is the specific ligand for LTK.
Predicted N Terminal	Ser20

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Form	Lyophilized from a 0.2 µm filtered solution in PBS.
Bio-activity	Measured by its binding ability in a functional ELISA. When Recombinant Human LTK is immobilized at 2 µg/mL, 100 µL/well, the concentration of Recombinant Human FAM-150A that produces 50% of the optimal binding response is 40-240 ng/mL.
Molecular Mass	Predicted Molecular Mass: 42 kDa SDS-PAGE: 56-84 kDa, reducing conditions
Endotoxin	<0.1 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	Reconstitute at 500 µg/mL in PBS.

GENE INFORMATION

Gene Name	LTK leukocyte receptor tyrosine kinase [Homo sapiens]
Official Symbol	LTK
Synonyms	LTK; leukocyte receptor tyrosine kinase; leukocyte tyrosine kinase; leukocyte tyrosine kinase receptor; TYK1; protein tyrosine kinase 1;
Gene ID	4058

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mRNA Refseq	NM_001135685
Protein Refseq	NP_001129157
MIM	151520
UniProt ID	P29376

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