

Lemur Tyrosine Kinase 3 (LMTK3) Active Protein | LMTK3 active protein

Active Lemur Tyrosine Kinase 3 (LMTK3)

CATALOG # AAA146624	HOST E. coli	REACTIVITY Homo sapiens (Human)	APPLICATIONS Invitro Assay, Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Lemur Tyrosine Kinase 3 (LMTK3); Active Lemur Tyrosine Kinase 3 (LMTK3); LMR3; TYKLM3; Serine/threonine-protein kinase LMTK3; LMTK3 active protein

PRODUCT SPECIFICATIONS

Host	E. coli
Reactivity	Homo sapiens (Human)
Purity/Purification	>95%
Form/Format	PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Concentration	Original Concentration: 400ug/mL (varies by lot)
Applicable Applications for LMTK3 active protein	Invitro Assay, Activity Assay, Cell Culture
Source	Prokaryotic expression.
Residues	Leu133~Leu411
Tags	Two N-terminal Tags, His-tag and SUMO-tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method).
Predicted isoelectric point	6.3
Usage	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Storage: Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

IMAGES

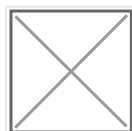

WB (Western Blot)

Figure 4. Western BlotSample: Recombinant LMTK3, Human;Antibody: Rabbit Anti-Human LMTK3 Ab

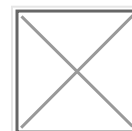

SDS_PAGE

Figure 3. SDS-PAGESample: Active recombinant LMTK3, Human



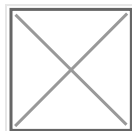
Application Data

Cell proliferation was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with various concentrations of LMTK3 for 72h. The dose-effect curve of LMTK3 was shown in Figure 2. It was obvious that LMTK3 significantly promoted cell proliferation of MCF-7 cells. The ED50 for this effect is approximately 6.14~50ng/mL.



Bioactivity

Mechanism:Lemur tyrosine kinase 3 (LMTK3), a member of the receptor tyrosine kinase (RTK) family, is implicated in breast cancer growth and endocrine resistance. It has been reported that LMTK3 promotes cell invasion, motility, and migration of the MCF-7 breast cancer cell line. To test the bioactivity of LMTK3, MCF-7 cells were seeded into triplicate wells of 96-well plates at a density of 2,000 cells/well and allowed to attach overnight, then the medium was replaced with serum-free standard DMEM prior to the addition of various concentrations of LMTK3. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 uL of CCK-8 solution was added to each well of the plate, then measure the absorbance at 450nm using a microplate reader after incubating the plate for 1-4 hours at 37°C. Cell proliferation of MCF-7 cells after incubation with LMTK3 for 72h observed by inverted microscope was shown in Figure 1.



Sequence

ADDITIONAL INFORMATION

Product Categories/Family for LMTK3
active protein

Active Protein

NCBI AND UNIPROT INFORMATION

NCBI GI #	117949603
NCBI GeneID	114783
UniProt Accession #	Q96Q04; Q4G0U1
Molecular Weight	Predicted Molecular Mass: 45.9kDa Accurate Molecular Mass: 46kDa as determined by SDS-PAGE reducing conditions.
NCBI Official Full Name	Serine/threonine-protein kinase LMTK3
NCBI Official Synonym Full Names	lemur tyrosine kinase 3
NCBI Official Symbol	LMTK3
NCBI Official Synonym Symbols	LMR3; TYKLM3; PPP1R101
NCBI Protein Information	serine/threonine-protein kinase LMTK3
UniProt Protein Name	Serine/threonine-protein kinase LMTK3
UniProt Gene Name	LMTK3
UniProt Synonym Gene Names	KIAA1883; TYKLM3

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-homo-sapiens-human-active-protein/lemur-tyrosine-kinase-3-lmtk3/146624>