

Human LMTK3 protein, His and SUMO tag (active)

Cat. No. GTX00071-pro

Application	Functional Assay
Species	Human

Package
10 µg

APPLICATION

Application Note

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 2000 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 µl 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. LMTK3 significantly promoted cell proliferation of MCF-7 cells. The ED₅₀ for this effect is approximately 6. 14-50 ng/ml.

Observed MW 46 kDa.

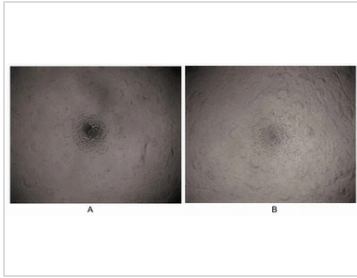
PROPERTIES

Form	Lyophilized powder
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.
Preservative	ProClin 300
Storage	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.
Region/Sequence	N-terminal His and SUMO-Tag; Leu133~Leu411
Expression System	E. coli
Purity	> 95%
Endotoxin	< 1 EU/µg
Conjugation	Unconjugated
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.



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DATA IMAGES

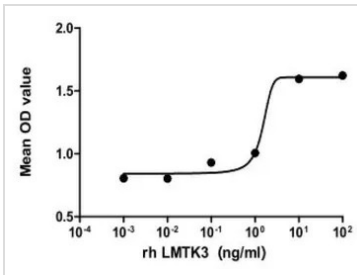


GTX00071-pro Functional Assay Image

Cell proliferation effect of GTX00071-pro Human LMTK3 protein (active).

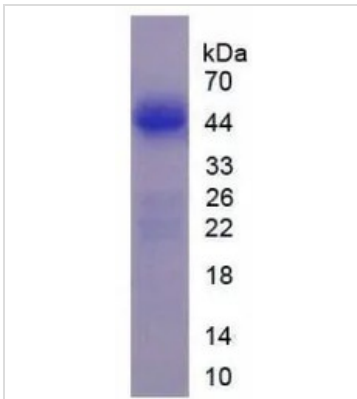
(A) Unstimulated MCF-7 cells cultured in serum-free DMEM for 72hrs.

(B) MCF-7 cells cultured in serum-free DMEM, stimulated with 10 ng/ml LMTK3 for 72hrs.



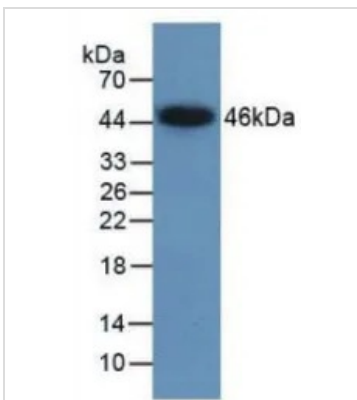
GTX00071-pro Functional Assay Image

The dose effect curve of GTX00071-pro Human LMTK3 protein (active) on MCF-7 cells. After incubation of Human LMTK3 protein (active) for 72 hrs, cell proliferation was measured by Cell Counting Kit-8 (CCK-8).



GTX00071-pro Image

SDS-PAGE analysis of GTX00071-pro Human LMTK3 protein (active).



GTX00071-pro Image

WB analysis of GTX00071-pro Human LMTK3 protein (active).



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