For Research Use Only

LMTK3 Polyclonal antibody

Catalog Number: 22899-1-AP



Basic Information

Catalog Number: 22899-1-AP

Size:

GenBank Accession Number:

NM 001080434

GeneID (NCBI):

150ul, Concentration: 300 ug/ml by 114783 Nanodrop and 173 ug/ml by Bradford $\,$ UNIPROT ID: method using BSA as the standard;

Q96Q04

Source: Full Name:

Rabbit lemur tyrosine kinase 3 Isotype:

Calculated MW: 154 kDa

Observed MW: ~155 kDa

Applications

Tested Applications: WB, IHC, ELISA

Species Specificity:

human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: MCF-7 cells,

IHC: human breast cancer tissue, human lung cancer

Purification Method:

WB 1:500-1:2000

IHC 1:50-1:500

Antigen Affinity purified

Recommended Dilutions:

Background Information

LMTK3 is enriched at a perinuclear structure around Golgi membranes, it is present as a dotted pattern throughout neurites, and localized at neuronal synapses. It is also expected to be expressed in brain and duodenum. LMTK3 is a serine/threonine protein kinase expressed predominantly in brain. LMTK3 regulated ER-alpha stability and activity directly at the mRNA level via downregulation of PKC catalytic activity, resulting in less phosphorylated AKT at ser473. In vitro kinase assays indicated that LMTK3 inhibited the ability of PKC to phosphorylate ER-alpha, thereby affecting ER-alpha activity indirectly at the protein level by protecting it from proteasomal degradation. In agreement, analysis with a breast tumor xenograft mouse model revealed that knockdown of LMTK3 reduced $proliferation\ of\ ER-alpha-positive\ breast\ cancer\ cells\ and\ reduced\ tumor\ growth.\ In\ addition,\ LMTK3\ abundance\ and\ reduced\ tumor\ growth$ intronic polymorphisms were significantly associated with human cancers, overall patient survival, and predicted response to endocrine therapies. The calculated molecular weight of LMTK3 is 153 kDa.

Storage

Storage:

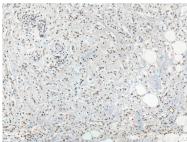
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3. Aliquoting is unnecessary for -20°C storage

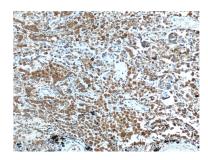
*** 20ul sizes contain 0.1% BSA

Selected Validation Data

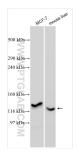


Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 22899-1-AP (LMTK3 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 22899-1-AP (LMTK3 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 22899-1-AP (LMTK3 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Various lysates were subjected to SDS PAGE followed by western blot with 22899-1-AP (LMTK3 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.