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**Product Name: LKB1 (phospho Ser428) Rabbit Polyclonal Antibody****Catalog #: APRab04959**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse,Cow
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Phosphorylated
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:20000-1:40000
<b>Molecular Weight</b>	65kDa

**Antigen Information**

<b>Gene Name</b>	STK11
<b>Alternative Names</b>	STK11; LKB1; PJS; Serine/threonine-protein kinase STK11; Liver kinase B1; LKB1; hLKB1; Renal carcinoma antigen NY-REN-19
<b>Gene ID</b>	6794.0
<b>SwissProt ID</b>	Q15831
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human LKB1 around the phosphorylation site of Ser428. AA range:384-433

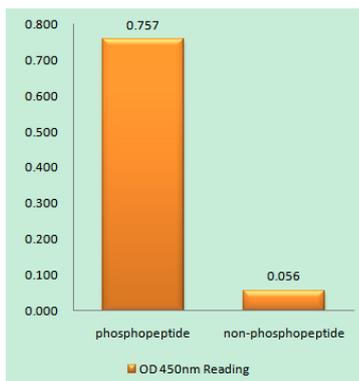
**Background**

This gene, which encodes a member of the serine/threonine kinase family, regulates cell polarity and functions as a tumor suppressor. Mutations in this gene have been associated with Peutz-Jeghers syndrome, an autosomal dominant disorder characterized by the growth of polyps in the gastrointestinal tract, pigmented macules on the skin and mouth, and other neoplasms. Alternate transcriptional splice variants of this gene have been observed but have not been thoroughly characterized. [provided by RefSeq, Jul 2008],catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium or manganese.,disease:Defects in STK11 are a cause of Peutz-Jeghers syndrome (PJS) [MIM:175200]. PJS is a rare hereditary disease in which there is predisposition to benign and malignant tumors of many organ systems. PJS is an autosomal dominant disorder characterized by melanocytic macules of the lips, multiple gastrointestinal hamartomatous polyps and an increased risk for various neoplasms, including gastrointestinal cancer.,disease:Defects in STK11 have been associated with testicular tumors [MIM:273300]. It includes germ cell tumor (GCT) or testicular germ cell tumor (TGCT).,enzyme regulation:Activated by binding of a complex consisting of CAB39 and STRAD or CAB39 and ALS2CR2.,function:Essential role in G1 cell cycle arrest. Phosphorylates and activates members of the AMPK-related subfamily of protein kinases. Tumor suppressor.,online information:PJS entry,PTM:Phosphorylated by a cAMP-dependent protein kinase.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. LKB1 subfamily.,similarity:Contains 1 protein kinase domain.,subcellular location:Relocates to the cytoplasm when bound to CAB39 and STRAD or CAB39 and ALS2CR2.,subunit:Found in a ternary complex composed of SMAD4, STK11 and STK11IP. Interacts with SMAD4 and STK11IP.,tissue specificity:Ubiquitously expressed. Strongest expression in testis and fetal liver.,

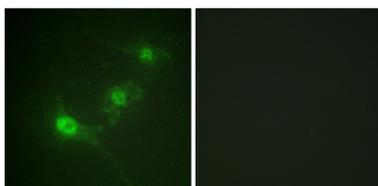
## Research Area

Insulin Receptor; mTOR; AMPK

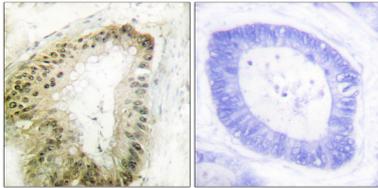
## Image Data



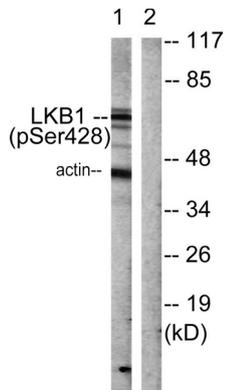
Enzyme-Linked Immunosorbent Assay ( Phospho-ELISA ) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right) , using LKB1 (Phospho-Ser428) Antibody



Immunofluorescence analysis of NIH/3T3 cells, using LKB1 (Phospho-Ser428) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using LKB1 (Phospho-Ser428) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HeLa cells treated with PMA 125ng/ml 30 ', using LKB1 (Phospho-Ser428) Antibody. The lane on the right is blocked with the phospho peptide.