



# LKB1 (Phospho Ser428) Rabbit mAb

<b>Catalog No</b>	YP-rAb-18329
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human,Mouse,Rat
<b>Applications</b>	WB,IF,ELISA
<b>Gene Name</b>	STK11
<b>Protein Name</b>	Serine/threonine-protein kinase STK11
<b>Purification Process</b>	Protein A
<b>Specificity</b>	LKB1 (Phospho Ser428) Antibody detects endogenous levels of LKB1 protein only when phosphorylated at S428.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):RLsAC
<b>Formulation</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source</b>	Monoclonal, Rabbit,IgG
<b>Dilution</b>	WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000;
<b>Concentration</b>	0.5 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-15° C to -25° C/1 year(Do not lower than -25° C)
<b>Synonyms</b>	STK11 ; LKB1 ; PJS ; Serine/threonine-protein kinase STK11 ; Liver kinase B1 ; LKB1 ; hLKB1 ; Renal carcinoma antigen NY-REN-19
<b>Observed Band</b>	55kD
<b>Calculated Molecular Weight</b>	49kD
<b>Cell Pathway</b>	Nucleus. Cytoplasm. Membrane . Mitochondrion. A small fraction localizes at membranes (By similarity). Relocates to the cytoplasm when bound to STRAD (STRADA or STRADB) and CAB39/MO25 (CAB39/MO25alpha or CAB39L/MO25beta). Translocates to the mitochondrion during apoptosis. PTEN promotes cytoplasmic localization. . ; [Isoform 2]: Nucleus . Cytoplasm . Predominantly nuclear, but translocates to the cytoplasm in response to metformin or peroxynitrite treatment.
<b>Tissue Specificity</b>	Ubiquitously expressed. Strongest expression in testis and fetal liver.




**Function**

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.,

**Background**

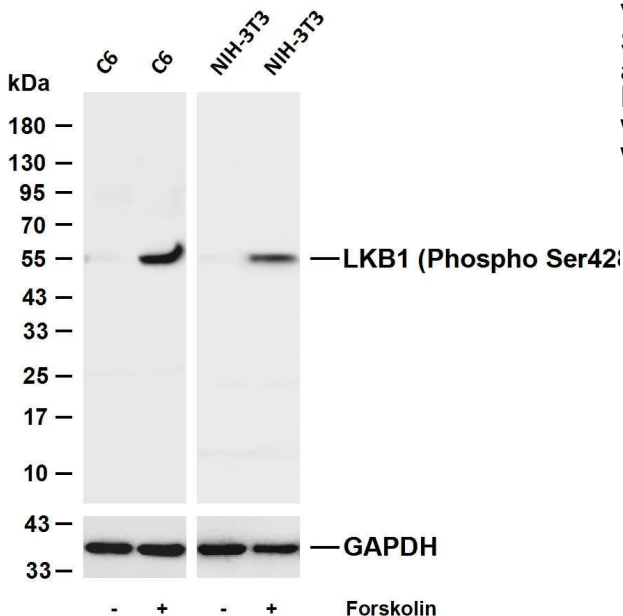
This gene, which encodes a member of the serine/threonine kinase family, regulates cell polarity and functions as a tumor suppressor. Mutations in this gene have been associated with Peutz-Jeghers syndrome, an autosomal dominant disorder characterized by the growth of polyps in the gastrointestinal tract, 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],

**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-LKB1 (Phospho Ser428) antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: C6 Lane 2: C6 was treated with Fo

