Best Tools for immunology Research

LKB1 Polyclonal Antibody

Catalog No :	YT2572
Reactivity :	Human;Mouse
Applications :	WB;IHC;IF;ELISA
Target :	LKB1
Fields :	>>FoxO signaling pathway;>>Autophagy - animal;>>mTOR signaling pathway;>>PI3K-Akt signaling pathway;>>AMPK signaling pathway;>>Longevity regulating pathway;>>Tight junction;>>Adipocytokine signaling pathway
Gene Name :	STK11
Protein Name :	Serine/threonine-protein kinase STK11
Human Gene Id :	6794
Human Swiss Prot No :	Q15831
Mouse Gene Id :	20869
Mouse Swiss Prot No :	Q9WTK7
Immunogen :	The antiserum was produced against synthesized peptide derived from human LKB1. AA range:384-433
Specificity :	LKB1 Polyclonal Antibody detects endogenous levels of LKB1 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500-2000 IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 49kD

Cell Pathway : Insulin Receptor; mTOR; AMPK

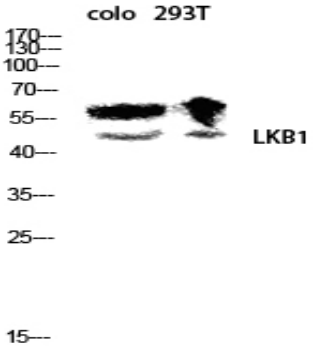
Background : This gene, which encodes a member of the serine/threonine kinase family, regulates cell polarity and functions as a tumor suppressor. Mutations in this gene have been associated with Peutz-Jeghers syndrome, an autosomal dominant disorder characterized by the growth of polyps in the gastrointestinal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

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 ki

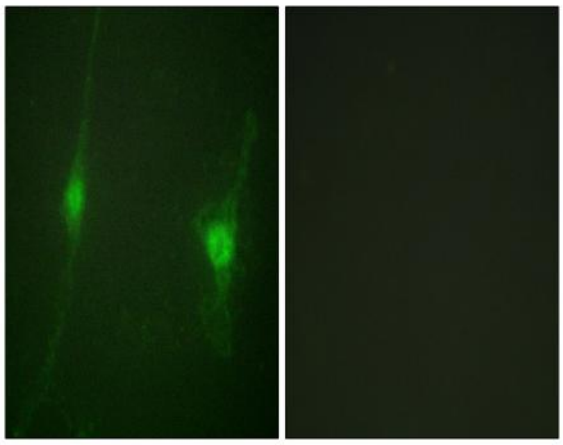
Subcellular Location : Nucleus. Cytoplasm. Membrane . Mitochondrion. A small fraction localizes at membranes (By similarity). Relocates to the cytoplasm when bound to STRAD (STRADA or STRADB) and CAB39/MO25 (CAB39/MO25alpha or CAB39L/MO25beta). Translocates to the mitochondrion during apoptosis. PTEN promotes cytoplasmic localization. .; [Isoform 2]: Nucleus . Cytoplasm . Predominantly nuclear, but translocates to the cytoplasm in response to metformin or peroxynitrite treatment.

Expression : Ubiquitously expressed. Strongest expression in testis and fetal liver.

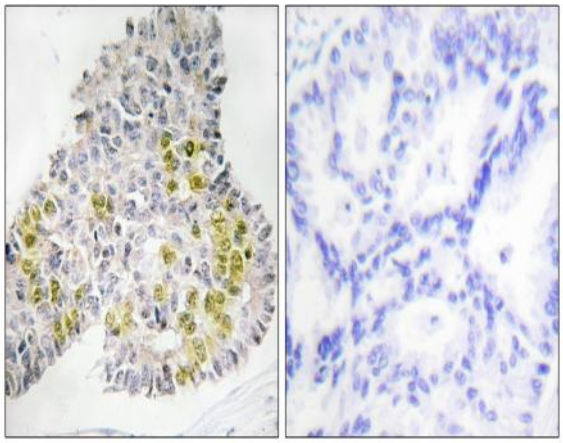
Products Images



Western blot analysis of colo 293T lysis using LKB1 antibody. Antibody was diluted at 1:500



Immunofluorescence analysis of NIH/3T3 cells, using LKB1 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using LKB1 Antibody. The picture on the right is blocked with the synthesized peptide.