



LKB1 Polyclonal Antibody

Catalog No	YP-Ab-14816
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC;IF;ELISA
Gene Name	STK11
Protein Name	Serine/threonine-protein kinase STK11
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	STK11; LKB1; PJS; Serine/threonine-protein kinase STK11; Liver kinase B1; LKB1; hLKB1; Renal carcinoma antigen NY-REN-19
Calculated Molecular Weight	49kD
Cell Pathway	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.
Tissue Specificity	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 ki

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],

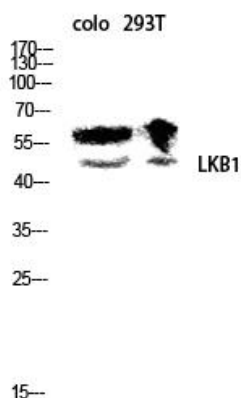
matters needing attention

Avoid repeated freezing and thawing!

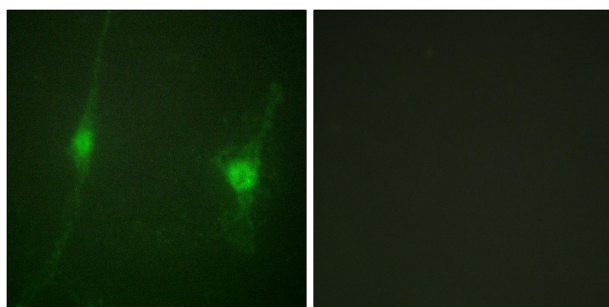
Usage suggestions

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

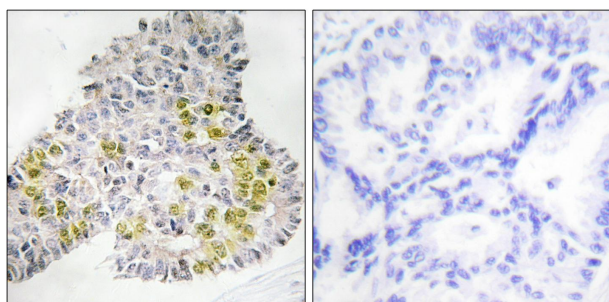
Products Images



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.