

Anti-LKB1 Rabbit pAb

Purified Rabbit Polyclonal Antibody

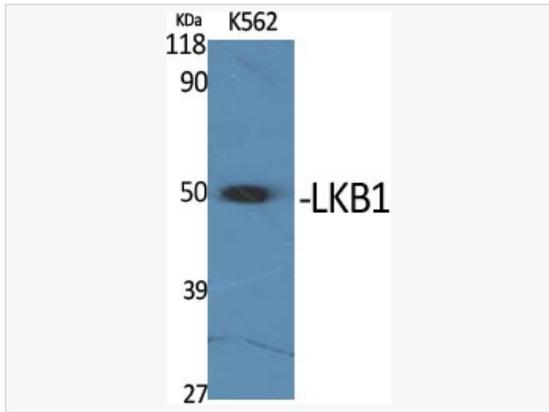
Catalog # P012475

Product Information

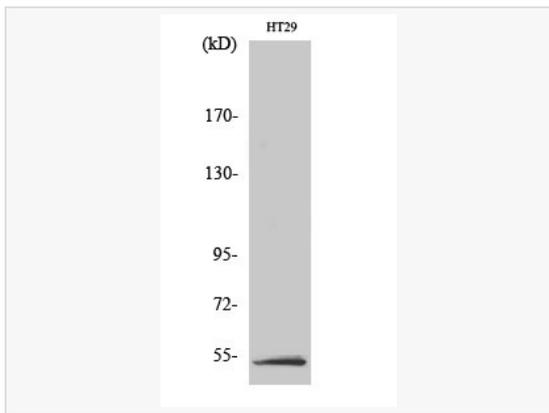
Application	WB, ELISA
Reactivity	Human, Mouse
Dilution	WB 1:500~1:1,000; ELISA 1:10,000
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	The antiserum was produced against synthesized peptide derived from human LKB1.
Format	Buffer System: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3. Purification: Affinity Chromatography
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-LKB1 antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

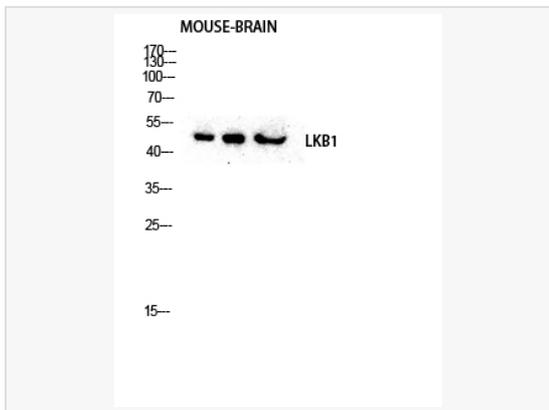
Synonyms	STK11, LKB1, PJS, Serine/threonine-protein kinase STK11, Liver kinase B1, LKB1, hLKB1, Renal carcinoma antigen NY-REN-19.
Calculated MW	Calculated MW: 49 kDa; Observed MW: 52 kDa
Uniprot ID	Q15831
Gene ID	6794
Background	Tumor suppressor serine/threonine-protein kinase that controls the activity of AMP-activated protein kinase (AMPK) family members, thereby playing a role in various processes such as cell metabolism, cell polarity, apoptosis and DNA damage response. Acts by phosphorylating the T-loop of AMPK family proteins, thus promoting their activity: phosphorylates PRKAA1, PRKAA2, BRSK1, BRSK2, MARK1, MARK2, MARK3, MARK4, NUA1, NUA2, SIK1, SIK2, SIK3 and SNRK but not MELK. Also phosphorylates non-AMPK family proteins such as STRADA, PTEN and possibly p53/TP53. Acts as a key upstream regulator of AMPK by mediating phosphorylation and activation of AMPK catalytic subunits PRKAA1 and PRKAA2 and thereby regulates processes including: inhibition of signaling pathways that promote cell growth and proliferation when energy levels are low, glucose homeostasis in liver, activation of autophagy when cells undergo nutrient deprivation, and B-cell differentiation in the germinal center in response to DNA damage. Also acts as a regulator of cellular polarity by remodeling the actin cytoskeleton. Required for cortical neuron polarization by mediating phosphorylation and activation of BRSK1 and BRSK2, leading to axon initiation and specification. Involved in DNA damage response: interacts with p53/TP53 and recruited to the CDKN1A/WAF1 promoter to participate in transcription activation. Able to phosphorylate p53/TP53; the relevance of such result in vivo is however unclear and phosphorylation may be indirect and mediated by downstream STK11/LKB1 kinase NUA1. Also acts as a mediator of p53/TP53-dependent apoptosis via interaction with p53/TP53: translocates to the



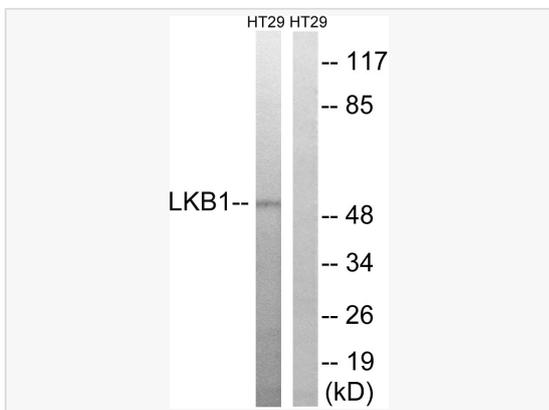
Western blot analysis of LKB1 in various lysates using LKB1 antibody.



Western blot analysis of LKB1 in HT-29 lysates using LKB1 antibody.



Western blot analysis of LKB1 in KB, 3T3, Hela lysates using LKB1 antibody.



Western blot analysis of LKB1 in HT-29 lysates using LKB1 antibody. The lane on the right is blocked with the synthesized peptide.