

Product datasheet for **TA392488S**

LKB1 (STK11) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:1000~1:2000
Reactivity:	Human, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic phosphopeptide derived from human LKB1 around the phosphorylation site of Serine 428.
Specificity:	LKB1(Phospho-Ser428) polyclonal antibody detects endogenous levels of LKB1 protein only when phosphorylated at Ser428.
Formulation:	Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2.
Concentration:	1mg/ml
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.
Stability:	1 year
Predicted Protein Size:	~ 55 kDa
Gene Name:	serine/threonine kinase 11
Database Link:	Entrez Gene 6794 Human Q15831



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Background:

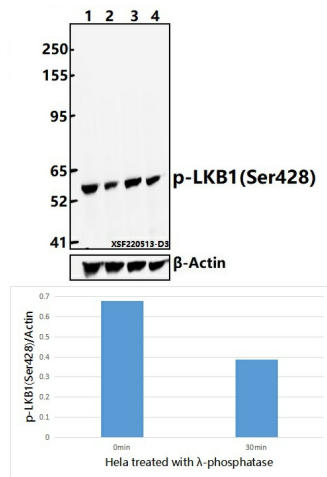
LKB1 (STK11) is a serine/threonine kinase and tumor suppressor that helps control cell structure, apoptosis and energy homeostasis through regulation of numerous downstream kinases. A cytosolic protein complex comprised of LKB1, putative kinase STRAD, and the MO25 scaffold protein, activates both AMP-activated protein kinase (AMPK) and several AMPK-related kinases. AMPK plays a predominant role as the master regulator of cellular energy homeostasis, controlling downstream effectors that regulate cell growth and apoptosis in response to cellular ATP concentrations. LKB1 appears to be phosphorylated in cells at several sites, including human LKB1 at Ser31/325/428 and Thr189/336/363. Mutation in the corresponding LKB1 gene causes Peutz-Jeghers syndrome (PJS), an autosomal dominant disorder characterized by benign GI tract polyps and dark skin lesions of the mouth, hands, and feet. A variety of other LKB1 gene mutations have been associated with the formation of sporadic cancers in several tissues. Recent evidence suggests that phosphorylation at Ser428 by PKC ζ influences the ability of LKB1 to bind and phosphorylate AMPK at Thr172 as well as regulate apoptosis through PTEN signaling pathway suppression of Akt.

Synonyms:

Hlkb1; Liver kinase B1; LKB1; LKB1, PJS; Renal carcinoma antigen NY-REN-19; Serine/threonine-protein kinase STK11; STK11

Note:

For research use only, not for use in diagnostic procedure.

Product images:

Western blot (WB) analysis of LKB1(Phospho-Ser428) polyclonal antibody at 1:1000 dilution Lane1:HeLa whole cell lysate(30ug) Lane2:HeLa treated with λ-phosphatase whole cell lysate(30ug) Lane3:HEK293T whole cell lysate(30ug) Lane4:PC12 whole cell lysate(30ug)