

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human LKB1/STK11 in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2A} Clone # 873502
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human LKB1/STK11 Met1-Gln433 Accession # Q15831
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Knockout Validated	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

LKB1, also known as STK11 and JBS, is a 55 kDa member of the CAMK Ser/Thr protein kinase family. It is ubiquitously expressed, and considered to be a tumor suppressor. LKB1 is both nuclear and cytoplasmic, and appears to contribute to cell polarization, G1 cell cycle arrest and Wnt signaling. It is known to complex with STRAD and CAB39/MO25, and phosphorylate PTEN plus p53. Human LKB1 is 433 amino acids (aa) in length. It contains a protein kinase domain (aa 49-309) and a prenylation motif (CysLysGlnGln) over aa 430-433. Phosphorylation on Ser428 promotes the ability of LKB1 to suppress G361 cell growth. There are two potential isoforms of LKB1. One shows a nine aa insertion after Tyr126, while another shows a 34 aa substitution for aa 371-433. Human LKB1 shares 90% aa sequence identity with mouse and rat LKB1.

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