

## DESCRIPTION

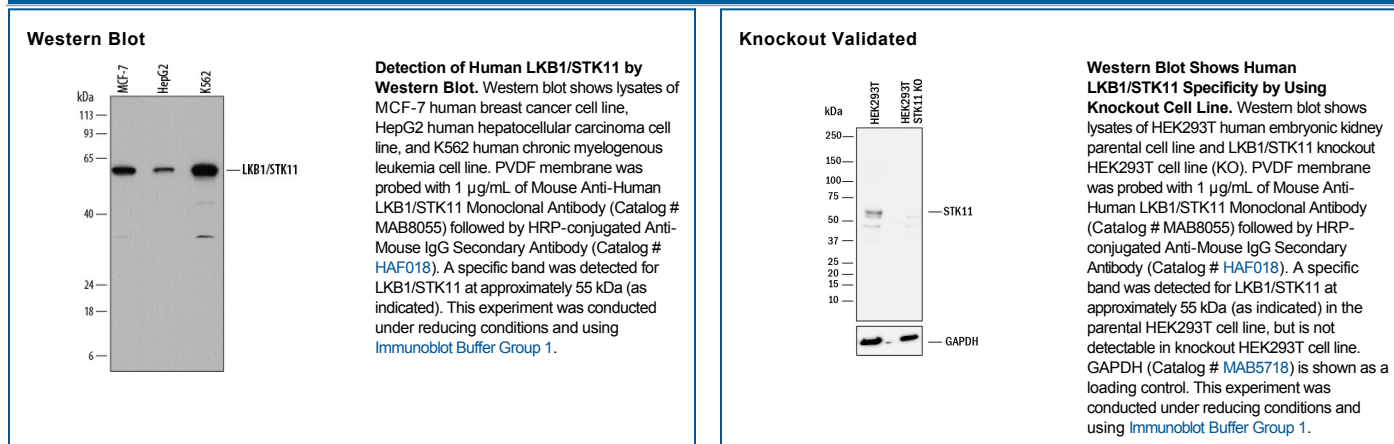
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human LKB1/STK11 in direct ELISAs and Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 873502
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human LKB1/STK11 Met1-Gln433 Accession # Q15831
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

## 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.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 µg/mL	See Below
<b>Knockout Validated</b>	LKB1/STK11 is specifically detected in HEK293T human embryonic kidney parental cell line but is not detectable in LKB1/STK11 knockout HEK293T cell line.	

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.