

For Research Use Only

Phospho-STK11/LKB1 (Ser334) Recombinant monoclonal antibody

Catalog Number: 87893-2-RR



Basic Information

Catalog Number:

87893-2-RR

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC007981

GeneID (NCBI):

6794

UNIPROT ID:

Q15831

Full Name:

serine/threonine kinase 11

Calculated MW:

49 kDa

Observed MW:

50-55 kDa

Purification Method:

Protein A purification

CloneNo.:

252441A6

Recommended Dilutions:

WB: 1:500-1:2000

Applications

Tested Applications:

WB, ELISA

Species Specificity:

human

Positive Controls:

WB: HeLa cells,

Background Information

STK11 (serine/threonine-protein kinase 11) is also named as LKB1, PJS, and belongs to the protein kinase superfamily. Phospho-STK11 (Ser334), also called p-LKB1 (S334), is an inhibitory phosphorylation modification of the tumor suppressor kinase LKB1. This site is phosphorylated by Akt and PIM kinases upon growth factor stimulation. Phosphorylated Ser334 recruits 14-3-3 proteins, sequestering LKB1 in the nucleus and disrupting its binding to STRAD α -MO25 complex. This abolishes LKB1's capacity to activate AMPK, impairing energy sensing, autophagy and anti-proliferative signals. Elevated p-LKB1 (Ser334) accelerates proliferation in breast, prostate and lung cancers, weakens metabolic stress response, and correlates with poor tumor prognosis. It serves as a biomarker for aberrant PI3K/Akt oncogenic signaling and represents a target to restore LKB1 tumor-suppressive function. (PMID: 22611470, 34193159)

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

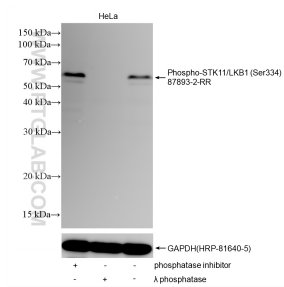
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Selected Validation Data



Non-treated HeLa cells, phosphatase inhibitor treated HeLa cells and λ phosphatase treated HeLa cells were subjected to SDS PAGE followed by western blot with 87893-2-RR (Phospho-STK11/LKB1 (Ser334) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH (HRP-81640-5) antibody as a loading control.