For Research Use Only

Phospho-AMPK Beta 1 (Ser182) Recombinant antibody

Catalog Number:83924-1-RR 4 Publications

proteintech®
Antibodies | ELISA kits | Proteins
Uni-rAb
www.ptglab.com

Basic Information

Catalog Number:
83924-1-RR

Size:
100ul , Concentration: 500 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
BC001007

GeneID (NCBI):
5564

UNIPROT ID:
Q9Y478

Full Name:
protein kinase, AMP-activated, beta 1 non-catalytic subunit

Calculated MW:
38 kDa

Observed MW:
38 kDa

Purification Method:
Protein A purfication

CloneNo.:
240628B1

Recommended Dilutions:
WB 1:500-1:2000

Applications

Tested Applications:
WB, ELISA

Cited Applications:
WB

Species Specificity:
human

Cited Species:
human, mouse, rat

Positive Controls:

WB : HEK-293 cells, λ phosphatase treated HEK-293 cells

Background Information

AMPK Beta 1 (5'-AMP-activated protein kinase subunit beta-1) is also named as PRKAB1 and AMPK. AMPK, a serine/threonine kinase that exists as a heterotrimer comprised of a catalytic α-subunit and regulatory β- and γ-subunits, has been recognized as a sensor of cellular energy homeostasis (PMID: 21937710). AMPK regulates key metabolic enzymes, cell growth, apoptosis, gene transcription, and protein synthesis (PMID: 12829246). AMPK is an energy sensor and plays an essential role in the control of cellular bioenergetics by responding to various stresses including those that induce changes in the cellular AMP:ATP ratio or modulation in intracellular calcium (PMID: 27812976, PMID: 26616193). Recent studies have shown that AMPK mediates the inhibition of cell proliferation and growth of tumor cells (PMID: 16613876). AMPK also inhibits the expression of Glut1 and glycolysis in Tregs by inhibiting mTORC1 signaling (PMID: 25477880). This antibody recognizes phosphorylated AMPK Beta 1.

Notable Publications

Author	Pubmed ID	Journal	Application
Maladho Tanta Diallo	39580063	Cell Signal	WB
Qi Yan	39599662	Nutrients	WB
Junli Zhang	39502521	Anal Cell Pathol (Amst)	WB

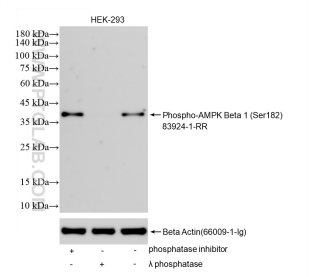
Storage

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

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

Selected Validation Data



Non-treated HEK-293 cells, phosphatase inhibitor treated HEK-293 cells and λ phosphatase treated HEK-293 cells were subjected to SDS PAGE followed by western blot with 83924-1-RR (Phospho-AMPK Beta 1 (Ser182) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Beta Actin (66009-1-Ig) antibody as a loading control.