

For Research Use Only

# Phospho-AMPK Beta 1 (Ser182) Recombinant antibody

Catalog Number: 83924-1-RR **4 Publications**



## 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 purification

CloneNo.:

240628B1

Recommended Dilutions:

WB 1:2000-1:10000

## Applications

Tested Applications:

WB, ELISA

Cited Applications:

WB

Species Specificity:

human

Cited Species:

human, mouse, rat

Positive Controls:

WB : HEK-293 cells,  $\lambda$  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  $\alpha$ -subunit and regulatory  $\beta$ - and  $\gamma$ -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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

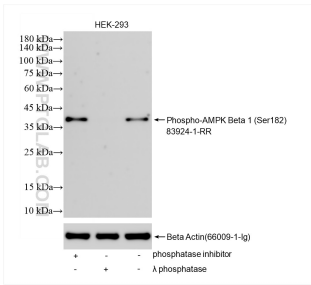
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## Selected Validation Data



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.