

AMPK Beta 1 Recombinant monoclonal antibody

Catalog Number: 88497-1-RR

Basic Information

Catalog Number:

88497-1-RR

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0301

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.:

260706B12

Recommended Dilutions:

WB: 1:5000-1:50000

IF/ICC: 1:200-1:800

Applications

Tested Applications:

WB, IF/ICC, ELISA

Species Specificity:

human, mouse, rat

Positive Controls:WB : HeLa cells, HEK-293 cells, A431 cells, K-562 cells,
NIH/3T3 cells, PC-12 cells, NR8383 cells

IF/ICC : MCF-7 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).

Storage

Storage:

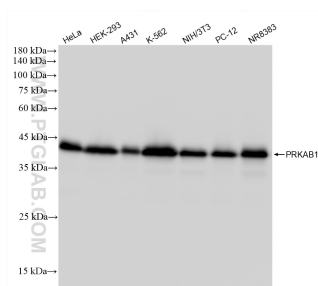
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

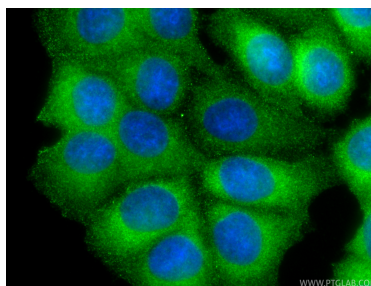
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 88497-1-RR (PRKAB1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using AMPK Beta 1 antibody (88497-1-RR, Clone: 260706B12) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).