

For Research Use Only

# AMPK Beta 1 Recombinant monoclonal antibody, PBS Only

Catalog Number: 88497-1-PBS



## Basic Information

|                                     |                                                                              |                                                |
|-------------------------------------|------------------------------------------------------------------------------|------------------------------------------------|
| Catalog Number:<br>88497-1-PBS      | GenBank Accession Number:<br>BC001007                                        | Purification Method:<br>Protein A purification |
| Source:<br>Rabbit                   | GeneID (NCBI):<br>5564                                                       | CloneNo.:<br>260706B12                         |
| Isotype:<br>IgG                     | UNIPROT ID:<br>Q9Y478                                                        |                                                |
| Immunogen Catalog Number:<br>AG0301 | Full Name:<br>protein kinase, AMP-activated, beta 1<br>non-catalytic subunit |                                                |
|                                     | Calculated MW:<br>38 kDa                                                     |                                                |
|                                     | Observed MW:<br>38 kDa                                                       |                                                |

## Applications

Tested Applications:  
WB, IF/ICC, Indirect ELISA

Species Specificity:  
human, mouse, rat

## 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).

## Storage

Storage:  
Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:  
PBS only, pH7.3

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

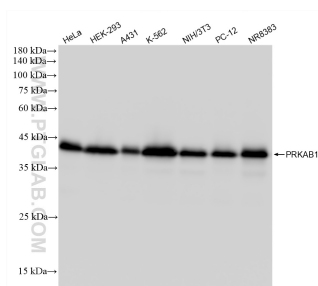
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

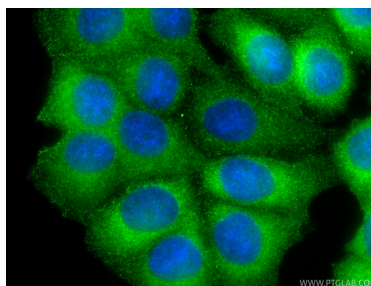
W: [ptgcn.com](http://ptgcn.com)

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## 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. This data was developed using the same antibody clone with 88497-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 88497-1-PBS in a different storage buffer formulation.