

## Product datasheet for **CF813115**

### AMPK beta 1 (PRKAB1) Mouse Monoclonal Antibody [Clone ID: OTI3B11]

#### Product data:

|                         |  |
|-------------------------|--|
| Product Type:           | Primary Antibodies   |
| Clone Name:             | OTI3B11  |
| Applications:           | WB   |
| Recommended Dilution:   | WB 1:500   |
| Reactivity:             | Human, Mouse, Rat  |
| Host:                   | Mouse  |
| Isotype:                | IgG1   |
| Clonality:              | Monoclonal   |
| Immunogen:              | Human recombinant protein fragment corresponding to amino acids 2-270 of human PRKAB1 (NP_006244) produced in E.coli.  |
| Formulation:            | Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)  |
| Reconstitution Method:  | For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific) |
| Purification:           | Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)  |
| Conjugation:            | Unconjugated   |
| Storage:                | Store at -20°C as received.  |
| Stability:              | Stable for 12 months from date of receipt.   |
| Predicted Protein Size: | 30.2 kDa   |
| Gene Name:              | protein kinase AMP-activated non-catalytic subunit beta 1  |
| Database Link:          | <a href="#">NP_006244</a><br><a href="#">Entrez Gene 19079 Mouse</a> <a href="#">Entrez Gene 83803 Rat</a> <a href="#">Entrez Gene 5564 Human</a><br><a href="#">Q9Y478</a>  |



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**Background:**

Non-catalytic subunit of AMP-activated protein kinase (AMPK), an energy sensor protein kinase that plays a key role in regulating cellular energy metabolism. In response to reduction of intracellular ATP levels, AMPK activates energy-producing pathways and inhibits energy-consuming processes: inhibits protein, carbohydrate and lipid biosynthesis, as well as cell growth and proliferation. AMPK acts via direct phosphorylation of metabolic enzymes, and by longer-term effects via phosphorylation of transcription regulators. Also acts as a regulator of cellular polarity by remodeling the actin cytoskeleton; probably by indirectly activating myosin. Beta non-catalytic subunit acts as a scaffold on which the AMPK complex assembles, via its C-terminus that bridges alpha (PRKAA1 or PRKAA2) and gamma subunits (PRKAG1, PRKAG2 or PRKAG3). [UniProtKB/Swiss-Prot Function]

**Synonyms:**

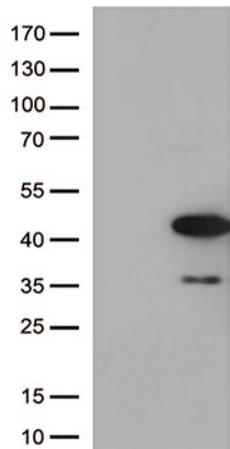
AMPK; HAMPKb

**Protein Families:**

Druggable Genome

**Protein Pathways:**

Adipocytokine signaling pathway, Hypertrophic cardiomyopathy (HCM), Insulin signaling pathway

**Product images:**

HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PRKAB1 ([RC203911], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PRKAB1 (1:500).