

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:	NP_006244 Entrez Gene 19079 Mouse Entrez Gene 83803 Rat Entrez Gene 5564 Human Q9Y478

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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:

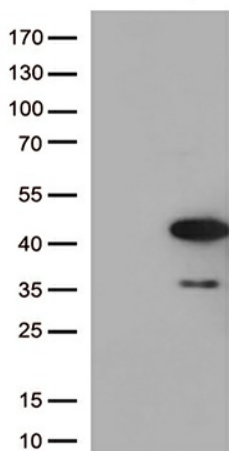
AMPK; HAMPKb

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).