

Product datasheet for **TA813116AM**

AMPK beta 1 (PRKAB1) Mouse Monoclonal Antibody (Biotin conjugated) [Clone ID: OTI3D10]

Product data:

| | |
|-------------------------|---|
| Product Type: | Primary Antibodies |
| Clone Name: | OTI3D10 |
| 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: | PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide. |
| Concentration: | 0.5 mg/ml |
| Purification: | Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G) |
| Conjugation: | Biotin |
| 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:

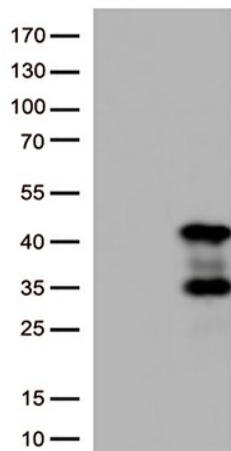
AMPK; HAMPKb

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).