

PRKAB2

Purified Mouse Monoclonal Antibody
Catalog # AO2604a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	O43741
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	7A8C3
Isotype	Mouse IgG2b
Calculated MW	30302
Immunogen	Purified recombinant fragment of human PRKAB2 (AA: 1-120) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	5565
Other Names	5'-AMP-activated protein kinase subunit beta-2, AMPK subunit beta-2, PRKAB2
Dilution	WB~~ 1/500 - 1/2000 IHC~~1:100~500 ICC~~N/A E~~ 1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PRKAB2 is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PRKAB2
Function	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).

References

1. Mol Biol Cell. 2013 Jun;24(11):1801-11, S1-4.2. Circ Res. 2012 Aug 31;111(6):800-14.

Images

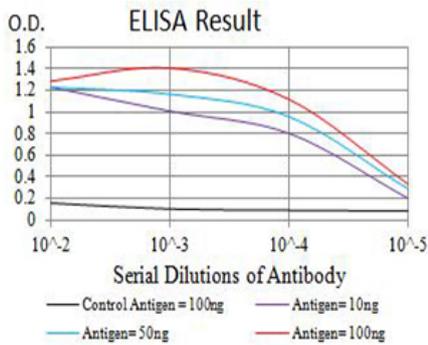


Figure 1: Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

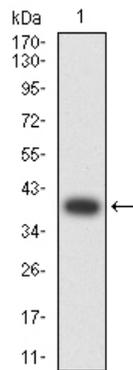


Figure 2: Western blot analysis using PRKAB2 mAb against human PRKAB2 (AA: 1-120) recombinant protein. (Expected MW is 39 kDa)

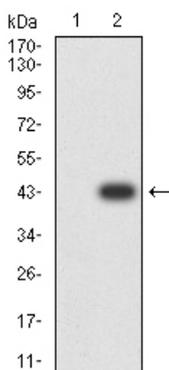
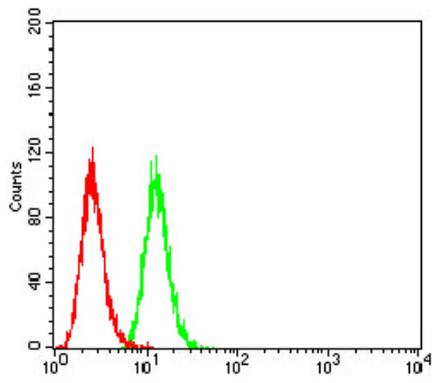


Figure 3: Western blot analysis using PRKAB2 mAb against HEK293 (1) and PRKAB2 (AA: 1-120)-hIgGFc transfected HEK293 (2) cell lysate.

Figure 4: Flow cytometric analysis of HeLa cells using PRKAB2 mouse mAb (green) and negative control (red).



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