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# PRKAB2

Purified Mouse Monoclonal Antibody
Catalog # AO2604a

## Product Information

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|---|---|
| **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

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|---|---|
| **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

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|---|---|
| **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

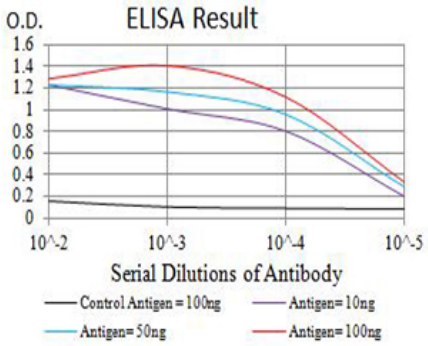



Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

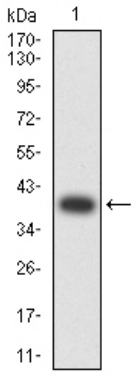



Figure 2:Western blot analysis using PRKAB2 mAb against human PRKAB2 (AA: 1-120) recombinant protein. (Expected MW is 39 kDa)

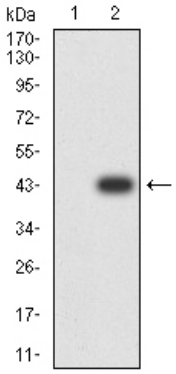
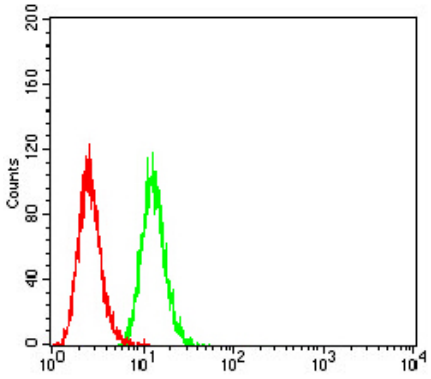



Figure 3:Western blot analysis using PRKAB2 mAb against HEK293 (1) and PRKAB2 (AA: 1-120)-hIgGFc transfected HEK293 (2) cell lysate.

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




Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.