

**PRKAB2**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2605a****Specification**

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**PRKAB2 - Product Information**

Application	E, WB, FCM, ICC, IHC
Primary Accession	<a href="#">O43741</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Calculated MW	30.3kDa KDa
<b>Immunogen</b>	

Purified recombinant fragment of human PRKAB2 (AA: 1-120) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**PRKAB2 - Additional Information**

**Gene ID** 5565

**Dilution**

E~~ 1/10000  
WB~~ 1/500 - 1/2000  
FCM~~1/200 - 1/400  
ICC~~ 1/200 - 1/1000  
IHC~~ 1/200 - 1/1000

**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.

**PRKAB2 - 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).

## PRKAB2 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## PRKAB2 - Images

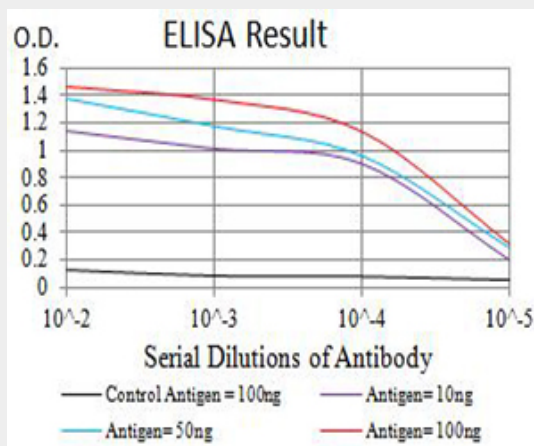


Figure 1: Black line: Control Antigen (100 ng); Purple line: Antigen (10 ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

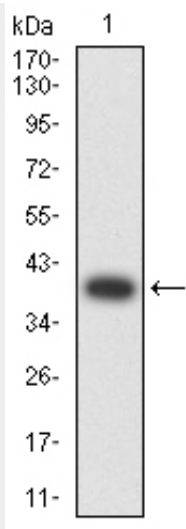


Figure 2: Western blot analysis using PRKAB2 mAb against human PRKAB2 (AA: 1-120) recombinant protein. (Expected MW is 39 kDa)

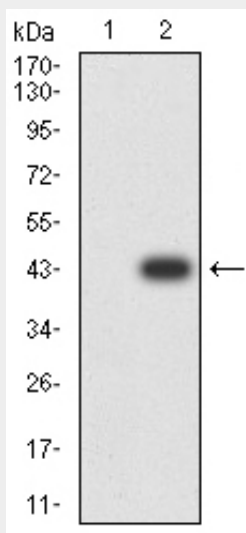


Figure 3: Western blot analysis using PRKAB2 mAb against HEK293 (1) and PRKAB2 (AA: 1-120)-hlgGfC transfected HEK293 (2) cell lysate.

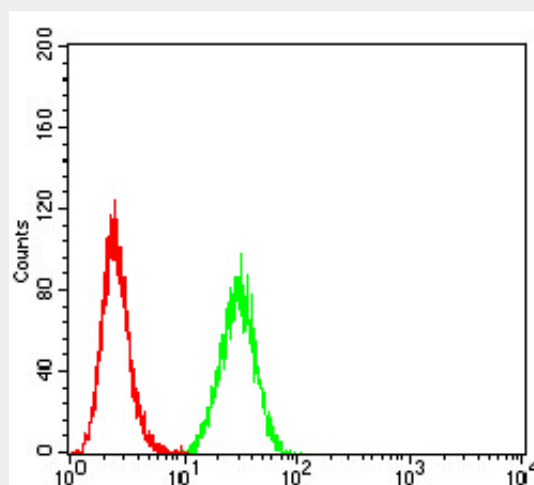


Figure 5: Flow cytometric analysis of Hela cells using PRKAB2 mouse mAb (green) and negative

control (red).

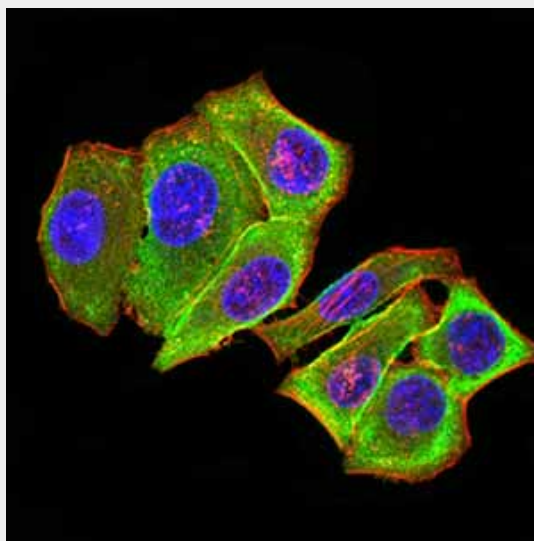


Figure 4: Immunofluorescence analysis of HeLa cells using PRKAB2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

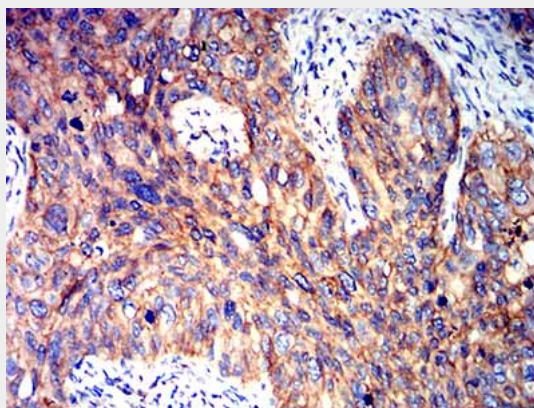


Figure 6: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using PRKAB2 mouse mAb with DAB staining.

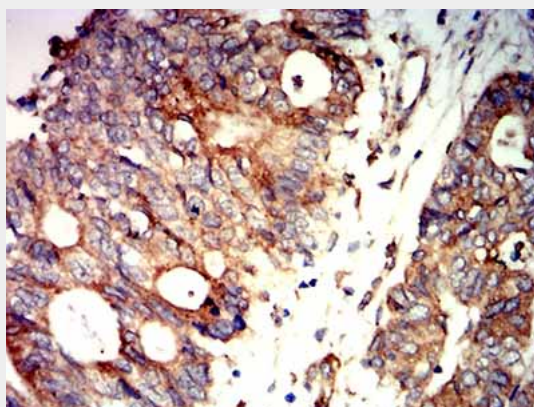


Figure 7: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using PRKAB2 mouse mAb with DAB staining.

#### PRKAB2 - References

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