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PRKAB2
Purified Mouse Monoclonal Antibody
Catalog # AO2605a

Specification

PRKAB2 - Product Information

Application	**WB, IHC, ICC, E**
Primary Accession	O43741
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1**
Calculated MW	**30.3kDa KDa**

Immunogen
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
WB~~ 1/500 - 1/2000
IHC~~ 1/200 - 1/1000
ICC~~ 1/200 - 1/1000
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.

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 Cytomety
- Cell Culture

PRKAB2 - Images

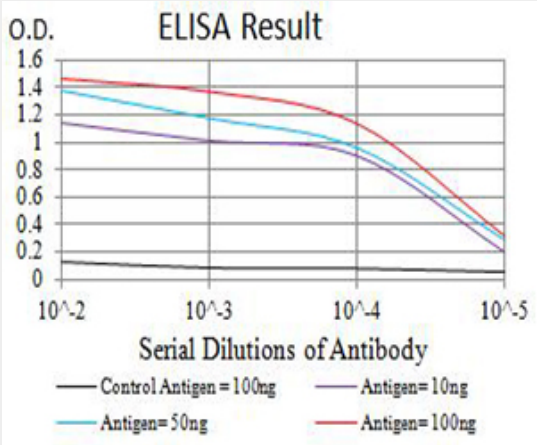

Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

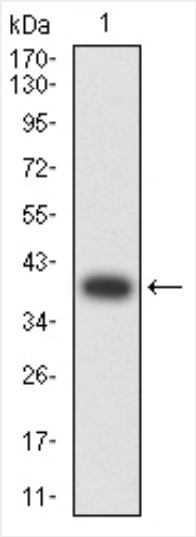

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Figure 2:Western blot analysis using PRKAB2 mAb against human PRKAB2 (AA: 1-120) recombinant protein. (Expected MW is 39 kDa)

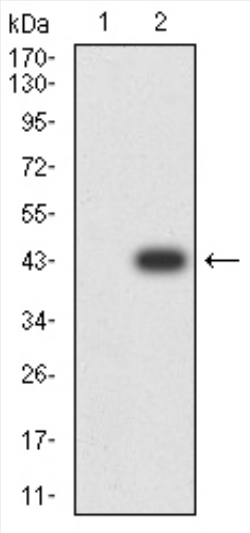

Figure 3:Western blot analysis using PRKAB2 mAb against HEK293 (1) and PRKAB2 (AA: 1-120)-hIgGFc transfected HEK293 (2) cell lysate.

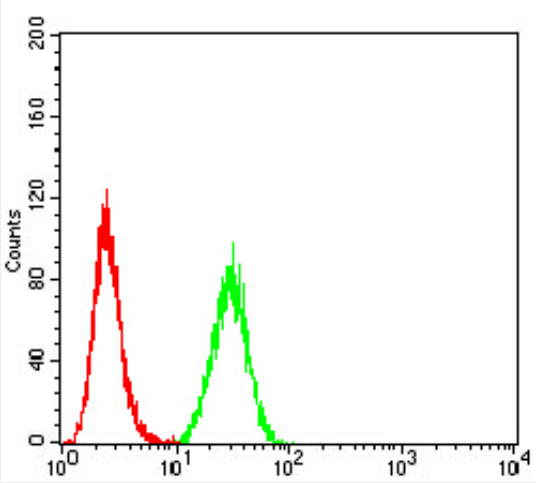

Figure 5:Flow cytometric analysis of Hela cells using PRKAB2 mouse mAb (green) and negative control (red).

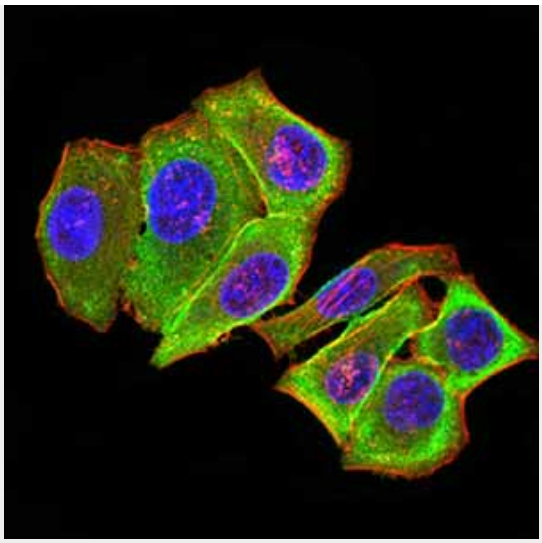

Figure 4:Immunofluorescence analysis of Hela cells using PRKAB2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

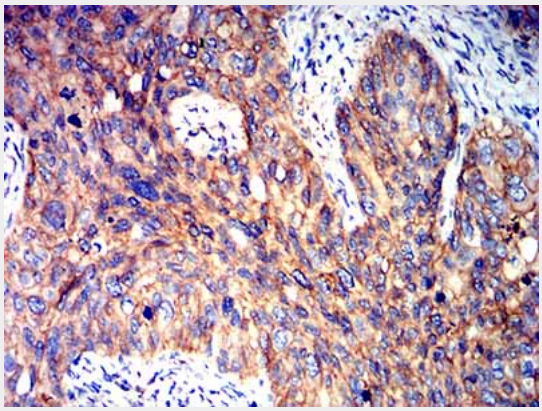

Figure 6:Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using PRKAB2 mouse mAb with DAB staining.

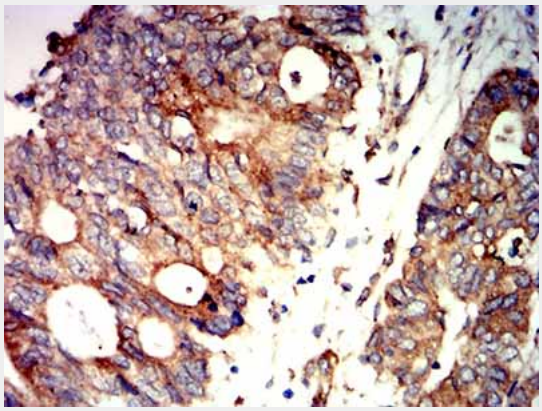

Figure 7:Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using PRKAB2 mouse mAb with DAB staining.

PRKAB2 - References

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