

# **RAB4A Antibody**

Purified Mouse Monoclonal Antibody Catalog # AO1720a

# **Specification**

## **RAB4A Antibody - Product Information**

Application WB, IHC, FC, E

Primary Accession P20338

Reactivity Human, Mouse, Monkey

Host Mouse
Clonality Monoclonal
Isotype IgG1

Calculated MW 23.8kDa KDa

**Description** 

The protein encoded by this gene belongs to the rab family. Rab4A protein is involved in the regulation of procathepsin L secretion, it was either inhibited by expression of a Rab4A dominant-negative mutant or increased by overexpression of the wild-type Rab4A in human melanoma cells.

### **Immunogen**

Purified recombinant fragment of human RAB4A expressed in E. Coli. <br/> <br/> />

## **Formulation**

Purified antibody in PBS with 0.05% sodium azide

## **RAB4A Antibody - Additional Information**

**Gene ID 5867** 

# **Other Names**

Ras-related protein Rab-4A, RAB4A, RAB4

# **Dilution**

WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 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**

RAB4A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **RAB4A Antibody - Protein Information**



# Name RAB4A (HGNC:9781)

### **Synonyms RAB4**

#### **Function**

The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes. Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit to membranes different sets of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion (PubMed:<a href="http://www.uniprot.org/citations/15907487" target="\_blank">15907487</a>, PubMed:<a href="http://www.uniprot.org/citations/16034420" target="\_blank">16034420</a>). RAB4A is involved in protein transport (PubMed:<a

href="http://www.uniprot.org/citations/29425100" target="\_blank">29425100</a>). Also plays a role in vesicular traffic. Mediates VEGFR2 endosomal trafficking to enhance VEGFR2 signaling (PubMed:<a href="http://www.uniprot.org/citations/29425100" target="\_blank">29425100</a>). Acts as a regulator of platelet alpha-granule release during activation and aggregation of platelets (By similarity).

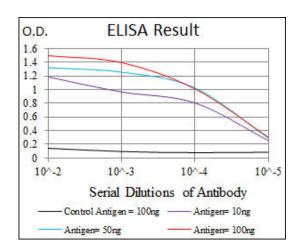
#### **Cellular Location**

Membrane; Peripheral membrane protein. Cytoplasm Early endosome membrane {ECO:0000250|UniProtKB:P05714}; Peripheral membrane protein {ECO:0000250|UniProtKB:P05714}. Recycling endosome membrane {ECO:0000250|UniProtKB:P05714}; Peripheral membrane protein {ECO:0000250|UniProtKB:P05714}. Note=Generally associated with membranes. Cytoplasmic when phosphorylated by CDK1

### RAB4A Antibody - 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





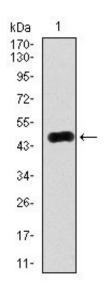


Figure 1: Western blot analysis using RAB4A mAb against human RAB4A (AA: 22-218) recombinant protein. (Expected MW is 47.9 kDa)

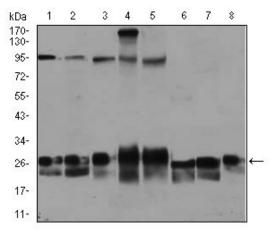


Figure 2: Western blot analysis using RAB4A mouse mAb against Jurkat (1), HeLa (2), A549 (3), HEK293 (4), K562 (5), NIH3T3 (6), PC-12 (7), and COS7 (8) cell lysate.

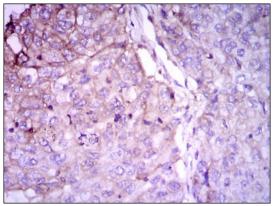


Figure 3: Immunohistochemical analysis of paraffin-embedded lung cancer tissues using RAB4A mouse mAb with DAB staining.



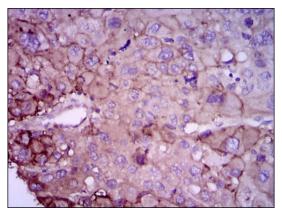


Figure 4: Immunohistochemical analysis of paraffin-embedded liver cancer tissues using RAB4A mouse mAb with DAB staining.

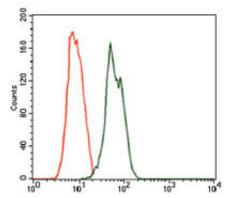


Figure 5: Flow cytometric analysis of MCF-7 cells using RAB4A mouse mAb (green) and negative control (red).

# **RAB4A Antibody - References**

1. Biochem J. 2011 Jul 1;437(1):97-107. 2. Int J Cancer. 2011 Jan 1;128(1):192-205.