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RAB4A Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1720a

Product Information

Application	WB, IHC, FC, E
Primary Accession	P20338
Reactivity	Human, Mouse, Monkey
Host	Mouse
Clonality	Monoclonal
Clone Names	4E11
Isotype	IgG1
Calculated MW	24390
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.
Formulation	Purified antibody in PBS with 0.05% sodium azide

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.

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:15907487, PubMed:16034420). RAB4A is involved in protein transport (PubMed:29425100). Also plays a role in vesicular traffic. Mediates VEGFR2 endosomal trafficking to enhance VEGFR2 signaling (PubMed:29425100). 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

References

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

Images

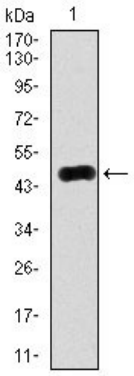


Figure 1: Western blot analysis using RAB4A mAb against human RAB4A (AA: 22-218) recombinant protein. (Expected MW is 47.9 kDa)

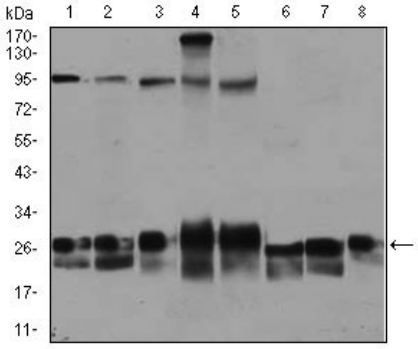


Figure 2: Western blot analysis using RAB4A mouse mAb against Jurkat (1), HeLa (2), A549 (3), HEK293 (4), K562 (5), NIH3T3 (6), PC-12 (7), and COS7 (8) cell lysate.

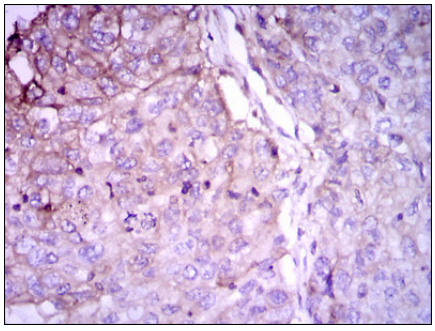
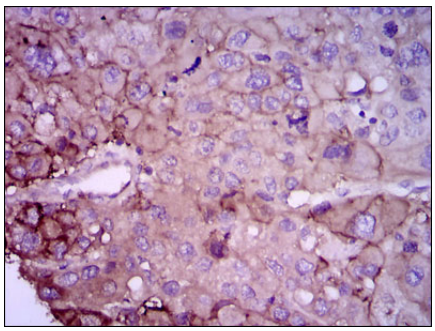


Figure 3: Immunohistochemical analysis of paraffin-embedded lung cancer tissues using RAB4A mouse mAb with DAB staining.

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



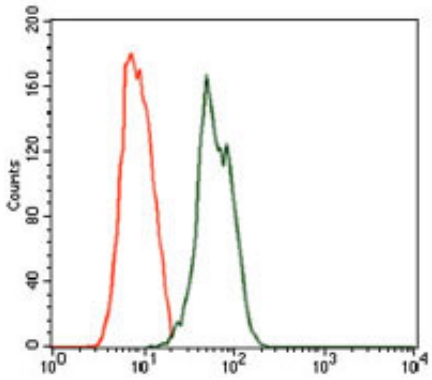


Figure 5: Flow cytometric analysis of MCF-7 cells using RAB4A mouse mAb (green) and negative control (red).

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