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RAP1GAP Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1974a

Product Information

Application	WB, FC, E
Primary Accession	P47736
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2G7B6
Isotype	IgG2b
Calculated MW	73361
Description	This gene encodes a type of GTPase-activating-protein (GAP) that down-regulates the activity of the ras-related RAP1 protein. RAP1 acts as a molecular switch by cycling between an inactive GDP-bound form and an active GTP-bound form. The product of this gene, RAP1GAP, promotes the hydrolysis of bound GTP and hence returns RAP1 to the inactive state whereas other proteins, guanine nucleotide exchange factors (GEFs), act as RAP1 activators by facilitating the conversion of RAP1 from the GDP- to the GTP-bound form. In general, ras subfamily proteins, such as RAP1, play key roles in receptor-linked signaling pathways that control cell growth and differentiation. RAP1 plays a role in diverse processes such as cell proliferation, adhesion, differentiation, and embryogenesis. Alternative splicing results in multiple transcript variants encoding distinct proteins.
Immunogen	Purified recombinant fragment of human RAP1GAP (AA: 412-678) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide.

Additional Information

Gene ID	5909
Other Names	Rap1 GTPase-activating protein 1, Rap1GAP, Rap1GAP1, RAP1GAP, KIAA0474, RAP1GA1
Dilution	WB~~1/500 - 1/2000 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	RAP1GAP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RAP1GAP
Synonyms	KIAA0474, RAP1GA1
Function	GTPase activator for the nuclear Ras-related regulatory protein RAP-1A (KREV-1), converting it to the putatively inactive GDP- bound state.
Cellular Location	Golgi apparatus membrane; Peripheral membrane protein
Tissue Location	Significant expression seen in the brain, kidney and pancreas. Abundant in the cerebral cortex and expressed at much lower levels in the spinal cord. Not detected in the lymphoid tissues

References

1. Endocr Relat Cancer. 2012 Jul 22;19(4):575-88.2. Cancer Lett. 2012 Jul 1;320(1):65-71.

Images

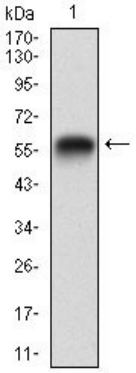

Figure 1: Western blot analysis using RAP1GAP mAb against human RAP1GAP (AA: 412-678) recombinant protein. (Expected MW is 53.9 kDa)

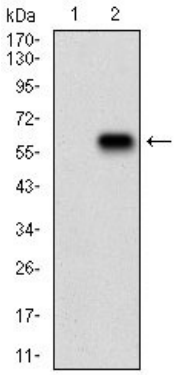

Figure 2: Western blot analysis using RAP1GAP mAb against HEK293 (1) and RAP1GAP (AA: 412-678)-hIgGFc transfected HEK293 (2) cell lysate.

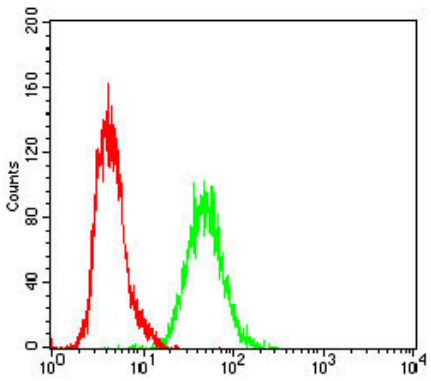

Figure 3: Flow cytometric analysis of A431 cells using RAP1GAP mouse mAb (green) and negative control (red).

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