

RAP1GAP Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1974a**Specification****RAP1GAP Antibody - Product Information**

Application	E, WB, FC
Primary Accession	P47736
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	73.4kDa KDa

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.

RAP1GAP Antibody - Additional Information

Gene ID 5909

Other Names

Rap1 GTPase-activating protein 1, Rap1GAP, Rap1GAP1, RAP1GAP, KIAA0474, RAP1GA1

Dilution

E~~1/10000

WB~~1/500 - 1/2000

FC~~1/200 - 1/400

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.

RAP1GAP Antibody - 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

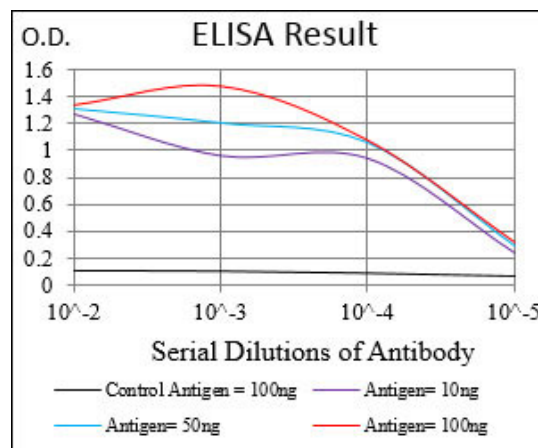
Tissue Location

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

RAP1GAP 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 Cytometry](#)
- [Cell Culture](#)



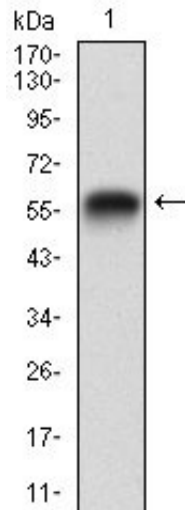


Figure 1: Western blot analysis using RAP1GAP mAb against human RAP1GAP (AA: 412-678) recombinant protein. (Expected MW is 53.9 kDa)

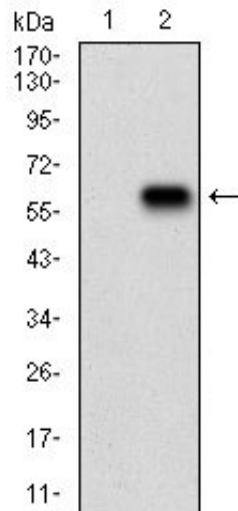


Figure 2: Western blot analysis using RAP1GAP mAb against HEK293 (1) and RAP1GAP (AA: 412-678)-hlgGfc transfected HEK293 (2) cell lysate.

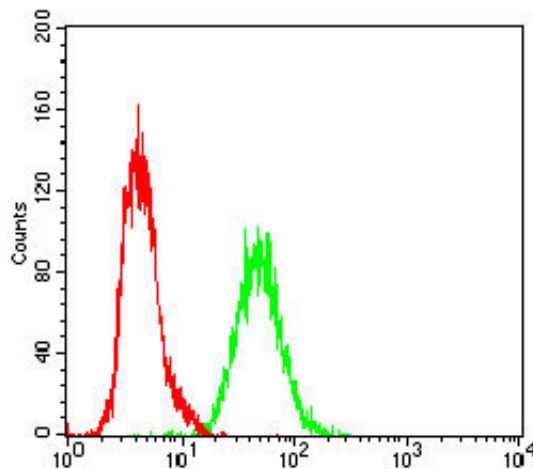


Figure 3: Flow cytometric analysis of A431 cells using RAP1GAP mouse mAb (green) and negative control (red).

RAP1GAP Antibody - References

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