

RASGRP1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5856C

Product Information

Application WB, IHC-P, FC, E

Primary Accession 095267

Reactivity Human **Predicted** Mouse, Rat Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB21940 90402 **Calculated MW Antigen Region** 495-521

Additional Information

Gene ID 10125

Other Names RAS guanyl-releasing protein 1, Calcium and DAG-regulated guanine

nucleotide exchange factor II, CalDAG-GEFII, Ras guanyl-releasing protein,

RASGRP1, RASGRP

Target/Specificity This RASGRP1 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 495-521 amino acids from the Central

region of human RASGRP1.

Dilution WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent

concentration.

Format Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This

antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation

followed by dialysis against PBS.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions RASGRP1 Antibody (Center) is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name RASGRP1

Synonyms

RASGRP

Function

Functions as a calcium- and diacylglycerol (DAG)-regulated nucleotide exchange factor specifically activating Ras through the exchange of bound GDP for GTP (PubMed:15899849, PubMed:23908768, PubMed:27776107, PubMed:29155103). Activates the Erk/MAP kinase cascade (PubMed:15899849). Regulates T-cell/B-cell development, homeostasis and differentiation by coupling T-lymphocyte/B-lymphocyte antigen receptors to Ras (PubMed:10807788, PubMed:12839994, PubMed:27776107, PubMed:29155103). Regulates NK cell cytotoxicity and ITAM-dependent cytokine production by activation of Ras-mediated ERK and JNK pathways (PubMed:19933860). Functions in mast cell degranulation and cytokine secretion, regulating FcERI-evoked allergic responses. May also function in differentiation of other cell types (PubMed:12845332).

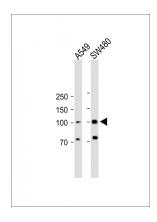
Cellular Location

Cytoplasm, cytosol. Cell membrane; Peripheral membrane protein. Golgi apparatus membrane; Peripheral membrane protein. Endoplasmic reticulum membrane; Peripheral membrane protein Note=Found both in the cytosol and associated with membranes Relocalization to the cell membrane upon activation is F-actin- dependent. Translocates to the Golgi in response to phorbol ester or nerve growth factor. Localizes to somata and dendrites but not to axons of hippocampal pyramidal cells (By similarity).

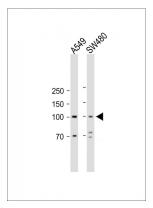
Tissue Location

Expressed in brain with higher expression in cerebellum, cerebral cortex and amygdala. Expressed in the hematopoietic system. Expressed in T-cells (at protein level) Expressed in NK cells (at protein level) (PubMed:19933860)

Images

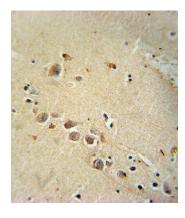


All lanes: Anti-RASGRP1 Antibody (Center) 1:1000 dilution Lane 1: A549 whole cel lysate Lane 2: SW480 whole cel lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 100kDa Blocking/Dilution buffer: 5% NFDM/TBST.

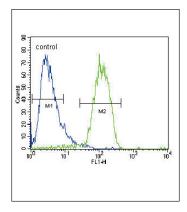


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RASGRP1 Antibody (Center) (Cat. #AP5856c) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by



peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the RASGRP1 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



RASGRP1 Antibody (Center) (Cat. #AP5856c) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

• RasGRP1 induces autophagy and transformation-associated changes in primary human keratinocytes

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