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RASGRP2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12183A

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	Q7LDG7
Other Accession	P0C643, Q9QUG9, A6N9I4, NP_001092141.1, NP_722541.1
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32230
Calculated MW	69248
Antigen Region	7-34

Additional Information

Gene ID	10235
Other Names	RAS guanyl-releasing protein 2, Calcium and DAG-regulated guanine nucleotide exchange factor I, CalDAG-GEFI, Cdc25-like protein, hCDC25L, F25B33 kinase-like protein, RASGRP2, CDC25L, MCG7
Target/Specificity	This RASGRP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 7-34 amino acids from the N-terminal region of human RASGRP2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~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 purified through a protein A column, followed by peptide affinity purification.
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	RASGRP2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RASGRP2

Synonyms	CDC25L, MCG7
Function	Functions as a calcium- and DAG-regulated nucleotide exchange factor specifically activating Rap through the exchange of bound GDP for GTP. May also activate other GTPases such as RRAS, RRAS2, NRAS, KRAS but not HRAS. Functions in aggregation of platelets and adhesion of T-lymphocytes and neutrophils probably through inside-out integrin activation. May function in the muscarinic acetylcholine receptor M1/CHRM1 signaling pathway.
Cellular Location	Cytoplasm, cytosol. Cell membrane; Peripheral membrane protein. Synapse, synaptosome. Cell projection, ruffle membrane; Peripheral membrane protein. Note=Found both in the cytosol and associated with membranes. Isoform 2 mainly localizes to the cell membrane. Enriched at juxtamembrane areas and membrane ruffles through association with F- actin. Localizes to the cell bodies and axons of striatal neurons (By similarity).
Tissue Location	Detected in platelets, neutrophils and T lymphocytes (at protein level). Expressed in brain where it is enriched in the striatum. Also expressed in the hematopoietic system. Detected in heart, brain, lung, placenta, liver, skeletal muscle and kidney

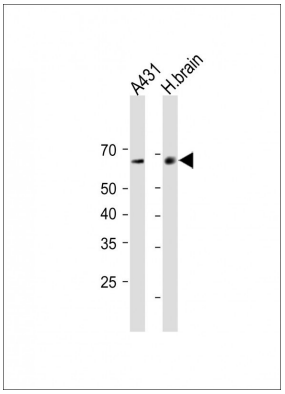
Background

The protein encoded by this gene is a brain-enriched nucleotide exchanged factor that contains an N-terminal GEF domain, 2 tandem repeats of EF-hand calcium-binding motifs, and a C-terminal diacylglycerol/phorbol ester-binding domain. This protein can activate small GTPases, including RAS and RAP1/RAS3. The nucleotide exchange activity of this protein can be stimulated by calcium and diacylglycerol. Three alternatively spliced transcript variants encoding the same protein have been found for this gene.

References

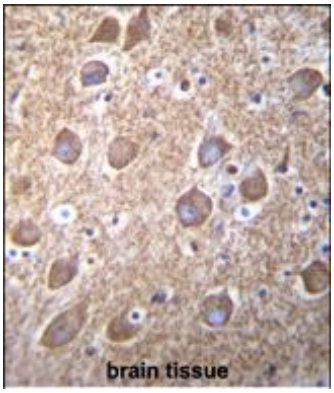
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Images

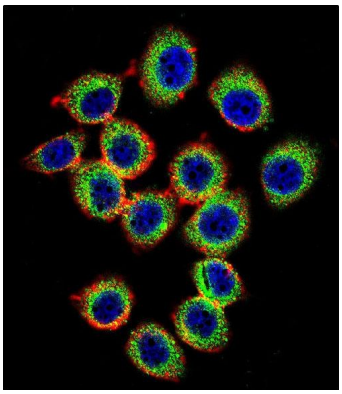


All lanes: Anti-RASGRP2 Antibody (N-term) at 1:1000 dilution Lane 1: A431 whole cell lysate Lane 2: Human brain lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 65 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

RASGRP2 Antibody (N-term) (Cat. #AP12183a)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 RASGRP2 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



Confocal immunofluorescent analysis of RASGRP2 Antibody (N-term)(Cat#AP12183a) with U-251MG cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). Actin filaments have been labeled with Alexa Fluor555 phalloidin (red). DAPI was used to stain the cell nuclear (blue).

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