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RASGRP2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP12183A

Specification

RASGRP2 Antibody (N-term) - Product Information

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

RASGRP2 Antibody (N-term) - 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
IF~~1:10~50
WB~~1:1000
IHC-P~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. 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.

RASGRP2 Antibody (N-term) - 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).

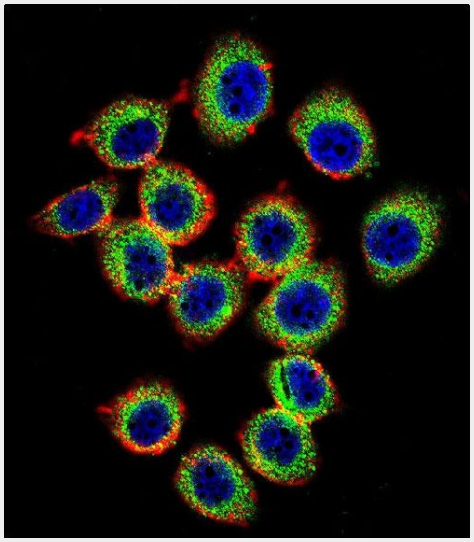
Tissue Location
Detected in platelets, neutrophils and T lymphocytes (at protein level). Expressed in brain where it is enriched in the striatum. Also expressed in the hematopoietic system. Detected in heart, brain, lung, placenta, liver, skeletal muscle and kidney

RASGRP2 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

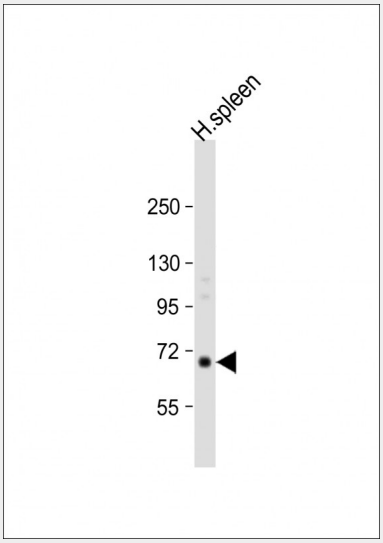
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

RASGRP2 Antibody (N-term) - Images

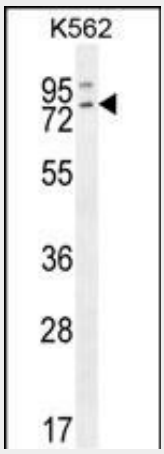


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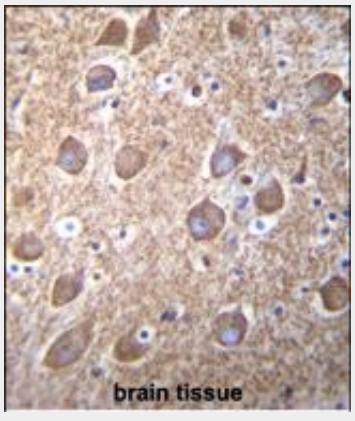
Confocal immunofluorescent analysis of RASGRP2 Antibody (N-term)(Cat#AP12183a) with U-251MG cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor555 phalloidin (red). DAPI was used to stain the cell nuclear (blue).



Anti-RASGRP2 Antibody (N-term) at 1:1000 dilution + human spleen lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 69 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



RASGRP2 Antibody (N-term) (Cat. #AP12183a) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the RASGRP2 antibody detected the RASGRP2 protein (arrow).



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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.

RASGRP2 Antibody (N-term) - 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.

RASGRP2 Antibody (N-term) - References

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