

RASGRP2 Rabbit pAb

Catalog # AP98764

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q7LDG7
Other Accession	Q7LDG7
Predicted	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	69248
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human RASGRP2
Epitope Specificity	351-450/609
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the RASGRP family. Contains 2 EF-hand domains. Contains 1 N-terminal Ras-GEF domain. Contains 1 phorbol-ester/DAG-type zinc finger. Contains 1 Ras-GEF domain.
Post-translational modifications	Isoform 2 is palmitoylated and myristoylated while isoform 1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	10235
Other Names	CALDAG-GEFI; CDC25L; Caldaggef1; GRP2_BOVIN; RASGRP2; Calcium and DAG-regulated guanine nucleotide exchange factor I (CalDAG-GEFI); GRP2_HUMAN; Cdc25-like protein (hCDC25L); F25B3.3 kinase-like protein; MCG7; GRP2_MOUSE; GRP2_RAT; RAS guanyl releasing protein 2; RAS guanyl releasing protein 2 (calcium and DAG-regulated); calcium- and diacylglycerol-regulated guanine nucleotide exchange factor I
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
----------------	---

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

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