

RASGRP2 Antibody (N-term) Blocking peptide Synthetic peptide

Catalog # BP12183a

Specification

RASGRP2 Antibody (N-term) Blocking peptide - Product Information

Primary Accession

<u>Q7LDG7</u>

RASGRP2 Antibody (N-term) Blocking peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RASGRP2 Antibody (N-term) Blocking peptide - 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) Blocking peptide - Protocols

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

Blocking Peptides

RASGRP2 Antibody (N-term) Blocking peptide - Images

RASGRP2 Antibody (N-term) Blocking peptide - Background

The protein encoded by this gene is a brain-enrichednucleotide exchanged factor that contains an N-terminal GEF domain,2 tandem repeats of EF-hand calcium-binding motifs, and aC-terminal diacylglycerol/phorbol ester-binding domain. Thisprotein 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 splicedtranscript variants encoding the same protein have been found forthis gene.

RASGRP2 Antibody (N-term) Blocking peptide - References

Nagamine, K., et al. Biol. Pharm. Bull. 33(7):1138-1142(2010)Katagiri, K., et al. J. Biol. Chem. 279(12):11875-11881(2004)Eto, K., et al. Proc. Natl. Acad. Sci. U.S.A. 99(20):12819-12824(2002)Toki, S., et al. J. Comp. Neurol. 437(4):398-407(2001)Guo, F.F., et al. J. Biol. Chem. 276(27):25568-25581(2001)