



Rabbit Anti-Rasgrp1 antibody

SL10436R

Product Name:	Rasgrp1
Chinese Name:	Ras蛋白特异鸟嘌呤核苷酸释放因子1抗体
Alias:	Calcium and DAG-regulated guanine nucleotide exchange factor II; CALDAG-GEFI; CALDAG-GEFII; Guanine nucleotide exchange factor, calcium and DAG regulated, Rap1A; hRasGRP1; Ras activator RasGRP; RAS guanyl nucleotide releasing protein 1; RAS guanyl releasing protein 1 (calcium and DAG-regulated); RAS guanyl releasing protein 1; RASGRP; RASGRP1; GRP1 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	90kDa
Cellular localization:	The cell membraneExtracellular matrix
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Rasgrp1:701-797/797
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	This gene is a member of a family of genes characterized by the presence of a Ras superfamily guanine nucleotide exchange factor (GEF) domain. It functions as a diacylglycerol (DAG)-regulated nucleotide exchange factor specifically activating Ras

through the exchange of bound GDP for GTP. It activates the Erk/MAP kinase cascade and regulates T-cells and B-cells development, homeostasis and differentiation. Alternatively spliced transcript variants encoding different isoforms have been identified. Altered expression of the different isoforms of this protein may be a cause of susceptibility to systemic lupus erythematosus (SLE). [provided by RefSeq, Jul 2008].

Function:

RasGRP1 is a Ras-specific exchange factor, which is activated by T-cell receptor (TCR) and promotes TCR-dependent positive selection of thymocytes. RasGRP1 is highly expressed on most T lymphocytic leukemias and is a common site of proviral insertion in retrovirus-induced murine T-cell lymphomas.

Subunit:

Forms a signaling complex with DGKZ and HRAS. Interacts with F-actin. Interacts with SKAP1.

Subcellular Location:

Cell Membrane, Cytoplasmic, Endoplasmic reticulum and Golgi Apparatus. Found in membrane fraction. Relocalization to the cell membrane upon activation is F-actin-dependent. Translocates to the Golgi in response to phorbol ester or nerve growth factor.

Tissue Specificity:

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

Post-translational modifications:

Defects in RASGRP1 may contribute to susceptibility to systemic lupus erythematosus (SLE) [MIM:152700]. SLE is a chronic, inflammatory and often febrile multisystemic disorder of connective tissue. It affects principally the skin, joints, kidneys and serosal membranes. SLE is thought to represent a failure of the regulatory mechanisms of the autoimmune system. Note=Aberrantly spliced isoforms and/or diminished levels of RASGRP1 are found in a cohort of SLE patients raising the possibility that dysregulation of this signaling protein contributes to the development of autoimmunity in a subset of SLE patients.

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.

SWISS:

O95267

Gene ID:
10125

Database links:

[Entrez Gene: 10125](#)Human

[Entrez Gene: 19419](#)Mouse

[Omim: 603962](#)Human

[SwissProt: O95267](#)Human

[SwissProt: Q9Z1S3](#)Mouse

[Unigene: 591127](#)Human

[Unigene: 42150](#)Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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