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RGS2 Rabbit pAb

Catalog # AP98425

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P41220
Other Accession	P41220
Reactivity	Rat, Human
Predicted	Pig, Mouse, Chicken, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24382
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human RGS2
Epitope Specificity	116-211/211
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 RGS domain.
SUBUNIT	Interacts with EIF2B5. Interacts with PRKG1 (isoform alpha).
Post-translational modifications	Phosphorylated by protein kinase C. Phosphorylation by PRKG1 leads to activation of RGS2 activity.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Regulator of G protein signaling (RGS) family members are regulatory molecules that act as GTPase activating proteins (GAPs) for G alpha subunits of heterotrimeric G proteins. RGS proteins are able to deactivate G protein subunits of the Gi alpha, Go alpha and Gq alpha subtypes. They drive G proteins into their inactive GDP-bound forms. Regulator of G protein signaling 2 belongs to this family. The protein acts as a mediator of myeloid differentiation and may play a role in leukemogenesis. [provided by RefSeq].

Additional Information

Gene ID	5997
Other Names	G0S8; GOS8; RGS2_HUMAN; RGS2; Cell growth-inhibiting gene 31 protein; G0/G1 switch regulatory protein 8; RGS2_MOUSE; RGS2_RAT; regulator of G protein signaling 2; regulator of G-protein signalling 2, 24kD; regulator of G-protein signalling 2, 24kDa; regulator of G-protein signaling 2, 24kDa; regulator of G-protein signaling 2
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	RGS2
Synonyms	G0S8
Function	Regulates G protein-coupled receptor signaling cascades. Inhibits signal transduction by increasing the GTPase activity of G protein alpha subunits, thereby driving them into their inactive GDP- bound form (PubMed:11063746, PubMed:19478087). It is involved in the negative regulation of the angiotensin-activated signaling pathway (PubMed:28784619). Plays a role in the regulation of blood pressure in response to signaling via G protein-coupled receptors and GNAQ. Plays a role in regulating the constriction and relaxation of vascular smooth muscle (By similarity). Binds EIF2B5 and blocks its activity, thereby inhibiting the translation of mRNA into protein (PubMed:19736320).
Cellular Location	[Isoform 1]: Cell membrane. Cytoplasm. Nucleus, nucleolus [Isoform 3]: Cell membrane. Cytoplasm Nucleus, nucleolus
Tissue Location	Expressed in acute myelogenous leukemia (AML) and in acute lymphoblastic leukemia (ALL).

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