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SRGAP1 Rabbit pAb

Catalog # AP97465

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q7Z6B7
Other Accession	Q7Z6B7
Reactivity	Rat
Predicted	Human, Mouse, Rabbit, Chicken, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	124264
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SRGAP1
Epitope Specificity	51-150/1085
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 FCH domain. Contains 1 Rho-GAP domain. Contains 1 SH3 domain.
SUBUNIT	Homodimer (Probable). Forms heterooligomer with SRGAP2 and SRGAP3 through its F-BAR domain. Interacts with ROBO1, CDC42 and RHOA. Interacts with FASLG.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	SRGAPs contain a highly conserved overall primary structure and play an important role in the cell facilitating Slit-robo signaling in cell migration and axon guidance. SRGAP1 (Slit-robo Rho GTPase activating protein 1), also known as ARHGAP13 (Rho GTPase activating protein 13), functions as a GTPase-activating protein for Cdc42 and Rho A. Expressed in kidney, testis, lung and brain, SRGAP1 contains an FCH (Fes/CIP4 homology) domain, a Rho-GAP domain and an SH3 domain. In the presence of Slit, SRGAP1 (via its SH3 domain) binds to the CC3 motif in robo (a protein responsible for mediating the repulsive effect of Slit) with higher affinity and inhibits Cdc42 activity in a robo/SRGAP-dependent manner. More specifically, SRGAP1 increases the intrinsic GTPase activity of Cdc42, thereby converting it to its inactive, GDP-bound form. Inactivation of Cdc42 ultimately leads to a decrease in actin polymerization.

Additional Information

Gene ID	57522
Other Names	ARHGAP13; NMTC2; 4930572H05Rik; RGD1566260; SRGP1_HUMAN; SRGAP1; Rho GTPase-activating protein 13; KIAA1304; SRGP1_MOUSE; SLIT-ROBO Rho GTPase activating protein 1
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	SRGAP1
Synonyms	ARHGAP13, KIAA1304
Function	GTPase-activating protein for RhoA and Cdc42 small GTPases. Together with CDC42 seems to be involved in the pathway mediating the repulsive signaling of Robo and Slit proteins in neuronal migration. SLIT2, probably through interaction with ROBO1, increases the interaction of SRGAP1 with ROBO1 and inactivates CDC42.
Tissue Location	Expressed in brain, lung, kidney, and testis.

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