

Rabbit Anti-SRGAP1 antibody

SL10671R

| Product Name: | SRGAP1 |
|------------------------|---|
| Chinese Name: | Rho GTP酶激活蛋白13抗体 |
| Alias: | ARHGAP13; FLJ22166; KIAA1304; RGD1566260; Rho GTPase activating protein 13; SLIT ROBO Rho GTPase activating protein 1; SRGAP 1; SRGP1 HUMAN. |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human, Mouse, Rat, Chicken, Cow, Horse, Rabbit, Sheep, |
| Applications: | WB=1:500-2000ELISA=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: | 124kDa |
| Cellular localization: | cytoplasmic |
| Form: | Lyophilized or Liquid |
| Concentration: | 1mg/ml |
| immunogen: | KLH conjugated synthetic peptide derived from human SRGAP1:51-150/1085 |
| 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: | 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.

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.

Subunit:

Homodimer (Probable). Forms heterooligomer with SRGAP2 and SRGAP3 through its F-BAR domain. Interacts with ROBO1, CDC42 and RHOA. Interacts with FASLG.

Tissue Specificity: Expressed in brain, lung, kidney, and testis.

Similarity: Contains 1 FCH domain. Contains 1 Rho-GAP domain. Contains 1 SH3 domain.

SWISS: 07Z6B7

Gene ID: 57522

Database links:

Entrez Gene: 57522Human

Entrez Gene: 117600Mouse

Entrez Gene: 314903Rat

Omim: 606523Human

SwissProt: Q7Z6B7Human

SwissProt: Q91Z69Mouse

Unigene: 210751Human

Unigene: 593803Human

Unigene: 288698Mouse

| | Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
|----------|---|
| Picture: | Tissue/cell: rat testis tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-SRGAP1 Polyclonal Antibody, Unconjugated(SL10671R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining |
| | |

