



## Rabbit Anti-ABCA4 antibody

SL11356R

<b>Product Name:</b>	ABCA4
<b>Chinese Name:</b>	神经元突触膜胞外分泌调节蛋白1抗体
<b>Alias:</b>	RIM1 ; ABCA4; CORD7; Rab-3-interacting molecule 1; Rab-3-interacting protein 2; RAB3 interacting protein 2; Rab3-interacting molecule 1; Rab3ip1; RAB3IP2; Regulating synaptic membrane exocytosis 1; Regulating synaptic membrane exocytosis protein 1; RIM 1; RIM; Rims1 (gene name); RIMS1; RIMS1_HUMAN; Serg1 (gene name); KIAA0340; MGC167823; MGC176677; Nbla00761.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Sheep,
<b>Applications:</b>	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.
<b>Molecular weight:</b>	189kDa
<b>Cellular localization:</b>	The cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human RIM1:751-850/1692
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	The protein encoded by this gene is a RAS gene superfamily member that regulates synaptic vesicle exocytosis. This gene also plays a role in the regulation of voltage-gated calcium channels during neurotransmitter and insulin release. Mutations have

suggested a role cognition and have been identified as the cause of cone-rod dystrophy type 7. Multiple transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Mar 2012].

**Function:**

Rab effector involved in exocytosis. May act as scaffold protein that regulates neurotransmitter release at the active zone. Essential for maintaining normal probability of neurotransmitter release and for regulating release during short-term synaptic plasticity.

**Subunit:**

Binds RAB3A, RAB3B and RAB3D that have been activated by GTP-binding. Interacts with RAB3C, RAB10, RAB26 AND RAB37. Binds UNC13A. Interacts with BZRAP1/RIMBP1 and RIMBP2. Interacts with PPFIA3 and PPFIA4. Interacts with ERC1 (By similarity). Binds SNAP25, SYT1 and CACNA1B. Interaction with SYT1 is enhanced by calcium ions. Interaction with SNAP25 is weaker in the presence of calcium ions.

**Subcellular Location:**

Cell membrane; Peripheral membrane protein (By similarity). Cell junction, synapse (By similarity). Cell junction, synapse, presynaptic cell membrane; Peripheral membrane protein (By similarity).

**Tissue Specificity:**

Detected in brain and retina.

**Post-translational modifications:**

Phosphorylated by BRSK1 (By similarity).

**DISEASE:**

Defects in RIMS1 may be a cause of cone-rod dystrophy type 7 (CORD7) [MIM:603649]. CORDs are inherited retinal dystrophies belonging to the group of pigmentary retinopathies. CORDs are characterized by retinal pigment deposits visible on fundus examination, predominantly in the macular region, and initial loss of cone photoreceptors followed by rod degeneration. This leads to decreased visual acuity and sensitivity in the central visual field, followed by loss of peripheral vision. Severe loss of vision occurs earlier than in retinitis pigmentosa.

**Similarity:**

Contains 2 C2 domains.

Contains 1 FYVE-type zinc finger.

Contains 1 PDZ (DHR) domain.

Contains 1 RabBD (Rab-binding) domain.

**SWISS:**

P78363

**Gene ID:**

24

**Database links:**[Entrez Gene: 281584](#) Cow[Entrez Gene: 24](#) Human[Entrez Gene: 11304](#) Mouse[Entrez Gene: 497268](#) Xenopus laevis[Omid: 601691](#) Human[SwissProt: O02698](#) Cow[SwissProt: P78363](#) Human[SwissProt: O35600](#) Mouse[SwissProt: Q5F1L3](#) Xenopus laevis[Unigene: 416707](#) Human[Unigene: 3918](#) Mouse**Important Note:**

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