

**RIM2 Antibody**  
**Catalog # ASC10632****Specification**

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**RIM2 Antibody - Product Information**

Application	IHC
Primary Accession	<a href="#">O9UQ26</a>
Other Accession	<a href="#">NP_001093587</a> , <a href="#">154354983</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 148 kDa KDa
Application Notes	RIM2 antibody can be used for detection of RIM2 by immunohistochemistry at 5 µg/mL.

**RIM2 Antibody - Additional Information**

Gene ID	9699
Target/Specificity	
RIMS2;	

**Reconstitution & Storage**

RIM2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

**Precautions**

RIM2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**RIM2 Antibody - Protein Information**

**Name** RIMS2

**Synonyms** KIAA0751, RAB3IP3, RIM2

**Function**

Rab effector involved in exocytosis. May act as scaffold protein. Plays a role in dendrite formation by melanocytes (PubMed:<a href="http://www.uniprot.org/citations/23999003" target="\_blank">23999003</a>).

**Cellular Location**

Cell membrane; Peripheral membrane protein. Synapse. Presynaptic cell membrane; Peripheral membrane protein

**Tissue Location**

Widely expressed (PubMed:32470375). Expressed in melanocytes (PubMed:23999003). In fetal tissues, predominantly expressed in the brain (PubMed:32470375). In the retina, expressed in the outer plexiform layer (at protein level) (PubMed:32470375). In the cerebellum, expressed in Purkinje cells (at protein level) (PubMed:32470375). In the pancreas, expressed in Langerhans

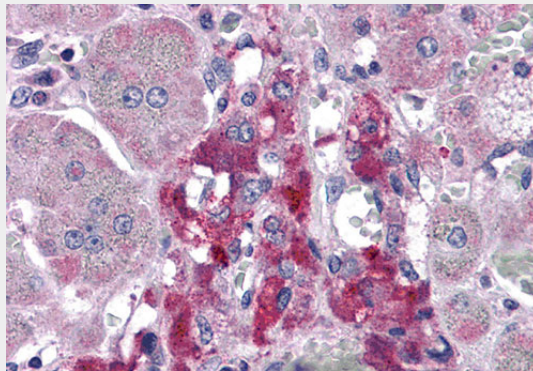
islets (at protein level) (PubMed:32470375).

### **RIM2 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **RIM2 Antibody - Images**



Immunohistochemistry of RIM2 in adrenal gland tissue with RIM2 antibody at 5 µg/mL.

### **RIM2 Antibody - Background**

**RIM2 Antibody:** Rab3-interacting molecules (RIMs) are synaptic proteins necessary for neuronal transmission and plasticity. RIM1 and RIM2 proteins are expressed in overlapping but distinct patterns throughout the brain. While the ablation of either gene was not lethal in mice, the deletion of both resulted in postnatal mortality. This lethality is due to a defect in neurotransmitter release; synapses without RIM proteins can still release neurotransmitters but are unable to do so in response to normal  $\text{Ca}^{2+}$  triggers. Like RIM1, RIM2 is thought to be an effector protein for Rab3, binding to Rab3 on synaptic vesicles in a GTP-dependent manner.

### **RIM2 Antibody - References**

Wang Y, Sugita S, and Sudhof TC. The RIM/NIM family of neuronal C2 domain proteins: interactions with Rab3 and a new class of Src homology 3 domain proteins. *J. Biol. Chem.* 2000; 275:20033-44.  
Liang F, Zhang B, Tang J, et al. RIM3gamma is a postsynaptic protein in the rat central nervous system. *J. Comp. Neurol.* 2007; 503:501-10  
Shoch S, Mittelstaedt T, Kaeser PS, et al. Redundant functions of RIM1 $\alpha$  and RIM2 $\alpha$  in  $\text{Ca}^{2+}$ -triggered neurotransmitter release. *EMBO J.* 2006; 25:5852-63.