

Rim3 Antibody

Catalog # ASC10642

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9UJD0
Other Accession	NP_055562 , 48476344
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	32796
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Rim3 antibody can be used for detection of Rim3 by Western blot at 1 μ g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 5 μ g/mL.

Additional Information

Gene ID	9783
Other Names	Regulating synaptic membrane exocytosis protein 3, Nim3, RIM3 gamma, Rab-3-interacting molecule 3, RIM 3, RIMS3, KIAA0237
Target/Specificity	RIMS3; This antibody is predicted to have no cross-reactivity to other Rim proteins.
Reconstitution & Storage	Rim3 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	Rim3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RIMS3
Synonyms	KIAA0237
Function	Regulates synaptic membrane exocytosis.
Cellular Location	Synapse.

Background

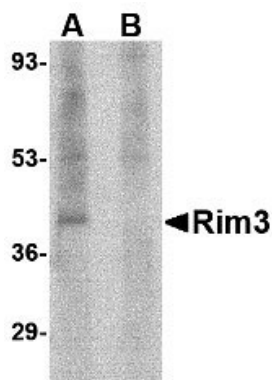
Rim3 Antibody: Rab3-interacting molecules (RIMs) are synaptic proteins necessary for neural transmission and plasticity. While both Rim1 and Rim 2 are thought to be effector proteins for Rab3, binding to Rab3 on synaptic vesicles in a GTP-dependent manner, less is known of Rim3. Expression of Rim3 in PC12 cells induced a significant increase in calcium-triggered exocytosis, with no appreciable change in the baseline release, suggesting that it plays a role in the regulation of exocytosis. Rim3 protein localizes primarily to neuronal dendrites and the postsynaptic densities, as opposed to Rim1 which is found in presynapse locations, indicating that Rim3 may contribute to synapse transmission and plasticity.

References

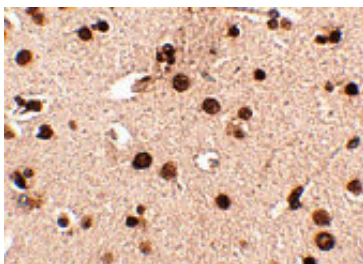
Wang Y, Sugita S, and Sudhof TC. The RIM/NIM family of neuronal C2 domain proteins: interactions with Rab3 and a new class of Src homology 3 domain proteins. *J. Biol. Chem.* 2000; 275:20033-44.

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.

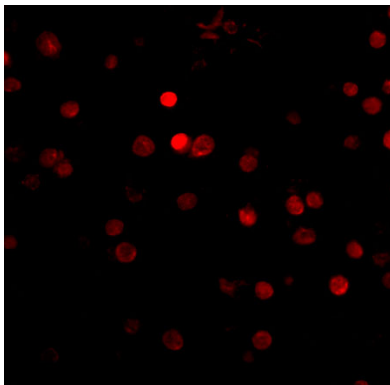
Images



Western blot analysis of Rim3 in human brain tissue lysate with Rim3 antibody at 1 $\mu\text{g/mL}$ in the (A) absence and (B) presence of blocking peptide.



Immunohistochemistry of Rim3 in human brain tissue with Rim3 antibody at 2.5 $\mu\text{g/mL}$.



Immunofluorescence of rim3 in human brain tissue with rim3 antibody at 5 $\mu\text{g/mL}$.

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