

RIM 2

Cat.No. 140-03P; control protein, 100 µg protein (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg protein, lyophilized. For reconstitution add 100 µl H ₂ O to get a 1mg/ml solution in TBS. Then aliquot and store at -20°C until use.
Immunogen	Recombinant protein corresponding to AA 909 to 1076 from rat RIM2-4C (UniProt Id: Q9JIS1-3)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	140 303
Remarks	This control protein consists of the recombinant protein (aa 909 - 1076 of rat RIM 2) that has been used for immunization. It has been tested in preadsorption experiments and blocks efficiently and specifically the corresponding signal in Western blots. The amount of protein needed for efficient blocking depends on the titer and on the affinity of the antibody to the antigen.

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

RIMs are presynaptic active zone proteins that regulate Ca²⁺ triggered release of neurotransmitters. RIM 1α and RIM 2α are composed of an N-terminal zinc-finger domain, a central PDZ domain and two C-terminal C2 domains that are separated by long alternatively spliced sequences. RIM 2β consists of a specific N-terminus, the central PDZ domain and the C-terminal C2 domains. The mRNA for RIM 2β is transcribed from an internal promoter of the RIM 2α gene. Shorter variants of RIM 2 which comprise only the C-terminal C₂B domain and some flanking regions are referred to as NIM 2 / RIM 2γ and NIM 3 / RIM 3γ.

Selected General References

Genomic definition of RIM proteins: evolutionary amplification of a family of synaptic regulatory proteins.
Wang Y, Südhof TC
Genomics (2003) 81(2): 126-37.

The RIM/NIM family of neuronal C2 domain proteins. Interactions with Rab3 and a new class of Src homology 3 domain proteins.
Wang Y, Sugita S, Südhof TC
The Journal of biological chemistry (2000) 275(26): 20033-44.