Synaptic Systems

Rudolf-Wissell-Str. 28
37079 Göttingen, Germany
Phone: +49 551-50556-0
Fax: +49 551-50556-384
E-mail: sales@sysy.com
Web: www.sysy.com

Neuroligin 4

Cat.No. 129-4P; control peptide, 100 µg peptide (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg peptide, lyophilized. For reconstitution add 100 µl H_2O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use. Control peptides should also be stored at -20°C when still lyophilized!
Immunogen	Synthetic peptide corresponding to AA 686 to 699 from mouse Neuroligin4 (UniProt Id: B0F2B4)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	129 403
Remarks	This control peptide consists of the synthetic peptide (aa 686-699 of mouse neuroligin 4) 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 peptide 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

Neuroligins form a family of postsynaptic cell surface molecules that interact with β-neurexins. They are 110-120 kDa polypeptides with homology to acetylcholine esterase. Neuroligin 1 and neuroligin 3 are specifically localized to post-synaptic densities of excitatory synapses whereas neuroligin 2 is found exclusively on inhibitory synapses.
Mutations in neuroligin 3 and **4** have been implicated with a rare, heritable form of autism.

Selected General References

Neuroligin-4 is localized to glycinergic postsynapses and regulates inhibition in the retina.
Hoon M, Soykan T, Falkenburger B, Hammer M, Patrizi A, Schmidt KF, Sassoè-Pognetto M, Löwel S, Moser T, Taschenberger H, Brose N, et al.
Proceedings of the National Academy of Sciences of the United States of America (2011) 108(7): 3053-8.

Dissection of synapse induction by neuroligins: effect of a neuroligin mutation associated with autism.
Chubykin AA, Liu X, Comoletti D, Tsigelny I, Taylor P, Südhof TC
The Journal of biological chemistry (2005) 280(23): 22365-74.