

Synaptoporin

Cat.No. 102-0P; control peptide, 100 µg peptide (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg peptide, lyophilized. For reconstitution add 100 µl H ₂ O 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 250 to 265 from rat Synaptoporin (UniProt Id: P22831)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	102 005, 101 111
Remarks	This control peptide consists of the synthetic peptide (EFGQQPSGPTSFNN) 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

Synaptoporin, also known as **synaptophysin 2** and **p38-2**, is highly homologous to synaptophysin 1 but encoded by a different gene. Like synaptophysin 1, synaptoporin contains four transmembrane regions and a short cytoplasmic tail. Unlike synaptophysin 1, it is not glycosylated. The distributions of synaptophysin 1 and synaptoporin are different. Synaptophysin 1 is more uniformly expressed whereas synaptoporin is particularly enriched in mossy fiber synapses in the hippocampus. It is thus an excellent marker for subsets of synapses.

Selected General References

The synaptic vesicle cycle: a cascade of protein-protein interactions.
Südhof TC
Nature (1995) 375(6533): 645-53.

Synaptic vesicles and exocytosis.
Jahn R, Südhof TC
Annual review of neuroscience (1994) 17: 219-46.

Relative properties and localizations of synaptic vesicle protein isoforms: the case of the synaptophysins.
Fykse EM, Takei K, Walch-Solimena C, Geppert M, Jahn R, De Camilli P, Südhof TC
The Journal of neuroscience : the official journal of the Society for Neuroscience (1993) 13(11): 4997-5007.

Synaptoporin, a novel putative channel protein of synaptic vesicles.
Knaus P, Marquèze-Pouey B, Scherer H, Betz H
Neuron (1990) 5(4): 453-62.