

Synapsin 2

Cat.No. 106 211; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg purified IgG, 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.
Applications	WB: 1 : 500 up to 1 : 1000 (AP staining) (see remarks) IP: yes ICC: 1 : 200 up to 1 : 500 IHC: 1 : 200 IHC-P/FFPE: 1 : 200
Clone	27E3
Subtype	IgG1 (κ light chain)
Immunogen	Synthetic peptide corresponding to AA 440 to 458 from rat Synapsin2 (UniProt Id: Q63537-1)
Epitop	Epitop: AA 440 to 458 from rat Synapsin2 (UniProt Id: Q63537-1)
Reactivity	Reacts with: human (Q92777), rat (Q63537), mouse (Q64332). No signal: zebrafish. Other species not tested yet.
Specificity	Specific for synapsin 2 (K.O. verified)
matching control	106-2P
Remarks	WB: This antibody is less sensitive than the polyclonal rabbit antibody. Enriched synaptic vesicles are recommended for westernblotting.

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

Synapsins are neuron-specific phosphoproteins that are exclusively associated with small synaptic vesicles, with little or no expression in other tissues including neuroendocrine cells. In mammals, three distinct synapsin genes (synapsin 1, 2 and 3) encode more than eight neuronal isoforms.

Synapsin 1 is one of the most specific markers of synapses throughout the central and peripheral nervous system. In addition to synaptic nerve terminals, the protein is also present in certain sensory nerve endings. It is expressed in two splice variants (synapsin 1a and synapsin 1b). Synapsin 1 interacts with vesicle membranes as well as with actin and spectrin.

Synapsin 2 is expressed in the nervous system and also two splice variants were described so far, while synapsin 3 shows a more restricted expression pattern and is mainly found in the hippocampus. Synapsins are major phosphoproteins and are substrates for several protein kinases such as PKA, CaMK I and CaMK II. Synapsin 1 is widely used as reference substrate for calmodulin-dependent protein kinases.

Selected References SYSY Antibodies

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Selected General References

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