SYSY
Synaptic Systems

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Synaptobrevin 2

Cat.No. 104 202; Polyclonal rabbit antibody, 200 µl antiserum (lyophilized)

Data Sheet

Reconstitution/ Storage	200 µl antiserum, lyophilized. For reconstitution add 200 µl H_2O, then aliquot and store at -20°C until use.
Applications	**WB**: 1 : 1000 up to 1 : 10000 (AP staining) **IP**: yes **ICC**: 1 : 500 **IHC**: 1 : 500 **IHC-P/FFPE**: 1 : 200 **EM**: yes
Immunogen	Synthetic peptide corresponding to AA 2 to 17 from rat Synaptobrevin2 (UniProt Id: P63045)
Reactivity	Reacts with: human (P63027), rat (P63045), mouse (P63044), hamster. No signal: chicken, zebrafish. Other species not tested yet.
Specificity	Specific for VAMP 2, no cross reactivity to VAMP 1 and VAMP 3. (K.D. verified)
matching control	104-2P
Remarks	This antibody recognizes the Botulinumtoxin B cleavage product (aa 1 - 76) with reduced affinity. The sensitivity is sufficient for the detection of cleaved recombinant protein.For analysis of toxin treated tissue homogenates cat. no. 104 203 is recommended.

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

Synaptobrevins/VAMPs represents a family of integral membrane proteins of 11-13 kDa with the N-terminal region exposed to the cytoplasm and a C-terminal transmembrane domain. Two isoforms were identified in the mammalian CNS, synaptobrevin 1 (VAMP 1 or p18-1) and **synaptobrevin 2** (VAMP 2 or p18-2) that differ in their distribution within different brain regions.
Synaptobrevin 1 is highly conserved between vertebrates and invertebrates. It is a major constituent of synaptic vesicles and peptidergic secretory granules in all neurons examined so far. In addition, it is present on secretory granules of neuroendocrine cells. Low levels of synaptobrevin 2 are present in many other tissues where the protein resides on specialized microvesicles.
In non-neuronal cells the third isoform, cellubrevin (VAMP 3), is present where it is localized to an endosomal membrane pool.
Synaptobrevin/VAMP is an essential component of the exocytotic fusion machine, related to a larger protein family referred to as v-SNAREs. It is the sole target for tetanus and several of the botulinal neurotoxins which cleave the protein at single sites in the C-terminal portion of the molecule.

Selected References SYSY Antibodies

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