

Synaptobrevin 2

Cat.No. 104 211C3; Monoclonal mouse antibody, 50 µg purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg purified IgG, lyophilized, fluorescence-labeled with Oyster [®] 550. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H ₂ O to get a 1mg/ml solution in PBS. Either add 1:1 (v/v) glycerol, then aliquot and store at -20°C until use, or store aliquots at -80°C without additives. Reconstitute immediately upon receipt! Avoid bright light when working with the antibody to minimize photo bleaching of the fluorescent dye. The mounting agent Aquatex [®] (Merck Chemicals) is not compatible with Oyster dyes!
Applications	WB: N/A IP: N/A ICC: 1 : 1000 IHC: 1 : 200 IHC-P/FFPE: not tested yet
Label	Oyster 550
Clone	69.1
Subtype	IgG1 (κ light chain)
Immunogen	Synthetic peptide corresponding to AA 2 to 17 from rat Synaptobrevin2 (UniProt Id: P63045)
Epitop	Epitop: 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.O. verified)
matching control	104-2P

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 botulin neurotoxins which cleave the protein at single sites in the C-terminal portion of the molecule.

Selected References SYSY Antibodies

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