

SV2 A

Cat.No. 119 011BT; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

Data Sheet

Reconstitution/Storage	100 µg purified IgG, lyophilized, biotin-labeled. 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 : 1000 (AP staining) (see remarks) IP: yes ICC: 1 : 100 up to 1 : 500 IHC: not tested yet IHC-P/FFPE: not tested yet
Label	biotin
Clone	17G10
Subtype	IgG3
Immunogen	Synthetic peptide corresponding to AA 2 to 17 from human SV2A (UniProt Id: Q7L0J3)
Epitop	Epitop: AA 2 to 17 from human SV2A (UniProt Id: Q7L0J3)
Reactivity	Reacts with: human (Q7L0J3), rat (Q02563), mouse (Q9JIS5). Other species not tested yet.
Specificity	Specific for SV 2A.
matching control	119-0P
Remarks	WB: SV 2 aggregates after boiling, making it necessary to run SDS-PAGE only with non-boiled samples.

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

SV 2s (synaptic vesicle protein 2) are integral membrane glycoproteins present in all synaptic vesicles. They have 12 transmembrane domains predicted by sequence analysis. There are three characterized isoforms, SV 2A, SV 2B and SV 2C. **SV 2A** is expressed ubiquitously throughout the brain and is probably involved in the maintenance of a pool of synaptic vesicles competent for calcium-stimulated exocytosis. SV 2B has a more restricted distribution with varying degrees of coexpression with SV 2A. SV 2C is more closely related to SV 2A but shows a very restricted expression pattern. The highest expression levels were observed in phylogenetically old brain areas like pallidum, the midbrain and the olfactory bulb. SV2 expression has also been observed in other organs. In kidney it localizes to podocytes.

Selected General References

- SV2 modulates the size of the readily releasable pool of secretory vesicles.
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