



## Rabbit Anti-SV2B/FITC Conjugated antibody

SL11365R-FITC

<b>Product Name:</b>	Anti-SV2B/FITC
<b>Chinese Name:</b>	FITC标记的突触泡蛋白2B抗体
<b>Alias:</b>	Synaptic vesicle protein 2B; SV2B HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Rabbit,
<b>Applications:</b>	ICC=1:50-200IF=1:50-200 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	77kDa
<b>Cellular localization:</b>	The cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human SV2B
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>Product Detail:</b>	<b>background:</b> In all vertebrates, SV2 proteins are abundant, hydrophobic, membrane glycoproteins that are expressed as two major isoforms, SV2A and SV2B, and one minor isoform, SV2C. SV2 proteins are differentially expressed in the brain and are present on all synaptic vesicles, independent of transmitter type. SV2A is abundantly expressed in the subcortex, specifically in the synaptic vesicles of all presynaptic nerve terminals, and also in most neuroendocrine secretory granules. SV2B displays a more restricted pattern of expression in that it is only present on a small subset of synapses in the hippocampus and cortex. SV2A and SV2B are functionally redundant and are required

for maintaining normal brain function in vertebrates. SV2A and SV2B mediate synaptic transmission by regulating cytoplasmic Ca<sup>2+</sup> levels in the nerve terminal during repetitive stimulation.

**Function:**

SV2s (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, SV2A, SV2B and SV2C. While SV2A is expressed ubiquitously throughout the brain, SV2B has a more restricted distribution with varying degrees of coexpression with SV2A. SV2C is more closely related to SV2A but shows a very restricted expression pattern.

**Subunit:**

Interacts with SYT1 in a calcium-independent manner. Forms a complex with SYT1, syntaxin-1 and SNAP25 (By similarity).

**Subcellular Location:**

Cytoplasmic vesicle, secretory vesicle. Synaptic vesicle membrane; Multi-pass membrane protein.

**Post-translational modifications:**

N-glycosylated (By similarity).

The N-terminal cytoplasmic domain is phosphorylated by CK1 (By similarity).

**Similarity:**

Belongs to the major facilitator superfamily.

**Database links:**

[Entrez Gene: 9899](#)Human

[Omin: 185861](#)Human

[SwissProt: Q6IAR8](#)Human

[SwissProt: Q7L112](#)Human

[Unigene: 592018](#)Human

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.