

Rabbit Anti-SV2B antibody

SL11365R

Product Name:	SV2B
Chinese Name:	突触泡蛋白2B抗体
Alias:	Synaptic vesicle protein 2B; SV2B HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-
	500IF=1:100-500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	77kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SV2B:401-
	500/683 <extracellular></extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
PubMed:	<u>PubMed</u>
Product Detail:	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 funtionally redundant and are required for maintaining normal brain function in vertebrates. SV2A and SV2B mediate synaptic transmission by regulating cytoplasmic Ca2+ 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.

SWISS:

O6IAR8

Gene ID:

9899

Database links:

Entrez Gene: 9899Human

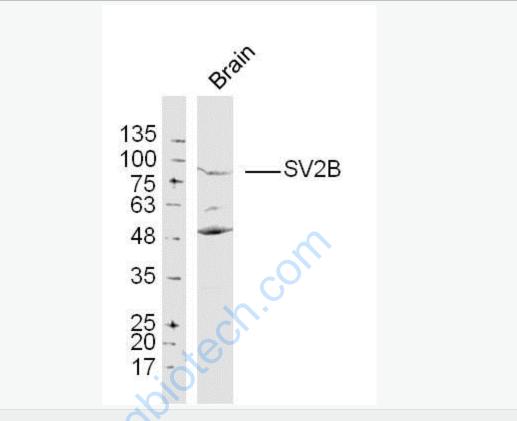
Omim: 185861Human

SwissProt: Q6IAR8Human

SwissProt: Q7L1I2Human

Unigene: 592018Human

	Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	Sample: U251 Cell (Human) Lysate at 30 ug Primary: Anti- SV2B (SL11365R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 77 kD Observed band size: 77 kD



Sample:

Brain (Mouse) Lysate at 40 ug

Primary: Anti- SV2B (SL11365R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 77 kD

Observed band size: 77 kD