



Rabbit Anti-SV2A antibody

SL21382R

Product Name:	SV2A
Chinese Name:	突触泡蛋白2A抗体
Alias:	Synaptic vesicle protein 2A; Synaptic vesicle glycoprotein 2A; Synaptic vesicle protein 2A; Synaptic vesicle protein 2; Sv2; Kiaa0736; SV2A HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,
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:	83kDa
Cellular localization:	cytoplasmicThe cell membrane Mitochondrion
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SV2A:621-720/742<Cytoplasmic>
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:	PubMed
Product Detail:	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. 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. The highest expression levels were observed in phylogenetically old brain areas like pallidum, the midbrain and the olfactory bulb. SV2A is probably involved in the maintenance of a pool of synaptic vesicles competent for calcium-stimulated exocytosis. SV2A is a highly glycosylated synaptic vesicle protein with homology to transmembrane transporters.

Function:

Plays a role in the control of regulated secretion in neural and endocrine cells, enhancing selectively low-frequency neurotransmission. Positively regulates vesicle fusion by maintaining the readily releasable pool of secretory vesicles (By similarity).

Subunit:

Interacts with SYT1/synaptotagmin-1 in a calcium-dependent manner. Binds the adapter protein complex AP-2.

Subcellular Location:

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

Post-translational modifications:

Phosphorylation by CK1 of the N-terminal cytoplasmic domain regulates interaction with SYT1.

Similarity:

Belongs to the major facilitator superfamily.

SWISS:

Q7L0J3

Gene ID:

9900

Database links:

[Entrez Gene: 9900](#)Human

[Entrez Gene: 64051](#)Mouse

[Entrez Gene: 117559](#)Rat

[Oimim: 185860](#)Human

[SwissProt: Q29397](#)Cow

[SwissProt: Q7L0J3](#)Human

[SwissProt: Q9JIS5](#)Mouse

[SwissProt: Q02563](#)Rat

[Unigene: 516153](#)Human

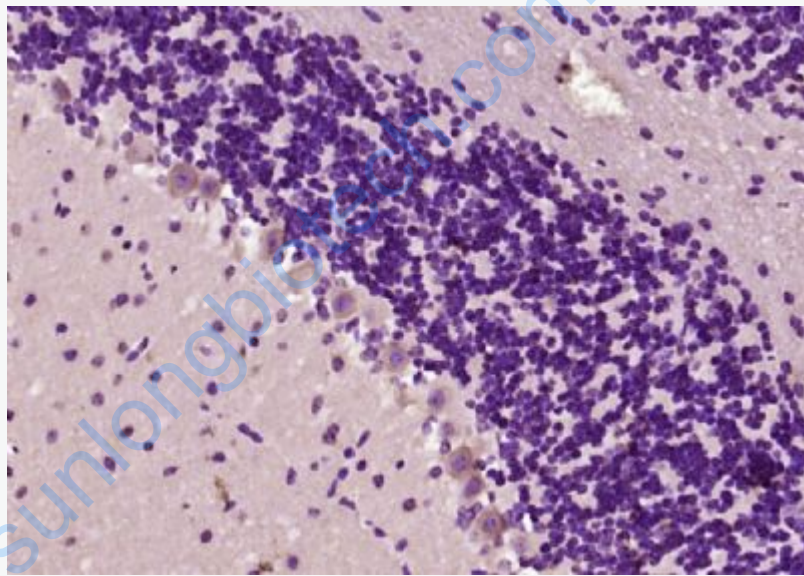
[Unigene: 200365](#)Mouse

[Unigene: 11264](#)Rat

Important Note:

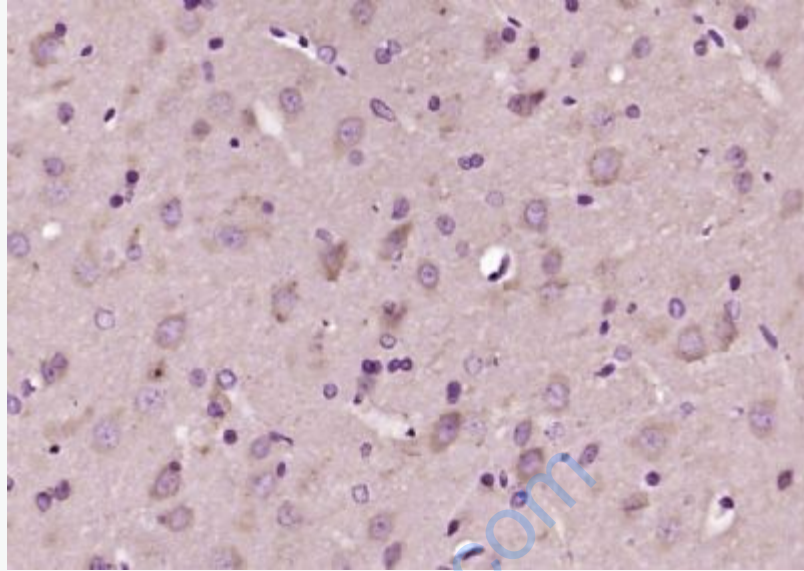
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突触泡蛋白2A(SV2A)是一类跨膜glycoprotein,定位于脊椎动物神经元及内分泌细胞,与神经递质的释放、内分泌胞吐作用、突触泡稳态的维持作用。



Picture:

Paraformaldehyde-fixed, paraffin embedded (mouse cerebellum tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SV2A) Polyclonal Antibody, Unconjugated (SL21382R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SV2A) Polyclonal Antibody, Unconjugated (SL21382R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.