

Recombinant SV2A Monoclonal Antibody

catalog number: **AN301990L**

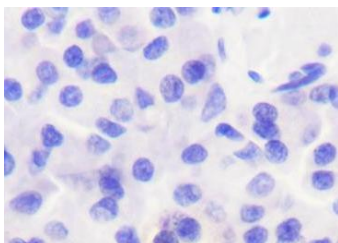
Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

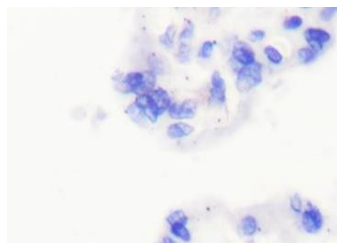
| | |
|---------------------|---|
| Reactivity | Human;Rat;Mouse |
| Immunogen | Recombinant fragment |
| Host | Rabbit |
| Isotype | IgG, κ |
| Clone | A710 |
| Purification | Protein A purified |
| Buffer | PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant. |

Applications Recommended Dilution

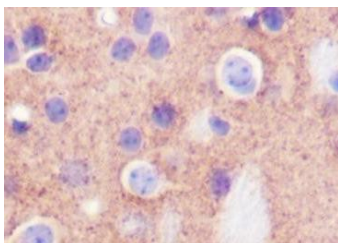
| | |
|------------|--------------|
| WB | 1:1000 |
| IHC | 1:500-1:1000 |



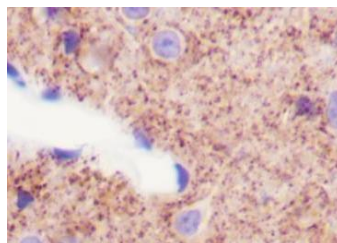
Immunohistochemistry of paraffin-embedded Human pancreas using SV2A Monoclonal Antibody at dilution of 1:1000.



Immunohistochemistry of paraffin-embedded Human placenta (negative tissue) using SV2A Monoclonal Antibody at dilution of 1:1000.



Immunohistochemistry of paraffin-embedded Mouse cerebrum using SV2A Monoclonal Antibody at dilution of 1:1000.



Immunohistochemistry of paraffin-embedded Rat cerebrum using SV2A Monoclonal Antibody at dilution of 1:1000.

Preparation & Storage

| | |
|-----------------|---|
| Storage | Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles. |
| Shipping | Ice bag |

Background

For Research Use Only

SV2s are a family of synaptic vesicle proteins expressed in both neurons and endocrine cells. SV2s function in the regulation of synaptic vesicle traffic, cytoplasmic Ca^{2+} levels in the nerve terminal during repetitive stimulation and the facilitation of synaptic transmission. There are three isoforms of SV2: SV2A, SV2B and SV2C. Each of these isoforms are structured similarly but expressed varyingly. SV2C, a minor isoform of SV2, expressed in a small subset of neurons located within the basal forebrain, midbrain and brainstem. SV2B, a major isoform of SV2 is expressed more abundantly, although rarely without the coexpression of SV2A. SV2A, the other major isoform of SV2 is the most widely expressed. SV2A is located in the presynaptic nerve terminals of almost every neuron throughout the nervous system. In addition, it is also located in most neuroendocrine secretory granules. SV2A has been identified as a critical protein for proper function of the central nervous system and has been linked to the physiopathology of epilepsy. In addition to the epileptic affects of this protein, mutations in it have also been seen to result in schizophrenia.