

## Rabbit SV2A Polyclonal Antibody | anti-SV2A antibody

Anti-SV2A Antibody

| CATALOG # | HOST   | REACTIVITY        | APPLICATIONS                                                         |
|-----------|--------|-------------------|----------------------------------------------------------------------|
| AAA19279  | Rabbit | Human, Mouse, Rat | Western Blot, Immunohistochemistry, Flow Cytometry, Functional Assay |

### PRODUCT SYNONYMS

SV2A; Polyclonal Antibody; Anti-SV2A Antibody; KIAA0736; PSEC0174; Synaptic vesicle glycoprotein 2A; synaptic vesicle glycoprotein 2A; anti-SV2A antibody

### PRODUCT SPECIFICATIONS

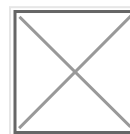
|                                                |                                                                                                                                                                                                            |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Rabbit                                                                                                                                                                                                     |
| Reactivity                                     | Human, Mouse, Rat                                                                                                                                                                                          |
| Clonality                                      | Polyclonal                                                                                                                                                                                                 |
| Isotype                                        | Rabbit IgG                                                                                                                                                                                                 |
| Specificity                                    | Rabbit IgG polyclonal antibody for SV2A detection.                                                                                                                                                         |
| Purity/Purification                            | Immunogen affinity purified.                                                                                                                                                                               |
| Form/Format                                    | Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na <sub>2</sub> HPO <sub>4</sub> .                                                                                                     |
| Applicable Applications for anti-SV2A antibody | WB (Western Blot), IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry)                                                                                                                                   |
| Application Notes                              | WB: 0.25-0.5ug/ml Mouse, Rat <br>IHC-P: 2-5ug/ml Human, Mouse, Rat <br>FC/FACS/FCM: 1-3ug/1x10 <sup>6</sup> cells Human                                                                                    |
| Immunogen                                      | A synthetic peptide corresponding to a sequence of human SV2A (MEEGFRDRAAFIRGAKDIAKEVKKHAACKVVK).                                                                                                          |
| Reconstitution                                 | Add 0.2ml of distilled water will yield a concentration of 500ug/ml.                                                                                                                                       |
| Recommended Detection Systems                  | Recommended Detection Systems                                                                                                                                                                              |
| Preparation and Storage                        | Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing. |

### IMAGES



#### FCM (Flow Cytometry)

Figure 8. Flow Cytometry analysis of U2OS cells using anti-SV2A antibody (AAA19279). Overlay histogram showing U2OS cells stained with AAA19279 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SV2A Antibody (AAA19279, 1µg/1x10<sup>6</sup> cells) for 30 min at 20 degree C. DyLight<sup>®</sup>488 conjugated goat anti-rabbit IgG (5-10µg/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



#### IHC (Immunohistochemistry)

Figure 7. IHC analysis of SV2A using anti-SV2A antibody (AAA19279). SV2A was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-SV2A Antibody (AAA19279) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



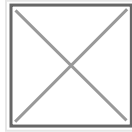
#### IHC (Immunohistochemistry)

Figure 6. IHC analysis of SV2A using anti-SV2A antibody (AAA19279).SV2A was detected in paraffin-embedded section of human ovarian serous adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2&mu;g/ml rabbit anti-SV2A Antibody (AAA19279) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



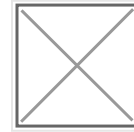
#### IHC (Immunohistochemistry)

Figure 5. IHC analysis of SV2A using anti-SV2A antibody (AAA19279).SV2A was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2&mu;g/ml rabbit anti-SV2A Antibody (AAA19279) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



#### IHC (Immunohistochemistry)

Figure 4. IHC analysis of SV2A using anti-SV2A antibody (AAA19279).SV2A was detected in paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2&mu;g/ml rabbit anti-SV2A Antibody (AAA19279) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



#### IHC (Immunohistochemistry)

Figure 3. IHC analysis of SV2A using anti-SV2A antibody (AAA19279).SV2A was detected in paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2&mu;g/ml rabbit anti-SV2A Antibody (AAA19279) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.

## ADDITIONAL INFORMATION

|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-SV2A antibody | Synaptic vesicle glycoprotein 2A is a ubiquitous synaptic vesicle protein that in humans is encoded by the SV2A gene. The protein encoded by this gene is one of three related synaptic vesicle proteins. The encoded protein may interact with synaptotagmin to enhance low frequency neurotransmission in quiescent neurons.                                                                                                                                                                                                                                                                                                                                                      |
| References                                         | <ol style="list-style-type: none"><li>1. Bajjalieh, S. M., Peterson, K., Linial, M., Scheller, R. H. Brain contains two forms of synaptic vesicle protein 2. Proc. Nat. Acad. Sci. 90: 2150-2154, 1993.</li><li>2. Crowder, K. M., Gunther, J. M., Jones, T. A., Hale, B. D., Zhang, H. Z., Peterson, M. R., Scheller, R. H., Chavkin, C., Bajjalieh, S. M. Abnormal neurotransmission in mice lacking synaptic vesicle protein 2A (SV2A). Proc. Nat. Acad. Sci. 96: 15268-15273, 1999.</li><li>3. Dong, M., Yeh, F., Tepp, W. H., Dean, C., Johnson, E. A., Janz, R., Chapman, E. R. SV2 is the protein receptor for botulinum neurotoxin A. Science 312: 592-596, 2006.</li></ol> |

## NCBI AND UNIPROT INFORMATION

|                                  |                                                        |
|----------------------------------|--------------------------------------------------------|
| NCBI GI #                        | 216548223                                              |
| NCBI GeneID                      | 9900                                                   |
| NCBI Accession #                 | NP_055664.3                                            |
| NCBI GenBank Nucleotide #        | NM_014849.4                                            |
| UniProt Accession #              | Q7L0J3; O94841; Q5QNX8; Q7Z3L6; Q8NBJ6; Q9BVZ9; D3DUZ7 |
| Molecular Weight                 | 76,619 Da                                              |
| NCBI Official Full Name          | synaptic vesicle glycoprotein 2A isoform 1             |
| NCBI Official Synonym Full Names | synaptic vesicle glycoprotein 2A                       |
| NCBI Official Symbol             | SV2A                                                   |
| NCBI Official Synonym Symbols    | SV2                                                    |
| NCBI Protein Information         | synaptic vesicle glycoprotein 2A                       |
| UniProt Protein Name             | Synaptic vesicle glycoprotein 2A                       |

|                            |            |
|----------------------------|------------|
| UniProt Gene Name          | SV2A       |
| UniProt Synonym Gene Names | KIAA0736   |
| UniProt Entry Name         | SV2A_HUMAN |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | [contact@aaabiotech.com](mailto:contact@aaabiotech.com)  
Online datasheet: <https://stage.aaabiotech.com/polyclonal/sv2a-antibody-western-blot-immunohistochemistry-flow-cytometry-elisa/19279>