

**Datasheet for 600-401-MK7****VACHT Antibody****Overview**

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|----------------------|----------------------------------------------------------------------------------|
| <b>Description:</b>  | Anti-Vesicular Acetylcholine Transporter (VACHT) (RABBIT) Antibody - 600-401-MK7 |
| <b>Item No.:</b>     | 600-401-MK7                                                                      |
| <b>Size:</b>         | 100 µg                                                                           |
| <b>Applications:</b> | ELISA, IF, IHC, WB                                                               |
| <b>Reactivity:</b>   | Human, Rat                                                                       |
| <b>Host Species:</b> | Rabbit                                                                           |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| <b>Background:</b>   | Slc18a3 (Solute Carrier Family 18 Member A3) is a Protein Coding gene. Vesicular acetylcholine transporters (VACHTs) are members of the solute carrier family 18 (SLC18) of ATP-dependent transporters that also includes vesicular monoamine transporters (VMAT) 1 and VMAT2. VACHT is found in the central and peripheral nervous systems. Transports acetylcholine into secretory vesicles for release into the extracellular space. Anti-VACHT Antibody is useful for researchers interested in Myasthenic syndromes, neurotransmitter release cycles, synaptic vesicle cycle, and neuroscience research. |
| <b>Synonyms:</b>     | Rabbit Anti-Vesicular acetylcholine transporter Antibody, VACHT, rVAT, solute carrier family 18 member 3, Slc18a3, Vacht, Vat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

**Target Details**

|                        |                                                                                                                                                                                                                                                     |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name:</b>      | Slc18a3                                                                                                                                                                                                                                             |
| <b>Reactivity:</b>     | Human, Rat                                                                                                                                                                                                                                          |
| <b>Immunogen Type:</b> | Conjugated Peptide                                                                                                                                                                                                                                  |
| <b>Immunogen:</b>      | Anti-VACHT antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal portion of rat vesicular acetylcholine transporter conjugated to Keyhole Limpet Hemocyanin (KLH). |

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|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity/Specificity:</b> | This affinity purified antibody is directed against rat VACHT. This product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with the antigen based on 100% homology with the immunizing sequence to mouse and human. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - Q62666</a></li><li>• <a href="#">NCBI - NP_113851.1</a></li><li>• <a href="#">GeneID - 60422</a></li></ul>                                                                                                                                   |

## Application Details

|                             |                                                                                                                                                                                                                                                  |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | ELISA, IF, IHC, WB                                                                                                                                                                                                                               |
| <b>Application Note:</b>    | Anti-Vesicular Acetylcholine Transporter Antibody has been tested in ELISA, WB, IHC, and IF. Expect a band at ~56.5kDa in western blot using appropriate lysates. Positive control used: PND2-6 in WB, PND1 cells in IF; rat spinal cord in IHC. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                  |
| <b>ELISA:</b>               | 5 µg/ml                                                                                                                                                                                                                                          |
| <b>IF:</b>                  | 15 µg/ml                                                                                                                                                                                                                                         |
| <b>IHC:</b>                 | 1:100                                                                                                                                                                                                                                            |
| <b>WB:</b>                  | 1:1000                                                                                                                                                                                                                                           |

## Formulation

|                        |                                                            |
|------------------------|------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                  |
| <b>Concentration:</b>  | 0.90 mg/ml by UV absorbance at 280 nm                      |
| <b>Buffer:</b>         | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.01% (w/v) Sodium Azide                                   |
| <b>Stabilizer:</b>     | None                                                       |

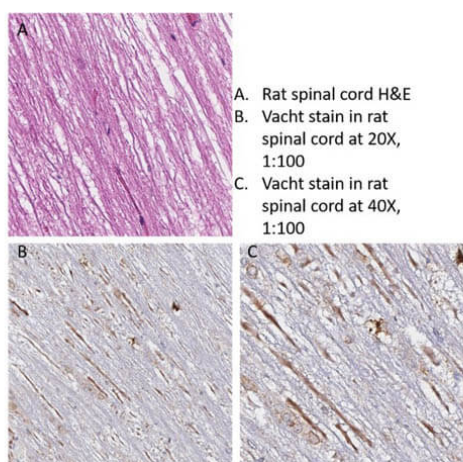
## Shipping & Handling

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|----------------------------|---------|
| <b>Shipping Condition:</b> | Dry Ice |
|----------------------------|---------|

**Storage Condition:** Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

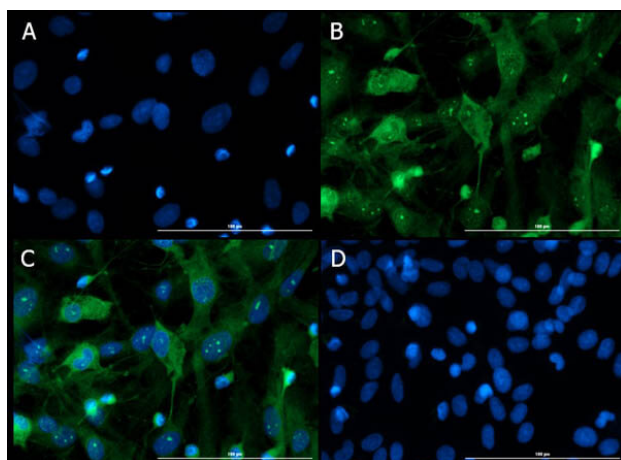
**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



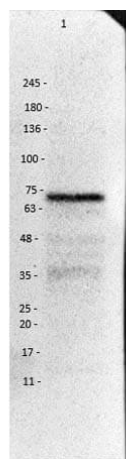
### Immunohistochemistry

Immunohistochemistry of Rabbit Anti-VACHT Antibody. Tissue: Rat Spinal Cord. Primary Antibody: Rabbit Anti-VACHT Antibody at 1:100 for 30min at RT. Secondary Antibody: Anti-Rabbit Poly-HRP-IgG. Ready to use 8 min at RT. Antigen Retrieval: HIER using Citrate Buffer for 20 min. Counterstain: Hematoxylin.



### Immunofluorescence Microscopy

Immunofluorescence of Rabbit Anti-VACHT Antibody. Cell Line: Post-natal rat pup (PND1) heterogeneous brain cells. Primary Antibody: Rabbit Anti-VACHT Antibody at 15µg/mL overnight at 4°C. Counterstain Antibody: Donkey Anti-Rabbit IgG DyLight™ 488 Conjugated (p/n 611-741-127) at 5µg/mL for 1hr at RT. Fixative: 4% PFA. Permeabilization: 0.3% Triton X-100. Nuclear Counter Stain: DAPI. Image: A) DAPI (blue). B) Anti-VACHT (green) and Secondary. C) Merge of A+B images. D) Secondary only. Localization: predicted membrane, Golgi apparatus. Antibody detecting dendrites and axons and specific organelles in the nucleus (nucleolus). Staining correspondent to confirmed Slc18a3 staining in mouse brain P7 Gensat project: <http://www.gensat.org/imagenavigator.jsp?imageID=66611>

**Western Blot**

Western Blot of Rabbit Anti-VACHT Antibody. Molecular Weight Marker: Opal Pre-stained (p/n MB-210-0500). Lane 1: Rat brain, post natal, Whole Cell Lysate (p/n W12-001-MQ6). Primary Antibody: Anti-VACHT Antibody at 1:1000 overnight at 4°C. Secondary Antibody: Donkey Anti-Rabbit IgG HRP (p/n 611-703-127) at 1:70,000 for 1hr at RT. Blocking: BlockOut Universal Buffer (p/n MB-073). Expected: ~57 kDa, protein glycosylation.

**Disclaimer**

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.