

# Product Datasheet

## VMAT2 Antibody NBP1-69750-0.1ml

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**NBP1-69750-0.1ml****VMAT2 Antibody**

<b>Product Information</b>	
<b>Unit Size</b>	0.1 ml
<b>Concentration</b>	1.36 mg/ml
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Clonality</b>	Polyclonal
<b>Preservative</b>	0.05% Sodium Azide
<b>Isotype</b>	IgG
<b>Purity</b>	Immunogen affinity purified
<b>Buffer</b>	PBS, 30% Glycerol

<b>Product Description</b>	
<b>Host</b>	Rabbit
<b>Gene ID</b>	6571
<b>Gene Symbol</b>	SLC18A2
<b>Species</b>	Human, Mouse, Rat
<b>Immunogen</b>	A genomic peptide made to an internal region of the human VMAT2 protein (within residues 30-200). [Swiss-Prot Q05940]
<b>Notes</b>	Manufactured by Genomic Antibody Technology™. GAT <a href="#">FAQs</a>

<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
<b>Recommended Dilutions</b>	Western Blot 1:10000, Immunohistochemistry 1:100, Immunocytochemistry/ Immunofluorescence 1:10 - 1:500, Immunohistochemistry-Paraffin 1:100
<b>Application Notes</b>	Use in Immunohistochemistry reported in scientific literature (PMID:33895869)

**Publications**

Kang SS, Ahn EH, Liu X et al. ApoE4 inhibition of VMAT2 in the locus coeruleus exacerbates Tau pathology in Alzheimer's disease *Acta neuropathologica* 2021-04-25 [PMID: 33895869] (IF/IHC, Human, Mouse)

di Caudo C, Martinez-Valbuena I, MundiNano IC et al. CAV-2-Mediated GFP and LRRK2G2019S Expression in the Macaca fascicularis Brain *Front Mol Neurosci* 2020-03-25 [PMID: 32269512] (IF/IHC, ICC/IF, Monkey)

Niu W, Zang T, Wang LL et al. Phenotypic Reprogramming of Striatal Neurons into Dopaminergic Neuron-like Cells in the Adult Mouse Brain. *Stem Cell Reports*. 2018-09-28 [PMID: 30318292] (IF/IHC, Mouse)

Reichard EE, Nanaware-Kharade N, Gonzalez GA et al. PEGylation of a High-Affinity Anti-(+)-Methamphetamine Single Chain Antibody Fragment Extends Functional Half-Life by Reducing Clearance *Pharm. Res* [PMID: 27620175] (WB, Rat)

Details:  
Used the HRP form of this antibody.

Vuong HE. Heterogeneous functional organization of somatostatin- and dopamine-containing wide-field amacrine cells in mouse retina Thesis, Graduate Student Researcher, UCLA: Physiological Science 0671 Retrieved from: [escholarship.org](https://escholarship.org) 2015-08-10 (IHC-Fr, Mouse)



## Procedures

### Western Blot protocol for VMAT2 Antibody (NBP1-69750)

#### Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 40 ug of total protein per lane.
2. Transfer proteins to membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain according to standard Ponceau S procedure (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot.
5. Block the membrane using standard blocking buffer for at least 1 hour.
6. Wash the membrane in wash buffer three times for 10 minutes each.
7. Dilute primary antibody in blocking buffer and incubate 1 hour at room temperature.
8. Wash the membrane in wash buffer three times for 10 minutes each.
9. Apply the diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer three times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions.

\*Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%.

### Immunohistochemistry-Paraffin protocol for VMAT2 Antibody (NBP1-69750)

#### Immunohistochemistry-Paraffin Embedded Sections

##### Antigen Unmasking:

Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes.

##### Staining:

1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in wash buffer for 5 minutes.
3. Block each section with 100-400 ul blocking solution for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul biotinylated diluted secondary antibody. Incubate 30 minutes at room temperature.
7. Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
8. Add 100-400 ul Streptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
9. Wash sections three times in wash buffer for 5 minutes each.
10. Add 100-400 ul DAB substrate to each section and monitor staining closely.
11. As soon as the sections develop, immerse slides in deionized water.
12. Counterstain sections in hematoxylin.
13. Wash sections in deionized water two times for 5 minutes each.
14. Dehydrate sections.
15. Mount coverslips.





### **Novus Biologicals USA**

10730 E. Briarwood Avenue  
Centennial, CO 80112  
USA  
Phone: 303.730.1950  
Toll Free: 1.888.506.6887  
Fax: 303.730.1966  
nb-customerservice@bio-techne.com

### **Bio-Techne Canada**

21 Canmotor Ave  
Toronto, ON M8Z 4E6  
Canada  
Phone: 905.827.6400  
Toll Free: 855.668.8722  
Fax: 905.827.6402  
canada.inquires@bio-techne.com

### **Bio-Techne Ltd**

19 Barton Lane  
Abingdon Science Park  
Abingdon, OX14 3NB, United Kingdom  
Phone: (44) (0) 1235 529449  
Free Phone: 0800 37 34 15  
Fax: (44) (0) 1235 533420  
info.EMEA@bio-techne.com

### **General Contact Information**

[www.novusbio.com](http://www.novusbio.com)  
Technical Support: [nb-technical@bio-techne.com](mailto:nb-technical@bio-techne.com)  
Orders: [nb-customerservice@bio-techne.com](mailto:nb-customerservice@bio-techne.com)  
General: [novus@novusbio.com](mailto:novus@novusbio.com)

### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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