

**VMAT2 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP59293****Specification**

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**VMAT2 Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	<a href="#">Q05940</a>
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	55713

**VMAT2 Polyclonal Antibody - Additional Information****Gene ID** 6571**Other Names**

Synaptic vesicular amine transporter, Monoamine transporter, Solute carrier family 18 member 2, Vesicular amine transporter 2, VAT2, SLC18A2, SVMT, VMAT2

**Dilution**

<span class = "dilution\_WB">WB~~1:1000</span><br \><span class = "dilution\_IHC-P">IHC-P~~N/A</span><br \><span class = "dilution\_IHC-F">IHC-F~~N/A</span><br \><span class = "dilution\_IF">IF~~1:50~200</span><br \><span class = "dilution\_ICC">ICC~~N/A</span><br \><span class = "dilution\_E">E~~N/A</span>

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

**VMAT2 Polyclonal Antibody - Protein Information****Name** SLC18A2**Synonyms** SVMT, VMAT2**Function**

Electrogenic antiporter that exchanges one cationic monoamine with two intravesicular protons across the membrane of secretory and synaptic vesicles. Uses the electrochemical proton gradient established by the V-type proton-pump ATPase to accumulate high concentrations of monoamines inside the vesicles prior to their release via exocytosis. Transports a variety of catecholamines such as dopamine, adrenaline and noradrenaline, histamine, and indolamines such as serotonin (PubMed:<a href="http://www.uniprot.org/citations/23363473" target="\_blank">23363473</a>),

PubMed:<a href="http://www.uniprot.org/citations/37914936" target="\_blank">37914936</a>,  
PubMed:<a href="http://www.uniprot.org/citations/38081299" target="\_blank">38081299</a>,  
PubMed:<a href="http://www.uniprot.org/citations/38517752" target="\_blank">38517752</a>,  
PubMed:<a href="http://www.uniprot.org/citations/8643547" target="\_blank">8643547</a>).  
Regulates the transvesicular monoaminergic gradient that determines the quantal size. Mediates somatodendritic dopamine release in hippocampal neurons, likely as part of a regulated secretory pathway that integrates retrograde synaptic signals (By similarity). Acts as a primary transporter for striatal dopamine loading ensuring impulse-dependent release of dopamine at the synaptic cleft (By similarity). Responsible for histamine and serotonin storage and subsequent corelease from mast cell granules (PubMed:<a href="http://www.uniprot.org/citations/8860238" target="\_blank">8860238</a>).

### Cellular Location

Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane {ECO:0000250|UniProtKB:Q01827}; Multi-pass membrane protein. Cytoplasmic vesicle, secretory vesicle membrane {ECO:0000250|UniProtKB:Q01827}; Multi-pass membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:Q01827} Cell projection, dendrite {ECO:0000250|UniProtKB:Q01827}. Note=Sorted to large dense core granules in neuroendocrine cells, presumably at the level of the trans-Golgi network. In neurons it is predominantly detected in somatodendritic tubulovesicular membranes, a distinct population of secretory vesicles that undergo calcium-dependent exocytosis in axons and dendrites upon depolarization. Localized at synaptic vesicles in axons. {ECO:0000250|UniProtKB:Q01827}

### Tissue Location

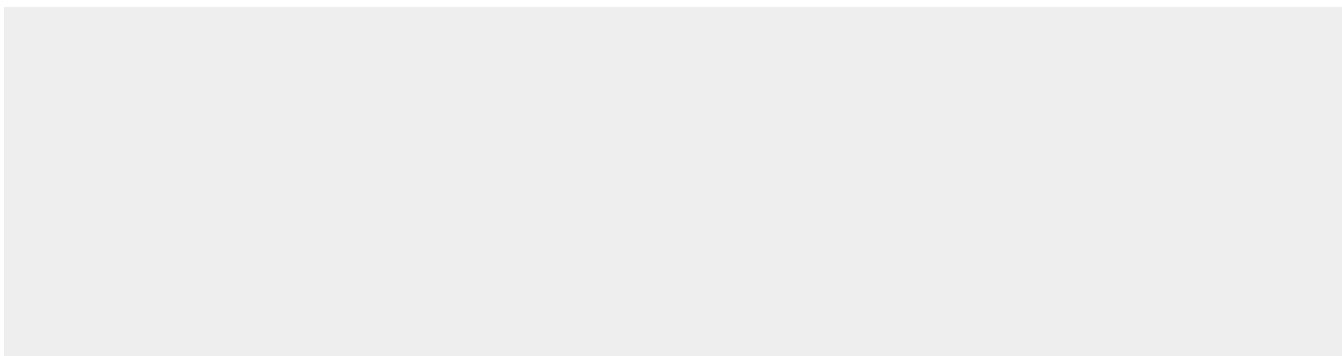
Expressed in neuronal and neuroendocrine tissues. Detected in central and peripheral nervous system in particular in axonal and dendritic processes in dopaminergic cells of substantia nigra, histaminergic neuronal cell bodies of substantia nigra and tuberomammillary nucleus, in ganglion cells of sympathetic glia and in peripheral sympathetic nerve terminals in stomach and duodenum (at protein level). Highly expressed in chromaffin cells of the adrenal medulla and histamine-storing enterochromaffin-like cells of oxyntic mucosa (at protein level).

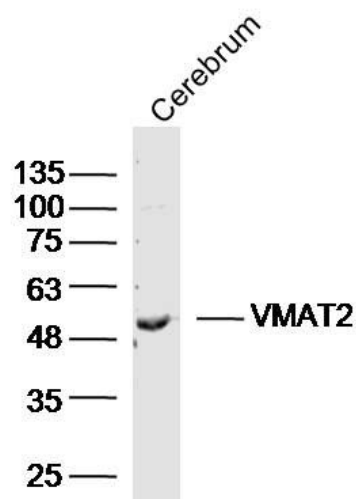
## VMAT2 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

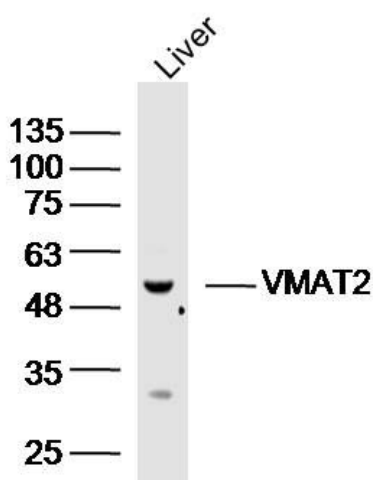
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## VMAT2 Polyclonal Antibody - Images





Sample: Cerebrum (Mouse) Lysate at 40 ug  
Primary: Anti-VMAT2 (bs-9565R) at 1/300 dilution  
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  
Predicted band size: 57 kD  
Observed band size: 57 kD



Sample: Liver (Mouse) Lysate at 40 ug  
Primary: Anti-VMAT2 (bs-9565R) at 1/300 dilution  
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  
Predicted band size: 57 kD  
Observed band size: 57 kD