

## VGLUT3/SLC17A8 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP59066

## **Specification**

# VGLUT3/SLC17A8 Polyclonal Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

IHC-P, IHC-F, IF, ICC, E <u>Q8NDX2</u> Rat, Dog, Bovine Rabbit Polyclonal 64991

# VGLUT3/SLC17A8 Polyclonal Antibody - Additional Information

#### Gene ID 246213

#### **Other Names**

Vesicular glutamate transporter 3, VGluT3, Solute carrier family 17 member 8, SLC17A8, VGLUT3

## **Dilution**

<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  $^{\circ}$ 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  $^{\circ}$ C.

# VGLUT3/SLC17A8 Polyclonal Antibody - Protein Information

Name SLC17A8 (<u>HGNC:20151</u>)

**Synonyms VGLUT3** 

## **Function**

Multifunctional transporter that transports L-glutamate as well as multiple ions such as chloride, sodium and phosphate (PubMed:<a href="http://www.uniprot.org/citations/12151341" target="\_blank">12151341</a>, PubMed:<a href="http://www.uniprot.org/citations/33440152" target="\_blank">33440152</a>). At the synaptic vesicle membrane, mainly functions as an uniporter that mediates the uptake of L- glutamate into synaptic vesicles at presynaptic nerve terminals of excitatory neural cells (PubMed:<a href="http://www.uniprot.org/citations/12151341" target="\_blank">12151341</a>). The L-glutamate uniporter activity is electrogenic and is driven by the proton electrochemical gradient, mainly by the electrical gradient established by the





vacuolar H(+)-ATPase across the synaptic vesicle membrane (PubMed:<a href="http://www.uniprot.org/citations/12151341" target="\_blank">12151341</a>). In addition, functions as a chloride channel that allows a chloride permeation through the synaptic vesicle membrane that affects the proton electrochemical gradient and promotes synaptic vesicles acidification (By similarity). At the plasma membrane, following exocytosis, functions as a symporter of Na(+) and phosphate from the extracellular space to the cytoplasm allowing synaptic phosphate homeostasis regulation (Probable). The symporter activity is electrogenic (PubMed:<a href="http://www.uniprot.org/citations/33440152" target="\_blank">33440152</a>). Moreover, operates synergistically with SLC18A3/VACHT under a constant H(+) gradient, thereby allowing striatal vesicular acetylcholine uptake (By similarity).

## **Cellular Location**

Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane {ECO:0000250|UniProtKB:Q7TSF2}. Cell membrane; Multi-pass membrane protein. Synapse, synaptosome {ECO:0000250|UniProtKB:Q7TSF2}

#### **Tissue Location**

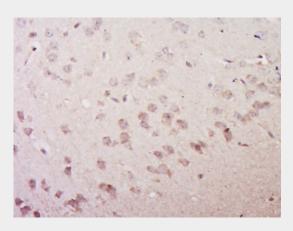
Expressed in amygdala, cerebellum, hippocampus, medulla, spinal cord and thalamus.

# VGLUT3/SLC17A8 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 Cytomety
- Cell Culture

## VGLUT3/SLC17A8 Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (VGLU3) Polyclonal Antibody, Unconjugated (bs-8701R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.