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VGLUT3/SLC17A8 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59066

Specification

VGLUT3/SLC17A8 Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q8NDX2
Reactivity	**Rat, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**65 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human VGLUT3/SLC17A8**
Epitope Specificity	**1-100/589**
Isotype	**IgG**
Purity	
affinity purified by Protein A	
Buffer	**Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4.**
SUBCELLULAR LOCATION	**Cytoplasmic vesicle > secretory vesicle > synaptic vesicle membrane. Membrane. Cell junction > synapse > synaptosome.**
SIMILARITY	**Belongs to the major facilitator superfamily. Sodium/anion cotransporter family. VGLUT subfamily.**
DISEASE	**Defects in SLC17A8 are the cause of deafness autosomal dominant type 25 (DFNA25) [MIM:605583]. DFNA25 is a form of sensorineural hearing loss. The expression of DFNA25 deafness is variable in terms of onset and rate of progression, with an age-dependent penetrance resembling an early-onset presbycusis, or senile deafness, a progressive bilateral loss of hearing that occurs in the aged.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
This gene encodes a vesicular glutamate transporter. The encoded protein transports the neurotransmitter glutamate into synaptic vesicles before it is released into the synaptic cleft. Mutations in this gene are the cause of autosomal-dominant nonsyndromic type 25 deafness. Alternate splicing results in multiple transcript variants.[provided by RefSeq, May 2010]

VGLUT3/SLC17A8 Polyclonal Antibody - Additional Information

Gene ID 246213

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

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

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage
Store at -20 ℃ 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 ℃.

VGLUT3/SLC17A8 Polyclonal Antibody - Protein Information

Name SLC17A8 (HGNC:20151)

Synonyms VGLUT3

Function
Multifunctional transporter that transports L-glutamate as well as multiple ions such as chloride, sodium and phosphate (PubMed:12151341, PubMed:33440152). 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:12151341). 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:12151341). 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:33440152). 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

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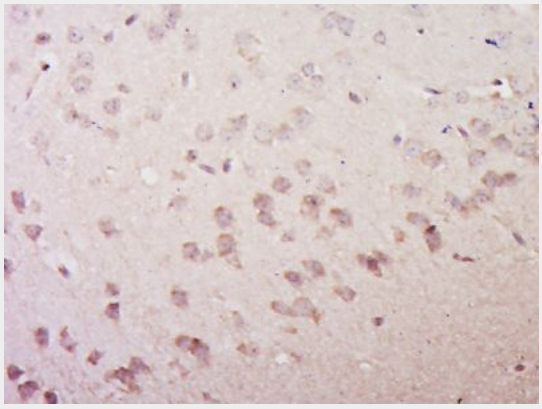
Provided below are standard protocols that you may find useful for product applications.

- 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) instructionsand DAB staining.