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(DANRE) slc17a6a Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20828c

Specification

(DANRE) slc17a6a Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	Q5W8I7
Reactivity	**Zebrafish**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**557-587**

(DANRE) slc17a6a Antibody (C-term) - Additional Information

Gene ID 494492

Other Names
Vesicular glutamate transporter 22, Solute carrier family 17 member 6-A, Vesicular glutamate transporter 2-B, slc17a6a, slc17a6l, vglut22, vglut2b

Target/Specificity
This (DANRE) slc17a6a antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide located within amino acid positions 557-587 amino acids of DANRE slc17a6a.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
(DANRE) slc17a6a Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

(DANRE) slc17a6a Antibody (C-term) - Protein Information

Name slc17a6a

Synonyms slc17a6l, vglut2.2, vglut2b

Function Multifunctional transporter that transports L-glutamate as well as multiple ions such as

chloride, proton, potassium, sodium and phosphate. At the synaptic vesicle membrane, mainly functions as a uniporter which transports preferentially L-glutamate but also, phosphate from the cytoplasm into synaptic vesicles at presynaptic nerve terminals of excitatory neural cells. The L-glutamate or phosphate 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. In addition, functions as a chloride channel that allows a chloride permeation through the synaptic vesicle membrane therefore affects the proton electrochemical gradient and promotes synaptic vesicles acidification. Moreover, functions as a vesicular K(+)/H(+) antiport allowing to maintain the electrical gradient and to decrease chemical gradient and therefore sustain vesicular L-glutamate uptake. The vesicular H(+)/H(+) antiport activity is electroneutral. 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. The symporter activity is driven by an inside negative membrane potential and is electrogenic (By similarity). Also involved in the regulation of retinal hyaloid vessel regression during postnatal development (By similarity). May also play a role in the endocrine L-glutamatergic system of other tissues such as pineal gland and pancreas (By similarity).

Cellular Location
Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane. Membrane; Multi-pass membrane protein. Synapse, synaptosome Cell membrane {ECO:0000250|UniProtKB:Q8BLE7}; Multi-pass membrane protein

Tissue Location
Expressed in spinal chord.

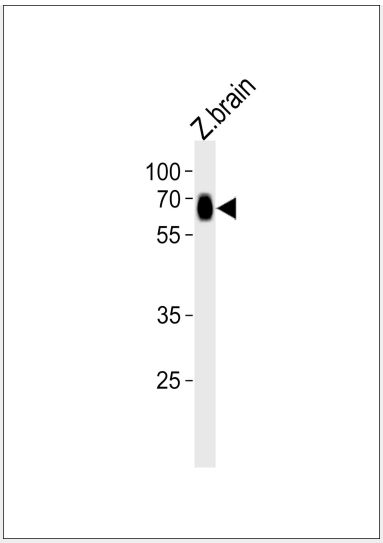
(DANRE) slc17a6a Antibody (C-term) - Protocols

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

(DANRE) slc17a6a Antibody (C-term) - Images

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Western blot analysis of lysate from zebra fish brain tissue lysate, using (DANRE) slc17a6a Antibody (C-term)(Cat. #AP20828c). AP20828c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 35ug.

(DANRE) slc17a6a Antibody (C-term) - Background

Mediates the uptake of glutamate into synaptic vesicles at presynaptic nerve terminals of excitatory neural cells (By similarity).

(DANRE) slc17a6a Antibody (C-term) - References

Higashijima S.,et al.J. Comp. Neurol. 480:1-18(2004).
Yokogawa T.,et al.PLoS Biol. 5:E277-E277(2007).