

Zebrafish slc17a6a Antibody (C-term) Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20828c

### Specification

# Zebrafish slc17a6a Antibody (C-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Antigen Region WB,E <u>O5W8I7</u> Zebrafish Rabbit Polyclonal Rabbit IgG 557-587

#### Zebrafish 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 Zebrafish slc17a6a antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide located within amino acid positions 557-587 amino acids of zebrafish slc17a6a.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

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** 

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

#### Zebrafish 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 cord.

### Zebrafish slc17a6a Antibody (C-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Zebrafish slc17a6a Antibody (C-term) - Images





Western blot analysis of lysate from zebrafish brain tissue lysate, using Zebrafish 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.

# Zebrafish slc17a6a Antibody (C-term) - Background

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

# Zebrafish 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).