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(DANRE) slc17a6a Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20828c

Product Information

Application	WB, E
Primary Accession	Q5W8I7
Reactivity	Zebrafish
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB46528
Calculated MW	64461

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 between 574-607 amino acids DANRE 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	(DANRE) slc17a6a Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

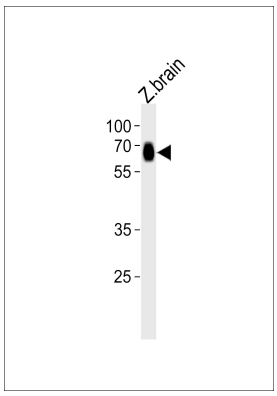
Background

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

References

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

Images



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.