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SLC18A1 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI10862

Product Information

Application	WB, IHC
Primary Accession	P54219
Other Accession	NM_003053, NP_003044
Reactivity	Human, Mouse, Rat, Rabbit, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56257

Additional Information

Gene ID	6570
Alias Symbol	CGAT, VAT1, VMAT1
Other Names	Chromaffin granule amine transporter, Solute carrier family 18 member 1, Vesicular amine transporter 1, VAT1, SLC18A1, VAT1, VMAT1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-SLC18A1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	SLC18A1 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

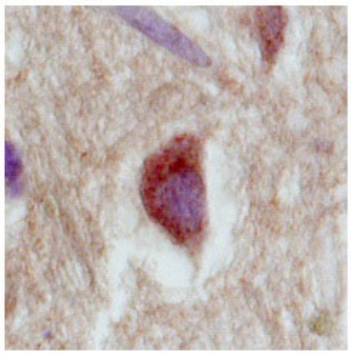
Name	SLC18A1
Synonyms	VAT1, VMAT1
Function	[Isoform 1]: Electrogenic antiporter that exchanges one cationic monoamine with two intravesicular protons across the membrane of secretory and synaptic vesicles. Uses the electrochemical proton gradient established by the V-type proton-pump ATPase to accumulate high concentrations of monoamines inside the vesicles prior to their release via exocytosis. Transports catecholamines and indolamines with higher affinity for serotonin (PubMed:16326835, PubMed:23337945, PubMed:8643547). Regulates the transvesicular monoaminergic gradient that determines the quantal size.

	Mediates presynaptic monoaminergic vesicle transport in the amygdala and prefrontal brain regions related with emotion processing in response to environmental stimuli (PubMed:23337945).
Cellular Location	Cytoplasmic vesicle, secretory vesicle membrane; Multi-pass membrane protein. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane {ECO:0000250|UniProtKB:Q8R090}; Multi-pass membrane protein [Isoform 2]: Endoplasmic reticulum membrane; Multi-pass membrane protein
Tissue Location	Expressed primarily in neuroendocrine tissues. Highly expressed in chromaffin cells of the adrenal medulla (at protein level). Detected in peripheral sympathetic ganglia (at protein level) Found in some paracrine cells in stomach and duodenum (at protein level) (PubMed:8643547). Expressed in substantia nigra (PubMed:23337945). [Isoform 2]: Expressed in gastrointestinal tract.

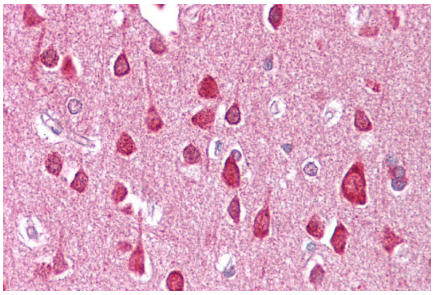
References

Lohoff,F.W., (er) Neuropsychobiology 57 (1-2), 55-60 (2008) In pressReconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.

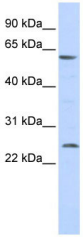
Images



Immunohistochemistry with Brain, cortex tissue at an antibody concentration of 2.5µg/ml using anti-SLC18A1 antibody (AI10862)



Brain, cortex



WB Suggested Anti-SLC18A1 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:62500
Positive Control: 293T cell lysate