

SLC18A2 antibody - N-terminal region
Rabbit Polyclonal Antibody
Catalog # AI12334**Specification**

SLC18A2 antibody - N-terminal region - Product Information

Application	WB, IHC
Primary Accession	Q05940
Other Accession	NM_003054 , NP_003045
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Guinea Pig, Dog
Predicted	Human, Mouse, Rabbit, Chicken, Horse, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56kDa KDa

SLC18A2 antibody - N-terminal region - Additional Information**Gene ID** 6571**Alias Symbol** MGC120477, MGC120478, MGC26538, SVAT, SVMT, VAT2, VMAT2**Other Names**

Synaptic vesicular amine transporter, Monoamine transporter, Solute carrier family 18 member 2, Vesicular amine transporter 2, VAT2, SLC18A2, SVMT, VMAT2

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-SLC18A2 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

SLC18A2 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

SLC18A2 antibody - N-terminal region - Protein Information**Name** SLC18A2**Synonyms** SVMT, VMAT2**Function**

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 a variety of catecholamines such as dopamine, adrenaline and noradrenaline, histamine, and indolamines such as serotonin (PubMed:23363473, PubMed:37914936, PubMed:38081299, PubMed:38517752, PubMed:8643547). Regulates the transvesicular monoaminergic gradient that determines the quantal size. Mediates somatodendritic dopamine release in hippocampal neurons, likely as part of a regulated secretory pathway that integrates retrograde synaptic signals (By similarity). Acts as a primary transporter for striatal dopamine loading ensuring impulse-dependent release of dopamine at the synaptic cleft (By similarity). Responsible for histamine and serotonin storage and subsequent corelease from mast cell granules (PubMed:8860238).

Cellular Location

Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane {ECO:0000250|UniProtKB:Q01827}; Multi-pass membrane protein. Cytoplasmic vesicle, secretory vesicle membrane {ECO:0000250|UniProtKB:Q01827}; Multi-pass membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:Q01827} Cell projection, dendrite {ECO:0000250|UniProtKB:Q01827}. Note=Sorted to large dense core granules in neuroendocrine cells, presumably at the level of the trans-Golgi network. In neurons it is predominantly detected in somatodendritic tubulovesicular membranes, a distinct population of secretory vesicles that undergo calcium-dependent exocytosis in axons and dendrites upon depolarization. Localized at synaptic vesicles in axons. {ECO:0000250|UniProtKB:Q01827}

Tissue Location

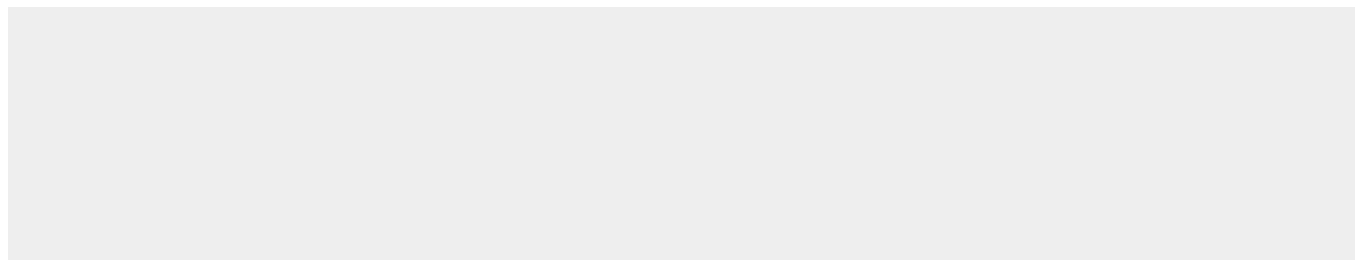
Expressed in neuronal and neuroendocrine tissues. Detected in central and peripheral nervous system in particular in axonal and dendritic processes in dopaminergic cells of substantia nigra, histaminergic neuronal cell bodies of substantia nigra and tuberomammillary nucleus, in ganglion cells of sympathetic glia and in peripheral sympathetic nerve terminals in stomach and duodenum (at protein level). Highly expressed in chromaffin cells of the adrenal medulla and histamine-storing enterochromaffin-like cells of oxyntic mucosa (at protein level).

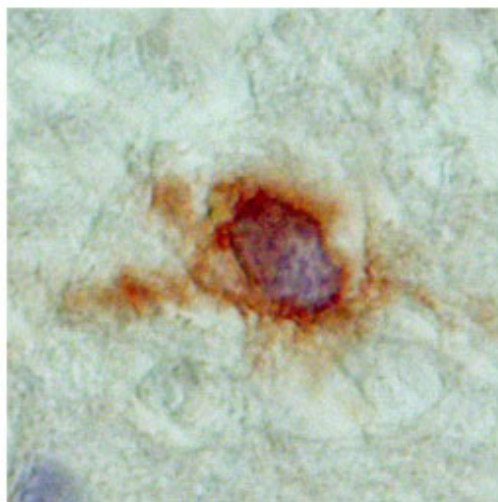
SLC18A2 antibody - N-terminal region - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SLC18A2 antibody - N-terminal region - Images





SLC18A2 (VMAT2) in human brain (cortex) was detected using HRP/DAB brown color stain

SLC18A2 antibody - N-terminal region - References

Yamamoto, S., (2006) Neurosci. Lett. 396(3), 187-191 Reconstitution and Storage: For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.