



# Mouse Anti-SLC18A1 monoclonal antibody, clone O550/32 (CABT-RM158)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Specificity</b>	Specifically detects Vesicular monoamine transporter 1 (VMAT1) and does not show reactivity with VMAT2. It targets an epitope with in 93 amino acids from the N-terminal first luminal region.
<b>Target</b>	SLC18A1
<b>Immunogen</b>	Recombinant fragment corresponding to 93 amino acids from the N-terminal first luminal region of murine Vesicular amine transporter 1 (VMAT1).
<b>Isotype</b>	IgG1, κ
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Mouse, Rat
<b>Clone</b>	O550/32
<b>Purification</b>	Protein G purified
<b>Conjugate</b>	unconjugated
<b>Applications</b>	WB
<b>Epitope</b>	extracellular domain
<b>Molecular Weight</b>	~93 kDa observed; 56.03 kDa calculated. Uncharacterized bands may be observed in some lysate(s).
<b>Format</b>	Liquid
<b>Size</b>	100 µl

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<b>Buffer</b>	0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl
<b>Preservative</b>	0.05% sodium azide
<b>Storage</b>	Stable for 1 year at 2-8°C from date of receipt.

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## BACKGROUND

<b>Introduction</b>	Chromaffin granule amine transporter is encoded by the <i>Scl19a1</i> gene in murine species. Vesicular monoamine transporters (VMATs) are involved in presynaptic storage and release of neurotransmitters. They are located in the presynaptic region and are involved in the transport of monoamines into storage vesicle, which are released upon arrival of an action potential. Two structurally related, but pharmacologically distinct, VMATs have been described (VMAT1 and VMAT2) that are encoded by separate genes. VMAT1 is a multi-pass membrane acidic glycoprotein that is found in both large dense-core vesicles and in small synaptic vesicles. It is both C- and N-terminal regions are located in the cytosolic side of the vesicle. VMAT1 is detected in adrenal medulla, and brain (at protein level). In brain, specifically found in the medulla oblongata, pons, prefrontal cortex, striatum, dentate gyrus and hippocampus. VMAT1 is shown to play a key role in survival of hippocampal neurons and may contribute to neurocognitive deficits observed in neuropsychiatric disorders.
<b>Keywords</b>	SLC18A1; solute carrier family 18 (vesicular monoamine transporter), member 1; CGAT; VAT1; VMAT1; chromaffin granule amine transporter; vesicular amine transporter 1; solute carrier family 18 member 1; solute carrier family 18 (vesicular monoamine), member 1

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## GENE INFORMATION

<b>Entrez Gene ID</b>	<a href="#">110877</a>
<b>UniProt ID</b>	<a href="#">Q8R090</a>

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