

**DESCRIPTION**

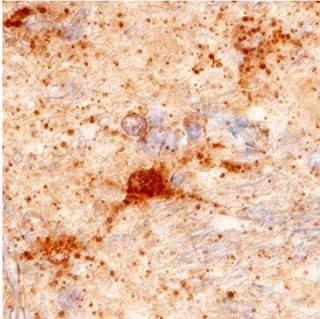
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human VGLUT/SLC17A7 in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 732607
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human VGLUT/SLC17A7 Asn93-Thr115 Accession # Q9P2U7
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below

**DATA**

<p><b>Immunohistochemistry</b></p> 	<p><b>VGLUT1/SLC17A7 in Human Brain.</b> VGLUT1/SLC17A7 was detected in immersion fixed paraffin-embedded sections of human brain (cortex) using Mouse Anti-Human VGLUT1/SLC17A7 Monoclonal Antibody (Catalog # MAB9054) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell &amp; Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to synaptic vesicles. View our protocol for <a href="#">Chromogenic IHC Staining of Paraffin-embedded Tissue Sections</a>.</p>
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**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

Vesicular glutamate transporter 1 (VGLUT1), also known as SLC17A7, is an integral membrane protein involved in glutamate uptake into synaptic vesicles. The vesicular glutamate transporter (VGLUT) mediates the accumulation of neurotransmitter (glutamate) into synaptic vesicles. It is expressed in pre-synaptic vesicles. VGLUT proteins appear to be differentially expressed in myelinated afferents located in specific axonal populations within the spinal cord. VGLUT proteins are among the most specific markers for the identification of glutamatergic neurons. It is an essential molecular component of glutamate synaptic transmission, and its de-regulation can result synaptic failure and excitotoxicity.