

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human VGLUT/SLC17A7 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 732607
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human VGLUT/SLC17A7 Asn93-Thr115 Accession # Q9P2U7
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Immunohistochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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.

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