

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human VIAAT/SLC32A1 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 731307
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human VIAAT/SLC32A1 Ala2-Phe133 Accession # Q9H598
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.

Immunocytochemistry 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

VIAAT (Vesicular inhibitory amino acid transporter; also VGAT and SLC32A1) is a 56-58 kDa member of the amino acid/polyamine transporter 2 family of proteins. It is expressed in inhibitory neurons throughout the CNS, in both resting and activated lymphocytes, and in pancreatic α-cells (in rodent). VIAAT is believed to transport both GABA and glycine across synaptic vesicle membranes in an electrical and pH gradient-dependent manner. Once transported, these neurotransmitters are released at the presynaptic membrane, acting as inhibitory factors in the mature nervous system, and excitatory factors in the immature nervous system. Human VIAAT is a 525 amino acid (aa) 10-transmembrane nonglycosylated protein. The N-terminus (aa 1-133) and C-terminus (aa 511-525) are cytoplasmic. There is a 52 kDa short form that is not well characterized. Over aa 2-133, human VIAAT shares 95% aa identity with mouse VIAAT.

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