

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 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.