Human/Mouse/Rat Syntaxin 1A Alexa Fluor® 594-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF7237T
100 µg

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat Syntaxin 1A in Western blots and detects recombinant human Syntaxin 1A in direct ELISAs. In direct ELISAs, approximately 10% cross-reactivity with recombinant human Syntaxin 1B2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human Syntaxin 1A Met1-Leu165 Accession # Q16623
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.
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

STX1A (Syntaxin [Greek for 'organizing']1A; also HPC-1) is a 34-36 kDa member of the syntaxin family of proteins. It is a t-SNARE that is widely expressed in neurons, and is involved in the exocytosis of neurotransmitters at the presynaptic membrane. STX1A is transported intracellularly by microtubule-associated syntabulin, and its availability appears to be regulated through binding to LGI3. When released from LGI3, STX1A interacts with SNAP25 and VAMP2 to form the SNARE complex involved in exocytotic vesicle release. Human STX1A is a type IV single-pass transmembrane protein (very long cytoplasmic N-terminus) that is 288 amino acids (aa) in length. It contains a 265 aa N-terminal cytoplasmic domain that contains one coiled-coil region (aa 68-109), a t-SNARE domain with a coiled-coil region (aa 192-254), and a C-terminal transmembrane sequence (aa 266-286). There are three potential isoform variants. One shows a 34 aa substitution for aa 227-288, while another termed STX1C is likely soluble, and contains a 25 aa substitution for the same aa sequence above encompassing aa 227-288. A third variant shows a five aa substitution for aa 1-10. Over aa 1-165, human STX1A shares 99% aa sequence identity with mouse STX1A.

PRODUCT SPECIFIC NOTICES

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