

Syntaxin 1A (D4E2W) Rabbit mAb

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R	Endogenous	33	Rabbit IgG	#Q16623	6804

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Syntaxin 1A (D4E2W) Rabbit mAb recognizes endogenous levels of total Syntaxin 1A protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val237 of human Syntaxin 1A protein.

Background

Syntaxin 1A (STX1A) is a SNARE protein involved in intracellular membrane fusion, including synaptic vesicle fusion (1). At the synapse, syntaxin 1 is located at the presynaptic plasma membrane and is therefore categorized as a t-SNARE protein (2). The amino-terminal domain of syntaxin 1 interacts with Munc18-1 and this interaction is essential for synaptic vesicle fusion (3). Although originally characterized from neural tissues, research studies have demonstrated syntaxin 1A expression in exocrine tissues such as pancreatic islets (4) where it negatively regulates insulin release (5).

Background References

1. Südhof, T.C. and Rothman, J.E. (2009) *Science* 323, 474-7.
2. Fukuda, R. et al. (2000) *Nature* 407, 198-202.
3. Zhou, P. et al. (2013) *EMBO J* 32, 159-71.
4. Jacobsson, G. et al. (1994) *Proc Natl Acad Sci U S A* 91, 12487-91.
5. Nagamatsu, S. et al. (1996) *J Biol Chem* 271, 1160-5.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

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