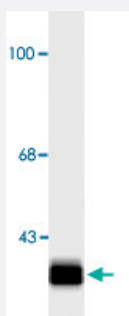


STX1A monoclonal antibody, clone SP8

Catalog # MAB8435

Size 100 uL

Applications



Western Blot (Tissue lysate)

Western blot of rat cortex lysate showing specific immunolabeling of the ~ 36k syntaxin STX1A protein. STX1A monoclonal antibody, clone SP8 (Cat # MAB8435).

Specification

Product Description Mouse monoclonal antibody raised against native STX1A.

Immunogen Native purified human brain STX1A.

Host Mouse

Theoretical MW (kDa) 36

Reactivity Hamster, Human, Pig, Rat

Specificity This antibody has been directly tested for reactivity in human, rat, pig, and hamster. This antibody is specific to the ~ 36 KDa syntaxin protein in Western blots of rat brain lysate. This antibody has also been used for immunohistochemistry on formalin fixed, vibratome sections. Does not work on paraffin sections.

Form Liquid

Purification Protein G purification

Isotype IgG1

Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 10 mM HEPES, 150 mM NaCl, pH 7.5 (50% glycerol, 0.1 mg/mL BSA)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Tissue lysate)

Western blot of rat cortex lysate showing specific immunolabeling of the ~ 36k syntaxin STX1A protein. STX1A monoclonal antibody, clone SP8 (Cat # MAB8435).

- Immunohistochemistry

Gene Info — STX1A

Entrez GeneID	6804
Protein Accession#	Q16623
Gene Name	STX1A
Gene Alias	HPC-1, STX1, p35-1
Gene Description	syntaxin 1A (brain)
Omim ID	186590
Gene Ontology	Hyperlink
Gene Summary	Synaptic vesicles store neurotransmitters that are released during calcium-regulated exocytosis. The specificity of neurotransmitter release requires the localization of both synaptic vesicles and calcium channels to the presynaptic active zone. Syntaxins function in this vesicle fusion process. Syntaxins also serve as a substrate for botulinum neurotoxin type C, a metalloprotease that blocks exocytosis and has high affinity for a molecular complex that includes the alpha-latrotoxin receptor (MIM 600565) which produces explosive exocytosis (Zhang et al., 1995 [PubMed 7622072]).[supplied by OMIM]
Other Designations	-

Publication Reference

- [Deficits in syntaxin 1 phosphorylation in schizophrenia prefrontal cortex.](#)

Castillo MA, Ghose S, Tamminga CA, Utery-Reynolds PG.

Biological Psychiatry 2009 Sep; 67(3):208.

Application: WB-Ti, Human, Rat, Human brain, Rat brain

- [Dual modes of Munc18-1/SNARE interactions are coupled by functionally critical binding to syntaxin-1 N terminus.](#)

Khvotchev M, Dulubova I, Sun J, Dai H, Rizo J, Sudhof TC.

Journal of Neuroscience 2007 Nov; 27(45):12147.

Pathway

- [SNARE interactions in vesicular transport](#)

Disease

- [Alzheimer disease](#)
- [Autistic Disorder](#)
- [Cardiovascular Diseases](#)
- [Developmental Disabilities](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Epilepsy](#)
- [Genetic Predisposition to Disease](#)
- [Glucose Intolerance](#)
- [Kidney Failure](#)
- [Mental Retardation](#)
- [Metabolic Syndrome X](#)

- [Migraine Disorders](#)
- [Neoplasms](#)
- [Obesity](#)
- [Osteoporosis](#)
- [Overweight](#)
- [Schizophrenia](#)