

Rabbit Anti-Synaptotagmin XI antibody

SL11399R

Product Name:	Synaptotagmin XI
Chinese Name:	突触Binding protein11抗体
Alias:	Synaptotagmin 11; Synaptotagmin 12; Synaptotagmin XI; Synaptotagmin-11; synaptotagmin XII; synaptotagmin-XII; Synaptotagmin11; Synaptotagmin12; Synaptotagmin-11; Synaptotagmin-12; SynaptotagminXI; SYT 11; SYT 12; SYT-11; SYT-12; Syt XI; Syt11; SYT11_HUMAN; SYT12; SytXI; DKFZp781D015; KIAA0080; MGC10881; MGC17226.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	48kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Synaptotagmin XI:51-100/431
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Synaptotagmins are a large family of synaptic vesicle type III integral membrane proteins that function as regulators of both exocytosis and endocytosis and are involved in neurotransmitter secretion from small secretory vesicles. Synaptotagmin XI, also

known as SYT11 (Synaptotagmin-11), is a 431 amino acid protein that localizes to the membrane and is expressed ubiquitously with highest expression in brain and lung. Like other Synaptotagmin proteins, Synaptotagmin XI is involved in the calcium-dependent exocytosis of secretory vesicles and is thought to act as a calcium sensor during vesicular trafficking. Synaptotagmin XI contains two C2 domains through which it can bind either three calcium ions or the zinc-finger protein Parkin (a juvenile Parkinson's disease gene product), the latter of which causes the polyubiquitination and subsequent degradation of Synaptotagmin XI by the proteasome complex. Defects in the gene encoding Synaptotagmin XI are implicated in a number of neurological disorders, including schizophrenia and Parkinson's disease.

Function:

May be involved in Ca(2+)-dependent exocytosis of secretory vesicles through Ca(2+) and phospholipid binding to the C2 domain or may serve as Ca(2+) sensors in the process of vesicular trafficking and exocytosis.

Subunit:

Homodimer. Can also form heterodimers. Interacts with PARK2.

Subcellular Location:

Membrane; Single-pass membrane protein. Cell junction, synapse. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane; Single-pass membrane protein. Note=In substantia nigra, observed in neuronal cell bodies and neurites. Found in the core of the Lewy bodies in the brain of sporadic Parkinson disease patients.

Post-translational modifications:

Ubiquitinated and targeted to the proteasome complex for degradation.

Similarity:

Belongs to the synaptotagmin family.

Contains 2 C2 domains.

SWISS:

O9BT88

Gene ID:

23208

Database links:

Entrez Gene: 23208Human

Entrez Gene: 229521Mouse

Entrez Gene: 60568Rat

Omim: 608741Human

SwissProt: Q9BT88Human

SwissProt: Q9R0N3Mouse

SwissProt: O08835Rat

Unigene: 32984Human

Unigene: 379376Mouse

Unigene: 9805Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.