



Rabbit Anti-Tomosyn/STXBP5 antibody

SL12126R

Product Name:	Tomosyn/STXBP5
Chinese Name:	突触融合蛋白Binding protein5抗体
Alias:	FLJ30922; Lethal(2) giant larvae protein homolog 3; LGL3; LLGL3; MGC141942; MGC141968; Nbla04300; STXBP5; Syntaxin binding protein 5; Syntaxin-binding protein 5; Tomosyn 1; STXB5 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,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:	127kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Tomosyn/STXBP5:235-380/1151
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:	WD-repeats are motifs that are found in a variety of proteins and are characterized by a conserved core of 40-60 amino acids that commonly form a tertiary propeller structure. While proteins that contain WD-repeats participate in a wide range of cellular functions, they are generally involved in regulatory mechanisms concerning chromatin assembly,

cell cycle control, signal transduction, RNA processing, apoptosis and vesicular trafficking. Tomosyn, also known as STXBP5 (syntaxin binding protein 5), LLGL3 or LGL3, is a 1,151 amino acid protein that localizes to the cytoplasm, as well as to the cell junction, secretory vesicles and to the peripheral membrane and contains one v-SNARE coiled-coil homology domain and 14 WD repeats. Interacting with Syntaxin 1 and Syntaxin 1B, Tomosyn functions as a regulator of neurotransmitter release and calcium-dependent exocytosis. Additionally, Tomosyn inhibits membrane fusion and may play a role in the assembly of SNARE complexes between transport vesicles and the plasma membrane. Multiple isoforms of Tomosyn exist due to alternative splicing events.

Function:

Tomosyn plays a regulatory role in calcium-dependent exocytosis and neurotransmitter release by inhibiting the assembly of trans-SNARE complexes between transport vesicles and the plasma membrane, via the displacement of munc18 from syntaxin-1. There are three splice variants of tomosyn designated m-tomosyn, b-tomosyn and s-tomosyn. Although b-tomosyn is ubiquitously expressed, s-tomosyn and m-tomosyn are expressed primarily in brain.

Subunit:

Interacts with STX1A and STX1B via its v-SNARE homology domain. Part of a complex that contains STX1, STXBP5, SNAP25 and SYT1. Part of a complex that contains STXBP5, STX4A and SNAP23.

Subcellular Location:

Cytoplasm. Cell membrane; Peripheral membrane protein. Cytoplasmic vesicle membrane; Peripheral membrane protein. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle. Cell junction, synapse. Note=Cytoplasmic, and associated with vesicular membranes and the plasma membrane. Detected at synapses and on synaptic vesicles.

Similarity:

Belongs to the WD repeat L(2)GL family.
Contains 1 v-SNARE coiled-coil homology domain.
Contains 14 WD repeats.

SWISS:

Q5T5C0

Gene ID:

134957

Database links:

[Entrez Gene: 134957](#)Human

[Entrez Gene: 78808](#)Mouse

[Entrez Gene: 81022](#)Rat

[Omim: 604586](#)Human

[SwissProt: Q5T5C0](#)Human

[SwissProt: Q8K400](#)Mouse

[SwissProt: Q9WU70](#)Rat

[Unigene: 93534](#)Human

[Unigene: 331751](#)Mouse

[Unigene: 96029](#)Rat

Important Note:

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

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