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Syt1 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI14398

Product Information

Application	WB, IHC
Primary Accession	P46096
Other Accession	NM_009306, NP_033332
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Chicken, Dog, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	47418

Additional Information

Gene ID	20979
Alias Symbol	AW124717, G630098F17Rik, SytI
Other Names	Synaptotagmin-1, Synaptotagmin I, SytI, p65, Syt1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Syt1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Syt1 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

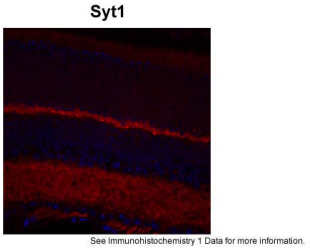
Name	Syt1 {ECO:0000312|MGI:MGI:99667}
Function	Calcium sensor that participates in triggering neurotransmitter release at the synapse (PubMed:11242035). May have a regulatory role in the membrane interactions during trafficking of synaptic vesicles at the active zone of the synapse (PubMed:7961887). It binds acidic phospholipids with a specificity that requires the presence of both an acidic head group and a diacyl backbone. A Ca(2+)- dependent interaction between synaptotagmin and putative receptors for activated protein kinase C has also been reported. It can bind to at least three additional proteins in a Ca(2+)-independent manner; these are neurexins, syntaxin and AP2. Plays a role in dendrite formation by melanocytes (By similarity).

Cellular Location	Cytoplasmic vesicle, secretory vesicle membrane {ECO:0000250|UniProtKB:P21707}; Single-pass membrane protein. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane; Single-pass membrane protein. Cytoplasmic vesicle, secretory vesicle, chromaffin granule membrane {ECO:0000250|UniProtKB:P21707}; Single-pass membrane protein {ECO:0000250|UniProtKB:P21707}. Cytoplasm {ECO:0000250|UniProtKB:P21707}
Tissue Location	Expressed in the brain and adrenal medulla (at protein level).

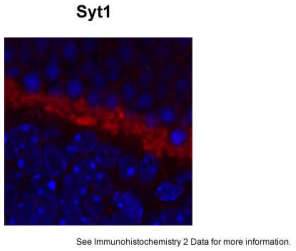
References

Fukuda M.,et al.J. Biol. Chem. 269:29206-29211(1994).
Carninci P.,et al.Science 309:1559-1563(2005).
Lubec G.,et al.Submitted (JAN-2009) to UniProtKB.
Lazzell D.R.,et al.J. Biol. Chem. 279:52124-52131(2004).
Ballif B.A.,et al.J. Proteome Res. 7:311-318(2008).

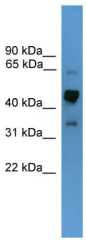
Images



Sample Type: complete mouse retina sections Red:
Primary Blue: DAPI Primary Dilution: 1:200
Secondary Antibody: Goat anti-Rabbit AF568 IgG(H+L)
Secondary Dilution: 1:200 Image
Submitted by: David Zenisek Yale University



Sample Type: outer mouse plexiform layer
Red: Primary Blue: DAPI Primary Dilution: 1:200
Secondary Antibody: Goat anti-Rabbit AF568 IgG(H+L)
Secondary Dilution: 1:200 Image
Submitted by: David Zenisek Yale University



Syt1 antibody - middle region (AI14398) validated by WB using Mouse Spleen lysate at 1.0µg/ml.