10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SYNJ1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21838b

Product Information

Application	WB, E
Primary Accession	O43426
Reactivity	Human, Rat, Mouse
Predicted	Canine, Rabbit
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB53251
Calculated MW	173103

Additional Information

Gene ID	8867
Other Names	Synaptojanin-1, Synaptic inositol 1, 5-trisphosphate 5-phosphatase 1, SYNJ1, KIAA0910
Target/Specificity	This SYNJ1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1148-1182 amino acids from the C-terminal region of human SYNJ1.
Dilution	WB~~1:1000-1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SYNJ1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SYNJ1 (HGNC:11503)
Synonyms	INPP5G, KIAA0910
Function	Phosphatase that hydrolyzes phosphate groups from the inositol ring of phosphoinositides and inositol phosphates, in a domain-specific manner

(PubMed:10224048, PubMed:18093523, PubMed:23804563, PubMed:27435091, PubMed:33349335, PubMed:40969890). The 5-PPase domain catalyzes removal of the 5-phosphate from substrates such as phosphatidylinositol-4,5-bisphosphate (PtdIns(4,5)P2), phosphatidylinositol-3,4,5-trisphosphate (PtdIns(3,4,5)P3), inositol-1,4,5-trisphosphate (Ins(1,4,5)P3) and inositol-1,3,4,5- tetrakisphosphate (Ins(1,3,4,5)P4) (PubMed:18093523, PubMed:23804563, PubMed:27435091, PubMed:33349335, PubMed:40969890). The SAC domain hydrolyzes phosphates at the 3- and 4-positions of the inositol ring, targeting phosphatidylinositol-3-phosphate (PI(3)P), phosphatidylinositol-4-phosphate (PI(4)P), and phosphatidylinositol- 3,5-bisphosphate (PI(3,5)P2) (PubMed:10224048, PubMed:18093523, PubMed:23804563, PubMed:27435091). Plays a role in the phosphatidylinositol metabolic process during an unconventional endocytic mechanism, the ultrafast endocytosis where it participates in the rapide neck formation of the newly generated synaptic vesicle through its phosphoinositide 5-phosphatase activity (By similarity). Also, participates in the clathrin uncoating of synaptc vesicle formed via budding from synaptic endosomes after ultrafast endocytosis through combined activity of its phosphatase domains (By similarity). Additionally, regulates actin filament rearrangement by hydrolyzing PIP2 bound to actin regulatory proteins (By similarity).

Cellular Location

Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:O18964}. Presynapse. Membrane {ECO:0000250|UniProtKB:Q62910} Note=Concentrates at clathrin-coated endocytic intermediates in nerve terminals. Also recruited to clathrin- and dynamin-coated intermediates. {ECO:0000250|UniProtKB:Q62910}

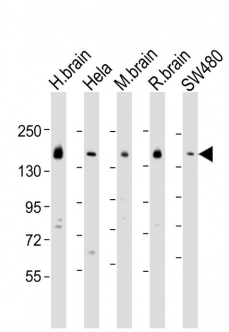
Background

Inositol 5-phosphatase which has a role in clathrin- mediated endocytosis.

References

Haffner C.,et al.FEBS Lett. 419:175-180(1997).
Nagase T.,et al.DNA Res. 5:355-364(1998).
Nakajima D.,et al.DNA Res. 9:99-106(2002).
Hattori M.,et al.Nature 405:311-319(2000).
Cestra G.,et al.J. Biol. Chem. 274:32001-32007(1999).

Images



All lanes : Anti-SYNJ1 Antibody (C-term) at 1:1000-1:2000 dilution Lane 1: human brain lysate Lane 2: Hela whole cell lysate Lane 3: mouse brain lysate Lane 4: rat brain lysate Lane 5: SW480 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 173 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.