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

SYNJ1 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI11756

Product Information

Application	WB
Primary Accession	O43426
Other Accession	NM_203446, NP_982271
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine
Predicted	Human, Rat, Rabbit, Pig, Chicken, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	173103

Additional Information

Gene ID	8867
Alias Symbol	INPP5G
Other Names	Synaptojanin-1, 3.1.3.36, Synaptic inositol 1, 4, 5-trisphosphate 5-phosphatase 1, SYNJ1, KIAA0910
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-SYNJ1 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	SYNJ1 antibody - N-terminal region 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).

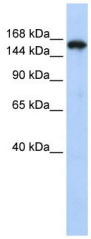
Cellular Location

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}

References

Thole,J.M., (2008) Plant Cell 20 (2), 381-395 Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.

Images



WB Suggested Anti-SYNJ1 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:62500
Positive Control: HepG2 cell lysate

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