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# SYNJ1 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI11863

## Product Information

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|---|---|
| **Application** | WB |
| **Primary Accession** | O43426 |
| **Other Accession** | NM_003895, NP_003886 |
| **Reactivity** | Human, Mouse, Rat, Rabbit, Pig, Dog, Horse |
| **Predicted** | Human, Mouse, Rat, Rabbit, Pig, Dog, Horse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 173103 |

## Additional Information

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|---|---|
| **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 - middle region is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **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: 1:312500
Positive Control: Human Stomach

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