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Intersectin 1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56972

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q15811
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	195422

Additional Information

Gene ID	6453
Other Names	Intersectin-1, SH3 domain-containing protein 1A, SH3P17, ITSN1
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	ITSN1 (HGNC:6183)
Function	Adapter protein that provides a link between the endocytic membrane traffic and the actin assembly machinery (PubMed:11584276, PubMed:29887380). Acts as a guanine nucleotide exchange factor (GEF) for CDC42, and thereby stimulates actin nucleation mediated by WASL and the ARP2/3 complex (PubMed:11584276). Plays a role in the assembly and maturation of clathrin-coated vesicles (By similarity). Recruits FCHSD2 to clathrin-coated pits (PubMed:29887380). Involved in endocytosis of activated EGFR, and probably also other growth factor receptors (By similarity). Involved in endocytosis of integrin beta-1 (ITGB1) and transferrin receptor (TFR); internalization of ITGB1 as DAB2-dependent cargo but not TFR may involve association with DAB2 (PubMed:22648170). Promotes ubiquitination and subsequent degradation of EGFR, and thereby contributes to the down-regulation of EGFR-dependent signaling pathways. In chromaffin cells, required for normal exocytosis of catecholamines. Required for rapid replenishment of release-ready synaptic vesicles at presynaptic active zones (By similarity). Inhibits ARHGAP31 activity toward RAC1 (PubMed:11744688).
Cellular Location	Endomembrane system. Synapse, synaptosome

	{ECO:0000250|UniProtKB:Q9WVE9}. Cell projection, lamellipodium. Cell membrane. Membrane, clathrin-coated pit. Recycling endosome. Endosome {ECO:0000250|UniProtKB:Q9Z0R4} Cytoplasmic vesicle {ECO:0000250|UniProtKB:Q9Z0R4}. Note=Colocalizes with SGIP1 at the plasma membrane in structures corresponding most probably to clathrin-coated pits (PubMed:20946875). Colocalizes with RAB13 on cytoplasmic vesicles that are most likely recycling endosomes (PubMed:29030480). [Isoform 5]: Endomembrane system
Tissue Location	Isoform 1 is expressed almost exclusively in the brain. Isoform 2 is detected in brain, spleen, lung, liver, heart, skeletal muscle and kidney. Isoform 5 is primarily expressed in brain, spleen, lung and kidney (at protein level) (PubMed:21712076). Isoform 1 and isoform 2 are detected in brain (PubMed:10482960). Isoform 2 is ubiquitous in adult and fetal tissues with high expression in skeletal muscle, heart, spleen, ovary, testis and all fetal tissues tested and low expression in thymus, blood, lung, liver and pancreas. Isoform 1 is expressed almost exclusively in the brain, in all brain regions. Not expressed in the spinal cord (PubMed:11690630, PubMed:21712076, PubMed:9799604).

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