



Intersectin 1 Mouse mAb

Catalog No	YP-mAb-19090
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	ITSN1 ITSN SH3D1A
Immunogen	Synthesized peptide derived from human Intersectin 1
Specificity	This antibody detects endogenous levels of Intersectin 1 at Human, Mouse,Rat
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal,Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ITSN1;SH3 domain-containing protein 1A;ITSN 1;ITSN;Intersectin-1;ITSN1 ITSN SH3D1A;Intersectin-1 (SH3 domain-containing protein 1A) (SH3P17)
Observed Band	150 kDa
Calculated Molecular Weight	1721 aa, 195 kDa
Cell Pathway	Endomembrane system . Cell junction, synapse, synaptosome . Cell projection, lamellipodium . Cell membrane . Membrane, clathrin-coated pit . Recycling endosome . Endosome . Cytoplasmic vesicle . 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 2]: Cytoplasm . Endomembrane system . Nucleus envelope . Shuttles between the cytoplasm and nucleus in an XPO1/CRM1-dependent manner. .; [Isoform 5]: Endomembrane system .
Tissue Specificity	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:9799604, PubMed:21712076, PubMed:11690630).

Function

Adapter protein that provides a link between the endocytic membrane traffic and the actin assembly machinery . Acts as guanine nucleotide exchange factor (GEF) for CDC42, and thereby stimulates actin nucleation mediated by WASL and the ARP2/3 complex . Plays a role in the assembly and maturation of clathrin-coated vesicles (By similarity). Recruits FCHSD2 to clathrin-coated pits . 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 . 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 . ; [Isoform 1]: Plays a role in synaptic vesicle endocytosis in brain neurons.

Background

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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