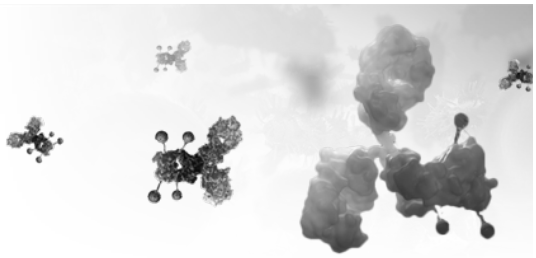

Rat Anti-SNX9 monoclonal antibody, clone 7D7 (CABT-RM180)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Detects human Sorting nexin 9 (SNX9). It targets an epitope with in the SH3 domain.
Target	SNX9
Immunogen	GST-tagged full-length recombinant human Sorting Nexin-9 protein.
Isotype	IgG1, κ
Source/Host	Rat
Species Reactivity	Human
Clone	7D7
Purification	Protein G purified
Conjugate	unconjugated
Applications	WB
Molecular Weight	~74 kDa observed; 66.59 kDa calculated. Uncharacterized bands may be observed in some lysate(s).
Format	Liquid
Size	100 µl
Buffer	0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl
Preservative	0.05% sodium azide

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Storage	Stable for 1 year at 2-8°C from date of receipt.

BACKGROUND

Introduction	Sorting nexin-9 is encoded by the SNX9 gene in human. SNX9 is widely expressed, with highest levels reported in heart and placenta, and lowest levels in thymus and peripheral blood leukocytes. SNX9 is localized at sites of endocytosis at the cell membrane and is detected on newly formed macropinosomes. It is transiently recruited to clathrin-coated pits at a late stage of clathrin-coated vesicle formation. SNX9 can exist as a homo dimer or homo oligomer and can also heterodimerize with SNX18. It displays four phosphatidylinositol 4,5-bisphosphate binding sites. It has a SH3 domain (aa 1-63), a SNX-type Phox homology (PX) domain (aa 250-361), and a BAR domain (aa 292-595). The PX domain mediates its interaction with membranes enriched in phosphatidylinositol phosphate. SNX9 can stimulate the GTPase activity of dynamin and both its SH3 domain and more C-terminal domains are required to efficiently stimulate this GTPase activity. Although it has high affinity for phosphatidylinositol 4,5-bisphosphate, but can also bind to membranes enriched in other phosphatidylinositol phosphates. SNX9 can be phosphorylated on tyrosine residues by TNK2 and phosphorylation promotes its activity in the degradation of EGFR. SNX9 is shown to be involved in endocytosis and intracellular vesicle trafficking, both during interphase and at the end of mitosis. It is required for efficient progress through mitosis and cytokinesis and also for normal formation of the cleavage furrow at the end of mitosis.
Keywords	SNX9; sorting nexin 9; SDP1; WISP; SH3PX1; SH3PXD3A; sorting nexin-9; SH3 and PX domain-containing protein 1; SH3 and PX domain-containing protein 3A; Wiskott-Aldrich syndrome protein (WASP) interactor protein

GENE INFORMATION

Entrez Gene ID	51429
UniProt ID	Q9Y5X1

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