

# Rabbit Anti-SH3PX1 antibody

## SL12407R

- · · · · ·	lavvanyv
Product Name:	SH3PX1
Chinese Name:	分选连接蛋白9抗体
Alias:	MST 155; MST155; MSTP 155; MSTP155; OTTHUMP00000040083; Protein SDP 1; Protein SDP1; SDP 1; SDP1; SH3 and PX domain containing protein 3A; SH3 and PX domain containing protein SH3PX1; SH3 and PX domain-containing protein 1; SH3 and PX domain-containing protein 3A; SH3PX1; SH3PXD3A; SNX 9; SNX9; SNX9_HUMAN; Sorting nexin 9; Sorting nexin-9; WASP interactor protein; Wiskott Aldrich syndrome protein (WASP) interactor protein; Wiskott Aldrich syndrome protein interactor protein; WISP.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	67kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SNX5:501-595/595
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	PubMed
Product Detail:	Sorting nexin (SNX) proteins are members of a large family of hydrophilic PX (phospholipid-binding motif) domain-containing proteins that interact with a variety of

receptor types. SNXs are widely expressed, although the tissue distribution of each SNX mRNA varies. The ability of SNXs to bind specific phospholipids, as well as their tendency to form protein-protein complexes, suggests a role for these proteins in cellular membrane trafficking and protein sorting. SNXs may also function specifically in pro-degradative sorting, internalization, endosomal recycling or simply in endosomal sorting. SNXs partially associate with cellular membranes, despite their hydrophilic nature. SNX9 resides in the cytosol where it influences the processing and trafficking of insulin receptors. The enzyme aldolase binds to and inactivates SNX9. Phosphorylation of SNX9 releases aldolase and frees SNX9 to recruit and activate Dynamin II, a neuronal phosphoprotein and a GTPase enzyme which mediates late stages of endocytosis in both neural and non-neural cells.

#### Function:

May be involved in several stages of intracellular trafficking. Plays a role in endocytosis via clathrin-coated pits, but also clathrin-independent, actin-dependent fluid-phase endocytosis. Plays a role in macropinocytosis. Promotes internalization of TNFR. Promotes degradation of EGFR after EGF signaling. Stimulates the GTPase activity of DNM1. Promotes DNM1 oligomerization. Promotes activation of the Arp2/3 complex by WASL, and thereby plays a role in the reorganization of the F-actin cytoskeleton. Binds to membranes enriched in phosphatidylinositol 4,5-bisphosphate and promotes membrane tubulation. Has lower affinity for membranes enriched in phosphatidylinositol 3-phosphate.

#### **Subcellular Location:**

Cytoplasmic vesicle membrane. Cell membrane. Cytoplasmic vesicle > clathrin-coated vesicle. Golgi apparatus > trans-Golgi network. Cell projection > ruffle. Cytoplasm. Localized at sites of endocytosis at the cell membrane. Detected on newly formed macropinosomes. Transiently recruited to clathrin-coated pits at a late stage of clathrin-coated vesicle formation. Colocalizes with the actin cytoskeleton at the cell membrane.

## Post-translational modifications:

Ubiquitinated by ITCH.

Phosphorylated on tyrosine residues by TNK2. Phosphorylation promotes its activity in the degradation of EGFR.

## Similarity:

Belongs to the sorting nexin family.

Contains 1 BAR domain.

Contains 1 PX (phox homology) domain.

Contains 1 SH3 domain.

#### **SWISS:**

Q9Y5X1

### Gene ID:

51429

## **Database links:**

Entrez Gene: 51429 Human

Omim: 605952 Human

SwissProt: Q9Y5X1 Human

Unigene: 191213 Human

## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.