

## Rabbit Anti-Epsin 1 antibody

### SL13101R

Product Name:	Epsin 1
Chinese Name:	内吞作用辅助蛋白EPN1抗体
Alias:	EH domain binding mitotic phosphoprotein; EPN1; EPN 1; EPN-1; EPS 15 interacting protein 1; EPS-15-interacting protein 1; Epsin 1; EPN1 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Horse, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100- 500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	60kDa
<b>Cellular localization:</b>	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Epsin 1/EPN1:101-200/576
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 $\overline{R}$ 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 $\overline{R}$ . 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 $\overline{R}$ .
PubMed:	PubMed
Product Detail:	Epsin 1 is an endocytic accessory protein, with significant similarity to the Xenopus mitotic phosphoprotein MP90. Epsin 1 interacts with Eps15 (the ?subunit of the Clathrin adaptor AP2), Clathrin and other accessory proteins. The mitotic phosphorylation of these proteins may be one of the mechanisms by which the invagination of Clathrin-coated pits is blocked in mitosis. Both Epsin and Eps15, like other cytosolic components

of the synaptic vesicle endo-cytic machinery, undergo constitutive phosphorylation and depolarization-dependent dephosphorylation in nerve terminals. Epsin 1 also contributes to the mechanism of Clathrin-vesicle-dependent endocytosis. The human Epsin 1 protein contains an Epsin N-terminal homology (ENTH) region and a single Clathrin-binding (LVDLD) motif. Epsin 1 localizes to the leading edge of a vesicular coated pit where the membrane is being actively bent.

#### Function:

Epsin 1 is a cytosolic adaptor protein and interacting partner for the EH domain containing region of Eps15. It is involved in the regulation of clathrin mediated endocytosis via its direct interactions with clathrin, the clathrin adaptor AP-2, and Eps15. Epsin 1 is a cargo specific adaptor for influenza virus entry through the clathrin mediated pathway. In addition to being a clathrin interacting protiein, Epsin 1 is also an ubiquitin, and phospholipid interacting protein. It also may function in a signaling pathway connecting the endocytic machinery to the regulation of nuclear function.

#### Subunit:

Monomer. Binds clathrin, ZBTB16/ZNF145 and ITSN1. Binds ubiquitinated proteins (By similarity). Binds REPS2, EPS15, AP2A1 and AP2A2. Interacts with RALBP1 in a complex also containing NUMB and TFAP2A during interphase and mitosis. Interacts with AP2B1. [SUBCELLULAR LOCATION]

#### Subcellular Location:

Cytoplasm (By similarity). Cell membrane; Peripheral membrane protein (By similarity). Nucleus (By similarity). Membrane, clathrin-coated pit (By similarity). Note=Associated with the cytoplasmic membrane at sites where clathrin-coated pits are forming. Colocalizes with clathrin and AP-2 in a punctate pattern on the plasma membrane. Detected in presynaptic nerve terminals and in Golgi stacks. May shuttle to the nucleus when associated with ZBTB16/ZNF145 (By similarity).

#### **Post-translational modifications:**

Phosphorylated on serine and/or threonine residues in mitotic cells. Phosphorylation reduces interaction with REPS2, AP-2 and the membrane fraction. Depolarization of synaptosomes results in dephosphorylation. Ubiquitinated (By similarity).

#### Similarity:

Belongs to the epsin family. Contains 1 ENTH (epsin N-terminal homology) domain. Contains 3 UIM (ubiquitin-interacting motif) repeats.

# **SWISS:** 09Y6I3

**Gene ID:** 29924



Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block
endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer
(normal goat serum, C-0005) at 37°C for 20 min;
Incubation: Anti-Epsin 1 Polyclonal Antibody, Unconjugated(SL13101R) 1:200,
overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and
DAB(C-0010) staining

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