

SL13040R

Product Name:	phospho-Dynamin 1 (Ser778)
Chinese Name:	磷酸化酶动力蛋白1抗体
Alias:	Dynamin 1 (phospho S778); Dynamin 1 (phospho Ser778); p-Dynamin 1 (S778); p- Dynamin 1 (Ser778); B dynamin; D100; DNM 1; DNM; DNM1; DYN1_HUMAN; Dynamin; Dynamin-1; Dynamin1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, 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:	97kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human Dynamin 1 around the phosphorylation site of Ser778:TS(p-S)PT
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:	Dynamin I is a GTPase enzyme required for the retrieval of synaptic vesicles after
	exocytosis and functions in endocytosis by stimulating assembly of invaginating
	synaptic vesicles (1). Dynamin I is phosphorylated in nerve terminals exclusively in the



cytosolic compartment and in vitro by protein kinase C (PKC) (2–5). The phosphorylation site in PKC-phosphorylated Dynamin I is a single site at Serine 795, which is located near a binding site for the SH3 domain of p85, the regulatory subunit of phosphatidylinositol 3-kinase (2–5). Dephosphorylation is required for synaptic vesicle retrieval, suggesting that phosphorylation affects the subcellular localization of Dynamin I (5). Mouse, rat and human Dynamin I are phosphorylated on serine residues, including Ser 778, by Cdk5, regulating PACSIN1 recruitment and enabling synaptic vesicle endocytosis.

Function:

Microtubule-associated force-producing protein involved in producing microtubule bundles and able to bind and hydrolyze GTP. Most probably involved in vesicular trafficking processes. Involved in receptor-mediated endocytosis.

Subunit:

Interacts with CAV1 and SH3GLB1. Binds SH3GL1, SH3GL2 and SH3GL3 (By similarity). Interacts with PHOCN. Interacts with PACSIN1, PACSIN2 and PACSIN3 (By similarity). Interacts with SNX9. Interacts with MYO1E (via SH3 domain).

Subcellular Location:

Cytoplasm. Cytoplasm, cytoskeleton. Note=Microtubule-associated.

Similarity:

Belongs to the dynamin family. Contains 1 GED domain. Contains 1 PH domain.

SWISS: Q05193

Gene ID: 1759

Database links: UniProtKB/Swiss-Prot: Q05193.2

Important Note:

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