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PRODUCT DATASHEET

Anti-Dynamin (Ser778) Antibody

phosphosolutions ANTIBODIES THAT WORK Pooled Serum

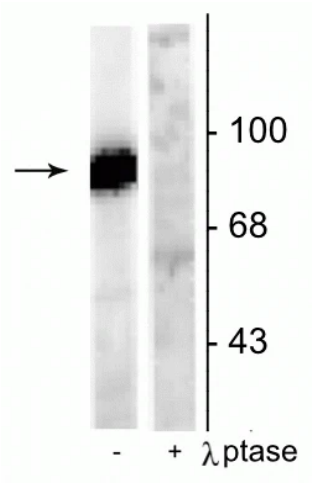
Product Details

Available Variants	100 µL (SKU:p1050-778) 25 µL (SKU:p1050-778t)
Conjugate	Unconjugated
Isotype	IgG
Gene Name	DNM1
Host Species	Sheep
Format	Antigen Affinity Purified from Pooled Serum
Physical State	Liquid
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol.
Production Notes	Prepared from pooled sheep serum by affinity purification via sequential chromatography on phospho and non-phosphopeptide affinity columns.
Applications	ELISA, WB
Dilution Ranges	WB: 1:1000 WB Brain: 1:1000
Species Reactivity	Mouse, Rat
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser778 of rat dynamin, conjugated to keyhole limpet hemocyanin (KLH).
Specificity	Specific for endogenous levels of the ~95 kDa dynamin protein phosphorylated at Ser778. Labels the purified protein phosphorylated in vitro by cdk5 but not by PKC. Does not cross react with other purified substrates of cdk5 (e.g. amphiphysin and synapsin). Immunolabeling is completely eliminated by treatment with λ-phosphatase.
Molecular Weight	95 kDa
Quality Control	Western blots performed on each lot.

Storage	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Antibody Registry ID	AB_2492083
UniProt ID	P21575 UniProt Summary: Catalyzes the hydrolysis of GTP and utilizes this energy to mediate vesicle scission and participates in many forms of endocytosis, such as clathrin-mediated endocytosis or synaptic vesicle endocytosis as well as rapid endocytosis (RE) (PubMed:15703209, PubMed:20428113, PubMed:29668686, PubMed:8101525, PubMed:8910402, PubMed:9362482). Associates to the membrane, through lipid binding, and self-assembles into rings and stacks of interconnected rings through oligomerization to form a helical polymer around the vesicle membrane leading to constriction of invaginated coated pits around their necks (PubMed:30069048, PubMed:7877694, PubMed:9922133). Self-assembly of the helical polymer induces membrane tubules narrowing until the polymer reaches a length sufficient to trigger GTP hydrolysis (PubMed:19084269). Depending on the curvature imposed on the tubules, membrane detachment from the helical polymer upon GTP hydrolysis can cause spontaneous hemifission followed by complete fission (PubMed:19084269). May play a role in regulating early stages of clathrin-mediated endocytosis in non-neuronal cells through its activation by dephosphorylation via the signaling downstream of EGFR (PubMed:29668686). Controls vesicle size at a step before fission, during formation of membrane pits, at hippocampal synapses (By similarity). Controls plastic adaptation of the synaptic vesicle recycling machinery to high levels of activity (By similarity). Mediates rapid endocytosis (RE), a Ca(2+)-dependent and clathrin- and K(+)-independent process in chromaffin cells (By similarity). Microtubule-associated force-producing protein involved in producing microtubule bundles and able to bind and hydrolyze GTP (By similarity). Through its interaction with DNAJC6, acts during the early steps of clathrin-coated vesicle (CCV) formation (PubMed:12791276). {ECO:0000250|UniProtKB:P39053, ECO:0000250|UniProtKB:Q08DF4, ECO:0000269|PubMed:12791276, ECO:0000269|PubMed:15703209, ECO:0000269|PubMed:19084269, ECO:0000269|PubMed:20428113, ECO:0000269|PubMed:29668686, ECO:0000269|PubMed:30069048, ECO:0000269|PubMed:7877694, ECO:0000269|PubMed:8101525, ECO:0000269|PubMed:8910402, ECO:0000269|PubMed:9362482, ECO:0000269|PubMed:9922133}.
Shipping	Blue Ice
Expiration	After date of receipt, stable for at least 1 year at -20°C.
Usage Statement	For research use only. Not intended for therapeutic or diagnostic use. Use of all products is subject to our terms and conditions, which can be viewed on our website.

Expected Reactivity	Bovine, Canine, Chicken, Human
Post Translational Modification Type	Phosphorylated
Post Translational Modification Residue	Ser778
NCBI Gene ID	140694

Product Images



Western blot of rat hippocampal lysate stimulated with forskolin showing specific immunolabeling of the ~95 kDa dynamin phosphorylated at Ser778 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is completely eliminated by blot treatment with lambda phosphatase (λ-Ptase, 1200 units for 30 min).