

Sheep anti-Rat Dynamin (Ser778) Polyclonal Antibody | anti-DNM1 antibody

Anti-Phospho-Ser778 Dynamin

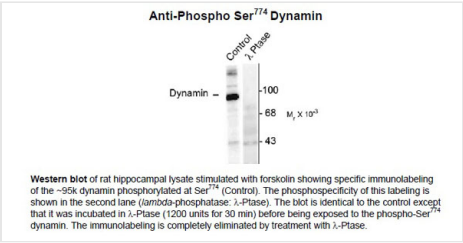
CATALOG # AAA72786	HOST Sheep	REACTIVITY Rat	APPLICATIONS Western Blot
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PRODUCT SYNONYMS

Dynamin (Ser778); Polyclonal Antibody; Anti-Phospho-Ser778 Dynamin; anti-DNM1 antibody

PRODUCT SPECIFICATIONS

Host	Sheep
Reactivity	Rat
Clonality	Polyclonal
Specificity	Specific for the ~95k 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 blocked by γ -phosphatase treatment.
Purity/Purification	Affinity Purified (Prepared from sheep serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.)
Form/Format	100 ul in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 ug BSA per ml and 50% glycerol. Adequate amount of material to conduct 10-mini Western Blots.
Sequence Length	851
Applicable Applications for anti-DNM1 antibody	WB (Western Blot)
Antigen	Phosphopeptide corresponding to amino acid residues surrounding the phospho-Ser778 of rat dynamin.
Immunogen Information	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser778 conjugated to KLH
Immunogen Species	Rat
Reactivity Assumed Based on 100% Sequence Homology	Bovine, canine, chicken, human and mouse
Species Reactivity Note	The antibody has been directly tested for reactivity in Western blots with rat tissue. It is anticipated that the antibody will react with bovine, canine, chicken, human and mouse based on the fact that these species have 100% homology with the amino acid sequence used as antigen.
Biological Significance	Dynamin is a member of a group of nerve terminal proteins called dephosphins that regulate synaptic vesicle endocytosis (Cousin et al., 2001; Graham et al., 2002; Tsuboi et al., 2002). Cyclin dependent protein kinase 5 phosphorylates dynamin at Ser774 and Ser778 that are the phosphorylation sites on dynamin phosphorylated in vivo (Tan et al., 2003). Phosphorylation of these sites on dynamin is thought to play a key role in synaptic vesicle trafficking.
Preparation and Storage	For long term storage -20 degree C is recommended. Stable at -20 degree C for at least 1 year.



Application Data

ADDITIONAL INFORMATION

Related Product Information for anti-DNM1 antibody	Affinity purified sheep polyclonal antibody
References	• Cousin MA, Tan TC, Robinson PJ (2001) Protein phosphorylation is required for endocytosis in nerve terminals: potential role for the dephosphins dynamin I and synaptojanin, but not AP180 or amphiphysin. J Neurochem 76:105-116. • Graham ME, O'Callaghan DW, McMahon HT, Burgoyne RD (2002) Dynamin-dependent and dynamin-independent processes contribute to the regulation of single vesicle release kinetics and quantal size. Proc Natl Acad Sci USA 99:7124-7129. • Tan TC, Valova VA, Malladi CS, Graham ME, Berven LA, Jupp OJ, Hansra G, McClure SJ, Sarcevic B, Boadle RA, Larsen MR, Cousin MA, Robinson PJ (2003) cdk5 is essential for synaptic vesicle endocytosis. Nat Cell Biol 5:701-710. • Tsuboi T, Terakawa S, Scalettar BA, Fantus C, Roder J, Jeromin A (2002) Sweeping model of dynamin activity - Visualization of coupling between exocytosis and endocytosis under an evanescent wave microscope with green fluorescent proteins. J Biol Chem 277:15957-15961. • Clayton EL, Sue N, Smillie KJ, O'Leary T, Bache N, Cheung G, Cole AR, Wyllie DJ, Sutherland C, Robinson PJ, Cousin MA. (2010) Dynamin I phosphorylation by GSK3 controls activity-dependent bulk endocytosis of synaptic vesicles. Nat Neurosci. 13(7):845-51.

NCBI AND UNIPROT INFORMATION

NCBI GI #	18093102
NCBI GeneID	140694
NCBI Accession #	NP_542420.1
NCBI GenBank Nucleotide #	NM_080689.4
UniProt Accession #	P21575
Molecular Weight	95
NCBI Official Full Name	dynamin-1
NCBI Official Synonym Full Names	dynamin 1
NCBI Official Symbol	Dnm1
NCBI Official Synonym Symbols	Dnm
NCBI Protein Information	dynamin-1; D100; B-dynamin; dynamin, brain
UniProt Protein Name	Dynamin-1
UniProt Gene Name	Dnm1
UniProt Synonym Gene Names	Dnm
UniProt Entry Name	DYN1_RAT

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/dynamin-ser778-antibody-western-blot-elisa/72786>