

## Datasheet for 612-601-D33

**Dynamin phospho S778 Antibody****Overview**

<b>Description:</b>	Anti-Dynamin pS778 (SHEEP) Antibody - 612-601-D33
<b>Item No.:</b>	612-601-D33
<b>Size:</b>	100 µL
<b>Applications:</b>	WB
<b>Reactivity:</b>	Rat
<b>Host Species:</b>	Sheep

**Product Details**

<b>Background:</b>	Dynamin Antibody detects Dynamin which is a member of a group of nerve terminal proteins called dephosphins that regulate synaptic vesicle endocytosis. Cyclin dependent protein kinase 5 phosphorylates dynamin at Ser774 and Ser778 that are the phosphorylation sites on dynamin phosphorylated in vivo. Phosphorylation of these sites on dynamin is thought to play a key role in synaptic vesicle trafficking. Anti-Dynamin pS778 Antibody is ideal for investigators involved in Cell Signaling, Cell Motility, Neuroscience and Cancer Research.
<b>Synonyms:</b>	sheep anti-Dynamin pS778 Antibody, Dynamin-1, B-dynamin, D100, Dnm1, Dnm
<b>Host Species:</b>	Sheep
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	IgG

**Target Details**

<b>Gene Name:</b>	Dnm1
<b>Reactivity:</b>	Rat
<b>PTM Specificity:</b>	Phosphorylation
<b>Immunogen Type:</b>	Conjugated Peptide
<b>Immunogen:</b>	Anti-Dynamin pS778 Antibody was produced in sheep by repeated immunizations with synthetic phospho-peptide corresponding to amino acid residues surrounding Ser778 conjugated to KLH.

**Purity/Specificity:** Anti-Dynamin pS778 antibody is directed against human Dynamin. Anti-Dynamin pS778 antibody was prepared from monospecific antiserum by immunoaffinity chromatography using phospho peptide coupled to agarose beads followed by solid phase adsorption(s) against non-phospho peptide and non-specific peptide to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-sheep Serum. This antibody is specific for phosphorylated Dynamin pS778 . Minimal reactivity occurs against non-phosphorylated Dynamin pS778 . Reactivity is completely blocked by treatment with lambda-phosphatase. Reactivity against Dynamin pS778 occurs from rat sources. However, reactivity is also expected against bovine, canine, chicken, human and mouse.

**Relevant Links:**

- [UniProtKB - P21575](#)
- [GeneID - 140694](#)
- [NCBI - AAA16746.1](#)

## Application Details

**Tested Applications:** WB

**Application Note:** Anti-Dynamin pS778 Antibody is tested for use in ELISA and Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 95 kDa in size corresponding to dynamin protein phosphorylated at Ser778 in the appropriate cell lysate or extract. Anti-Dynamin pS778 antibody labels the purified protein phosphorylated in vitro by cdk5 but not by PKC. Anti-Dynamin pS778 antibody does not cross react with other purified substrates of cdk5 (e.g. amphiphysin and synapsin).

**Assay Dilutions:** All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

**ELISA:** 1:10,000

**WB:** 1:1000

## Formulation

**Physical State:** Liquid

**Concentration:** Titrated value sufficient to run approximately 10 mini blots.

**Buffer:** 0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5

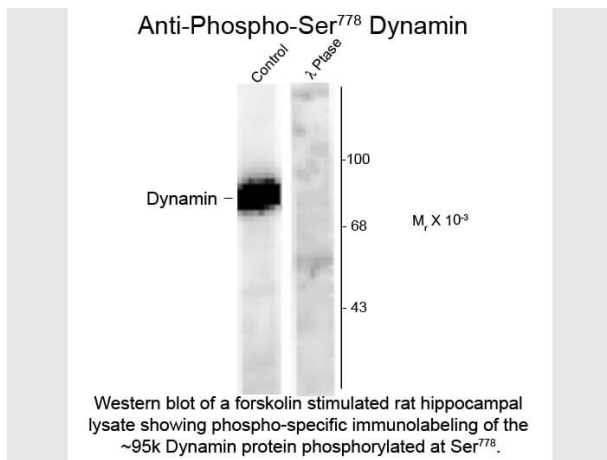
**Stabilizer:** 0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

## Shipping & Handling

**Shipping Condition:** Dry Ice

<b>Storage Condition:</b>	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
<b>Expiration:</b>	Expiration date is one (1) year from date of receipt.

## Images



### Western Blot

Western Blot of Anti-Dynamin pS778 (Sheep) Antibody .  
Lane 1: rat hippocampal lysate stimulated with forskolin.  
Lane 2: rat hippocampal lysate stimulated with forskolin incubated in  $\lambda$ -Ptase (1200 units for 30 min). Load: 10  $\mu$ g per lane. Primary antibody: Dynamin pS778 antibody at 1:400 for overnight at 4°C. Secondary antibody: IRDye800™ sheep secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~95kDa/~95kDa for dynamin phosphorylated at Ser778 . Other band(s): none.

## References

- Liu GT et al. Endosomal phosphatidylinositol 3-phosphate controls synaptic vesicle cycling and neurotransmission. *EMBO J.* (2022)

## Disclaimer

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