

DESCRIPTION

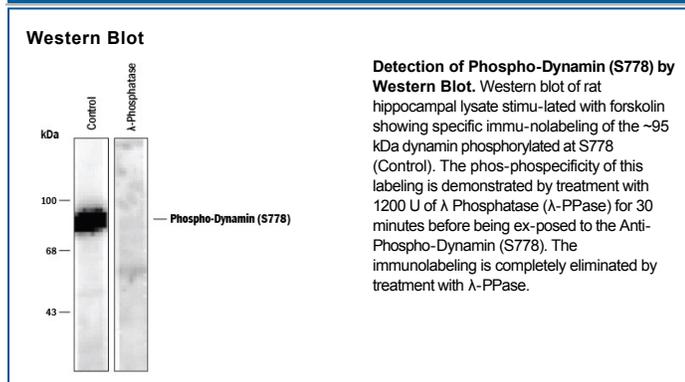
Species Reactivity	Human/Mouse/Rat/Bovine/Canine/Chicken
Specificity	Specific for the ~95 kDa Dynamin protein phosphorylated at S778 in Western blots. Labels the purified protein phosphorylated <i>in vitro</i> by Cdk5 but not by PKC. Does not cross react with other purified substrates of Cdk5 (e.g. Amphiphysin and Synapsin).
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Phosphopeptide corresponding to amino acid residues surrounding the phospho-S778 of Dynamin
Formulation	100 µL in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg/mL BSA and 50% glycerol. See Certificate of Analysis for details.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	µg/mL	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	For long-term storage, ≤ -20° C is recommended. Product is stable at ≤ -20° C for at least 1 year.

BACKGROUND

Rat dynamin (or Dynamin 1), also known as Dephosphin, is a 95-100 kDa GTPase that belongs to the "classic dynamin" group of the dynamin superfamily. It is 864 amino acids (aa) in length, and contains three N-terminal GTP-binding elements (aa 38-208), one pleckstrin-homology domain (aa 519-625), a GED (GTPase Effector Domain) (aa 645-745), and a C-terminal SH3-binding proline-rich region (aa 753-864). At least four alternate splice forms are known, one that shows a 47 aa substitution between aa 398-445, and three that generate unique C-termini over the last 20 amino acids. Dynamin is found constitutively phosphorylated and inactive in the cytoplasm just under synaptic membranes. Upon stimulation, calcineurin dephosphorylates, and nitric oxide nitrosylates, Dynamin. Dephosphorylated and nitrosylated Dynamin now interacts with the cell membrane, generating endocytic synaptic vesicles. The process terminates when Cdk5 rephosphorylates dynamin on S744 and S778.