

Phospho-Ser774 Dynamin Antibody

Affinity purified sheep polyclonal antibody Catalog # AN1007

Specification

Phospho-Ser774 Dynamin Antibody - Product Information

Application WB
Primary Accession P21575
Reactivity Rat

Predicted Bovine, Chicken, Human, Mouse, Monkey

Host Sheep Clonality polyclonal Calculated MW 95 KDa

Phospho-Ser774 Dynamin Antibody - Additional Information

Gene ID 140694
Gene Name DNM1

Other Names

Dynamin-1, B-dynamin, D100, Dynamin, brain, Dnm1, Dnm

Target/Specificity

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser774 conjugated to KLH.

Dilution

WB~~ 1:1000

Format

Prepared from sheep serum by affinity purification via sequential chromatography on phosphoand dephosphopeptide affinity columns.

Antibody Specificity

Specific for the \sim 95k dynamin protein phosphorylated at Ser774. Labelsthe purified protein phosphorylated in vitro by cdk5 but not by PKC. Does not cross react withother purified substrates of cdk5 (e.g. amphiphysin and synapsin). Immunolabeling is blockedby λ -phosphatase treatment.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Phospho-Ser774 Dynamin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

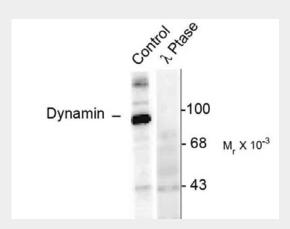


Phospho-Ser774 Dynamin Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Phospho-Ser774 Dynamin Antibody - Images



Western blot of rat hippocampal lysate stimulated with forskolin showing specific immunolabeling of the $\sim\!95k$ dynamin phosphorylated at Ser774 (Control). The phosphospecificity of this labeling is shown in the second lane (lambda-phosphatase: λ -Ptase). The blot is identical to the control except that it was incubated in λ -Ptase (1200 units for 30 min) before being exposed to the phospho-Ser774 dynamin. The immunolabeling is completely eliminated by treatment with λ -Ptase.

Phospho-Ser774 Dynamin Antibody - Background

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 Ser774 by GSK3 has recently been shown to control activity-dependent bulk endocytosis of synaptic vesicles (Clayton et al., 2010)

Phospho-Ser774 Dynamin Antibody - References

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