

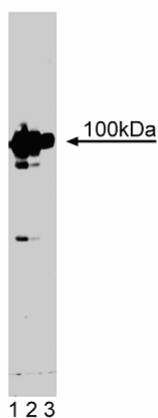
Technical Data Sheet

Purified Mouse Anti-Dynamin**Product Information**

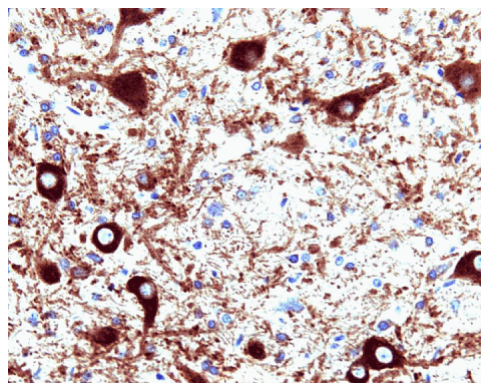
Material Number:	610245
Size:	50 µg
Concentration:	250 µg/ml
Clone:	41/Dynamin
Immunogen:	Rat Dynamin I aa. 698-851
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Rat Tested in Development: Human, Dog, Chicken, Mouse
Target MW:	100 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Dynamin is a nerve terminal phosphoprotein with intrinsic GTPase activity which plays an important role in endocytosis. This GTPase activity is stimulated in vitro by microtubules, SH3 domain-containing proteins, phospholipids, and Protein Kinase C (PKC)-mediated phosphorylation. There are at least two distinct dynamin genes in mammals, which show 79% identity, encoding proteins Dynamin I and Dynamin II. Dynamin I is expressed almost exclusively in the central nervous system while Dynamin II expression is ubiquitous. Depolarization stimulates synaptic vesicle recycling and Dynamin I is subsequently dephosphorylated. This rapid dephosphorylation is mediated by calcineurin which acts as a switch for depolarization-initiated synaptic vesicle endocytosis. The C-terminus of dynamin contains two clusters of proline-rich SH3 domain binding proline motifs which interact with known SH3 domain proteins during tyrosine kinase receptor activation. It is reported that clone 41 detects both dynamin I and dynamin II.



Western blot analysis of Dynamin on PC12 cell lysate.
Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of anti-Dynamin.



Dynamin (clone 41) staining on rat brain. Formalin fixed paraffin section without citrate buffer pretreatment. 40X.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20°C.

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Application Notes

Application

Western blot	Routinely Tested
Immunohistochemistry	Tested During Development
Immunofluorescence	Tested During Development
Immunoprecipitation	Not Recommended

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharming/en/protocols/Western_Blotting.shtml.

Suggested Companion Products

Catalog Number	Name	Size	Clone
611454	PC12 Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Hayes S, Chawla A, Corvera S. TGF beta receptor internalization into EEA1-enriched early endosomes: role in signaling to Smad2. *J Cell Biol.* 2002; 158(7):1239-1249.(Clone-specific: Immunofluorescence)
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