

Datasheet for ABIN967852  
**anti-Dynamin 1 antibody (AA 698-851)**

2 Images

5 Publications

[Go to Product page](#)

## Overview

Quantity:	50 µg
Target:	Dynamin 1 (DNM1)
Binding Specificity:	AA 698-851
Reactivity:	Human, Mouse, Rat, Dog, Chicken
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Dynamin 1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP)

## Product Details

Immunogen:	Rat Dynamin I aa. 698-851
Clone:	41-Dynamin
Isotype:	IgG1
Cross-Reactivity:	Human, Dog (Canine), Chicken, Mouse (Murine)
Characteristics:	<ol style="list-style-type: none"><li>1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.</li><li>2. Please refer to us for technical protocols.</li><li>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.</li><li>4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.</li></ol>

## Product Details

Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
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## Target Details

Target:	Dynamin 1 (DNM1)
Alternative Name:	Dynamin ( <a href="#">DNM1 Products</a> )
Background:	<p>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.</p>
Molecular Weight:	100 kDa
Pathways:	<a href="#">Toll-Like Receptors Cascades</a> , <a href="#">CXCR4-mediated Signaling Events</a> , <a href="#">Thromboxane A2 Receptor Signaling</a>

## Application Details

Comment:	Related Products: ABIN968539, ABIN967389
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide

## Handling

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Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
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Storage:	-20 °C
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Storage Comment:	Store undiluted at -20° C.
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## Publications

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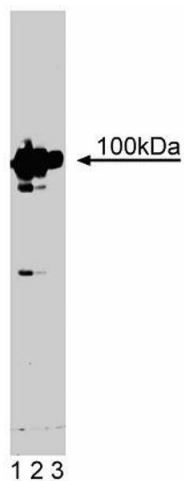
Product cited in: Hayes, Chawla, Corvera: "TGF beta receptor internalization into EEA1-enriched early endosomes: role in signaling to Smad2." in: **The Journal of cell biology**, Vol. 158, Issue 7, pp. 1239-49, (2002) ([PubMed](#)).

Kalthoff, Groos, Kohl, Mahrhold, Ungewickell: "Clint: a novel clathrin-binding ENTH-domain protein at the Golgi." in: **Molecular biology of the cell**, Vol. 13, Issue 11, pp. 4060-73, (2002) ([PubMed](#)).

Schmidlin, Dery, DeFea, Slice, Patierno, Sternini, Grady, Bunnett: "Dynamin and Rab5a-dependent trafficking and signaling of the neurokinin 1 receptor." in: **The Journal of biological chemistry**, Vol. 276, Issue 27, pp. 25427-37, (2001) ([PubMed](#)).

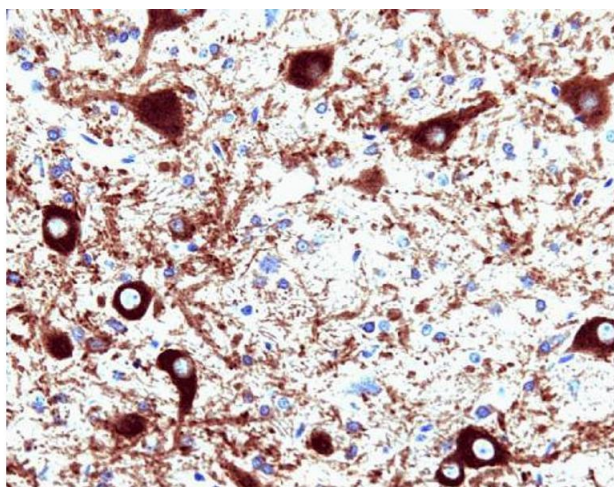
Ochoa, Slepnev, Neff, Ringstad, Takei, Daniell, Kim, Cao, McNiven, Baron, De Camilli: "A functional link between dynamin and the actin cytoskeleton at podosomes." in: **The Journal of cell biology**, Vol. 150, Issue 2, pp. 377-89, (2000) ([PubMed](#)).

Scaife, Gout, Waterfield, Margolis: "Growth factor-induced binding of dynamin to signal transduction proteins involves sorting to distinct and separate proline-rich dynamin sequences." in: **The EMBO journal**, Vol. 13, Issue 11, pp. 2574-82, (1994) ([PubMed](#)).



### Western Blotting

**Image 1.** 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.



### Immunohistochemistry (Paraffin-embedded Sections)

**Image 2.** Dynamin (clone 41) staining on rat brain. Formalin fixed paraffin section without citrate buffer pretreatment. 40X.