

Datasheet for ABIN967865
anti-DNM2 antibody (AA 274-555)[2 Images](#)[5 Publications](#)[Go to Product page](#)

Overview

Quantity:	50 µg
Target:	DNM2
Binding Specificity:	AA 274-555
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This DNM2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP)

Product Details

Immunogen:	Rat Dynamin II aa. 274-555
Clone:	27-Dynamin II
Isotype:	IgG2a
Cross-Reactivity:	Human, Mouse (Murine)
Characteristics:	<ol style="list-style-type: none">1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.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. Please refer to us for technical protocols.

Product Details

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

Target:	DNM2
Alternative Name:	Dynamin II (DNM2 Products)
Background:	<p>Dynamin is a membrane-associated GTPase that binds to GTP, microtubules, and phospholipids. Northern blot analysis has shown dynamin to be present in most tissues but at an amount about 20-fold lower than that in brain. There are at least two distinct dynamin genes in mammals. Transcripts of both dynamin genes are alternatively spliced at two or more sites. The first site is identical in both dynamins, whereas, the second site differs. The two gene products are known as Dynamin I and Dynamin II and show 79% identity. Dynamin I is expressed almost exclusively in the central nervous system while Dynamin II expression is ubiquitous. The two proteins are highly homologous in the N-terminal region, while the C-terminal domain shows significant divergence. The GTPase activity of Dynamin I is stimulated several fold by binding to microtubules, phospholipids, and membranous vesicles. Dynamin I is a good substrate of PKC in vitro as well as in vivo in resting nerve terminals. In vitro, phosphorylation occurs at the C-terminus of Dynamin I and this enhances the GTPase activity more than 10-fold. However, Dynamin II is not a substrate of PKC and its activity does not appear to be affected by phosphorylation. These data suggest that the function of the common N-terminal domain between Dynamin I and II may be differentially specified by distinct C-terminal domains.</p>
Molecular Weight:	100 kDa
Pathways:	Toll-Like Receptors Cascades

Application Details

Comment:	Related Products: ABIN967389, ABIN968535
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL

Handling

Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤ 0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store undiluted at -20°C.

Publications

Product cited in:

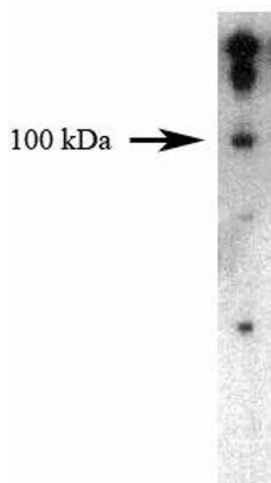
Kessels, Engqvist-Goldstein, Drubin: "Association of mouse actin-binding protein 1 (mAbp1/SH3P7), an Src kinase target, with dynamic regions of the cortical actin cytoskeleton in response to Rac1 activation." in: **Molecular biology of the cell**, Vol. 11, Issue 1, pp. 393-412, (2000) ([PubMed](#)).

Kranenburg, Verlaan, Moolenaar: "Dynamain is required for the activation of mitogen-activated protein (MAP) kinase by MAP kinase kinase." in: **The Journal of biological chemistry**, Vol. 274, Issue 50, pp. 35301-4, (2000) ([PubMed](#)).

McNiven, Kim, Krueger, Orth, Cao, Wong: "Regulated interactions between dynamain and the actin-binding protein cortactin modulate cell shape." in: **The Journal of cell biology**, Vol. 151, Issue 1, pp. 187-98, (2000) ([PubMed](#)).

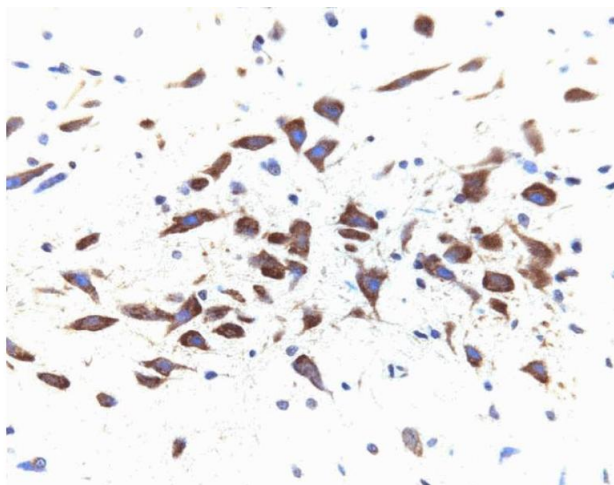
Cook, Urrutia, McNiven: "Identification of dynamain 2, an isoform ubiquitously expressed in rat tissues." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 91, Issue 2, pp. 644-8, (1994) ([PubMed](#)).

Sontag, Fykse, Ushkaryov, Liu, Robinson, Südhof: "Differential expression and regulation of multiple dynamains." in: **The Journal of biological chemistry**, Vol. 269, Issue 6, pp. 4547-54, (1994) ([PubMed](#)).



Western Blotting

Image 1. Western blot analysis of Dynamin II on a HeLa cell lysate (Human cervical epitheloid carcinoma, ATCC CCL-2) using 1 µg/mL of the Mouse Anti-Dynamin II antibody.



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Immunohistochemical staining for Dynamin II on a rat brain section, zinc-fixed paraffin-embedded (40X magnification).