



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Dynamin I (h): 293T Lysate: sc-117282

BACKGROUND

Members of the dynamin family, including Dynamin I and Dynamin II, are GTPase, microtubule-associated proteins which are involved in endocytosis, synaptic transmission and neurogenesis. Dynamin I is localized to the central nervous system, while Dynamin II exhibits ubiquitous distribution with highest expression found in testis. Both dynamin proteins contain SH3 and proline-rich domains that mediate interactions between the dynamins and effectors of their GTPase activity. The interactions with these effectors, which include microtubules, acidic phospholipids and SH3 domain-containing proteins, are required for rapid endocytosis. Dynamin I appears to be recruited to clathrin coated pits by SH3 domain interaction with amphiphysin, a protein highly expressed in brain.

REFERENCES

1. Sontag, J.M., et al. 1994. Differential expression and regulation of multiple dynamins. *J. Biol. Chem.* 269: 4547-4554.
2. Scaife, R., et al. 1994. Grow factor-induced binding of dynamin to signal transduction proteins involves sorting to distinct and separate proline-rich dynamin sequences. *EMBO J.* 13: 2574-2582.
3. Cook, T.A., et al. 1995. Identification of Dynamin 2, an isoform ubiquitously expressed in rat tissues. *Proc. Natl. Acad. Sci. USA* 91: 644-648.
4. Shpetner, H.S., et al. 1996. A binding site for SH3 domains targets dynamin to coated pits. *J. Biol. Chem.* 271: 13-16.
5. Okamoto, P.M., et al. 1997. Role of the basic, proline-rich region of dynamin in Src homology 3 domain binding and endocytosis. *J. Biol. Chem.* 272: 11629-11635.
6. Grabs, D., et al. 1997. The SH3 domain of amphiphysin binds the proline-rich domain of dynamin at a single site that defines a new SH3 binding consensus sequence. *J. Biol. Chem.* 272: 13419-13425.
7. Scaife, R.M., et al. 1997. The role of the PH domain and SH3 binding domains in dynamin function. *Cell. Signal.* 9: 395-401.
8. Wigge, P., et al. 1997. Inhibition of receptor-mediated endocytosis by the amphiphysin SH3 domain. *Curr. Biol.* 7: 554-560.

CHROMOSOMAL LOCATION

Genetic locus: DNM1 (human) mapping to 9q34.11.

PRODUCT

Dynamin I (h): 293T Lysate represents a lysate of human Dynamin I transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

Dynamin I (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Dynamin I antibodies. Recommended use: 10-20 µl per lane.

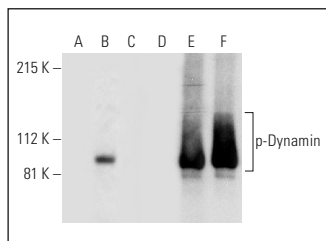
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Dynamin I (D5): sc-12724 is recommended as a positive control antibody for Western Blot analysis of enhanced human Dynamin I expression in Dynamin I transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Western blot analysis of Dynamin I phosphorylation in non-transfected: sc-117752 (A,D), untreated human Dynamin I transfected: sc-117282 (B,E) and lambda protein phosphatase (sc-200312A) treated human Dynamin I transfected: sc-117282 (C,F) 293T whole cell lysates. Antibodies tested include p-Dynamin I (E-9): sc-377563 (A,B,C) and Dynamin I (D5): sc-12724 (D,E,F).

RESEARCH USE

For research use only, not for use in diagnostic procedures.