

# epsin 1 (L-19): sc-5411

## BACKGROUND

Epsin 1 (EPN1) is an endocytic accessory protein that interacts with Eps15 (the  $\alpha$  subunit of the clathrin adaptor AP2), clathrin, and other accessory proteins, and contributes to the mechanism of clathrin-vesicle-dependent endocytosis. Human Eps1 protein contains an epsin N-terminal homology (ENTH) region and a single clathrin-binding (LVLDL) motif. EPN1 localizes to the leading edge of a vesicular coated pit where the membrane is being actively bent.

## REFERENCES

- Chen, H., et al. 1998. Epsin is an EH-domain-binding protein implicated in clathrin-mediated endocytosis. *Nature* 394: 793-797.
- Morinaka, K., et al. 1999. Epsin binds to the EH domain of POB1 and regulates receptor-mediated endocytosis. *Oncogene* 18: 5915-5922.
- Rosenthal, et al. 1999. The epsins define a family of proteins that interact with components of the Clathrin coat and contain a new protein module. *J. Biol. Chem.* 274: 33959-33965.
- Drake, M.T., et al. 2000. Epsin binds to Clathrin by associating directly with the Clathrin-terminal domain. Evidence for cooperative binding through two discrete sites. *J. Biol. Chem.* 275: 6479-6489.
- Oldham, C.E., et al. 2002. The ubiquitin-interacting motifs target the endocytic adaptor protein epsin for ubiquitination. *Curr. Biol.* 12: 1112-1116.
- Ford, M.G., et al. 2002. Curvature of Clathrin-coated pits driven by epsin. *Nature* 419: 361-366.
- Wendland, B. 2002. Epsins: adaptors in endocytosis? *Nat. Rev. Mol. Cell Biol.* 3: 971-977.
- Hussain, N.K., et al. 2003. A role for epsin N-terminal homology/AP180 N-terminal homology (ENTH/ANTH) domains in tubulin binding. *J. Biol. Chem.* 278: 28823-28830.
- Stahelin, R.V., et al. 2003. Contrasting membrane interaction mechanisms of AP180 N-terminal homology (ANTH) and epsin N-terminal homology (ENTH) domains. *J. Biol. Chem.* 278: 28993-28999.

## CHROMOSOMAL LOCATION

Genetic locus: EPN1 (human) mapping to 19q13.42; Epn1 (mouse) mapping to 7 A1.

## SOURCE

epsin 1 (L-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of epsin 1 of rat origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-5411 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

epsin 1 (L-19) is recommended for detection of epsin 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

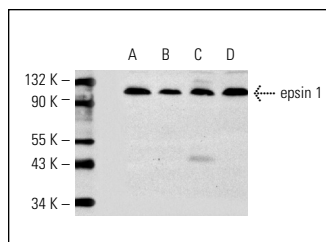
epsin 1 (L-19) is also recommended for detection of epsin 1 in additional species, including equine and canine.

Suitable for use as control antibody for epsin 1 siRNA (h): sc-35323, epsin 1 siRNA (m): sc-35324, epsin 1 shRNA Plasmid (h): sc-35323-SH, epsin 1 shRNA Plasmid (m): sc-35324-SH, epsin 1 shRNA (h) Lentiviral Particles: sc-35323-V and epsin 1 shRNA (m) Lentiviral Particles: sc-35324-V.

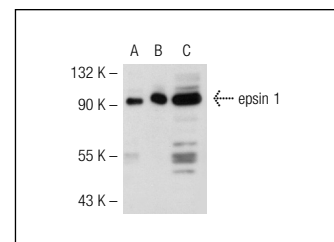
Molecular Weight of epsin 1: 94 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa whole cell lysate: sc-2200 or epsin 1 (m): 293T Lysate: sc-126801.

## DATA



epsin 1 (L-19): sc-5411. Western blot analysis of epsin 1 expression in HeLa (A), A-431 (B), K-562 (C) and Jurkat (D) whole cell lysates.



epsin 1 (L-19): sc-5411. Western blot analysis of epsin 1 expression in non-transfected 293T: sc-117752 (A), mouse epsin 1 transfected 293T: sc-126801 (B) and Jurkat (C) whole cell lysates.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **epsin 1 (C-11): sc-55556** or **epsin 1 (G-11): sc-55564**, our highly recommended monoclonal alternatives to epsin 1 (L-19).