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- Expressversand

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# POD-1 (m): 293T Lysate: sc-122671

## BACKGROUND

The basic helix-loop-helix (bHLH) class of transcription factors govern cell fate determination by controlling a variety of cellular differentiation processes. POD-1 (podocyte-expressed 1, also designated capsulin or epicardin) is a nuclear bHLH protein that is involved in the specification of select mesodermal cell populations associated with heart, cranial skeletal muscle, gut and urogenital system. POD-1 is selectively expressed in mesenchymal cells at sites of epithelial-mesenchymal interaction in the kidney, lung, intestine, pancreas and the epicardium, which gives rise to the coronary arteries. This epithelial-mesenchymal interaction is involved in the formation of numerous internal organs. POD-1 is also expressed in the mesothelium that gives rise to the spleen and in cells that give rise to smooth muscle. In addition to its role in kidney morphogenesis and spleen organogenesis, POD-1 may play a role in the development and sex determination of the mammalian gonad.

## REFERENCES

- Hidai, H., Bardales, R., Goodwin, R., Quertermous, T. and Quertermous, E.E. 1998. Cloning of capsulin, a basic helix-loop-helix factor expressed in progenitor cells of the pericardium and the coronary arteries. *Mech. Dev.* 73: 33-43.
- Quaggin, S.E., Vanden Heuvel, G.B. and Igarash, P. 1998. POD-1, a mesoderm-specific basic-helix-loop-helix protein expressed in mesenchymal and glomerular epithelial cells in the developing kidney. *Mech. Dev.* 71: 37-48.
- Lu, J., Richardson, J.A. and Olson, E.N. 1998. Capsulin: a novel bHLH transcription factor expressed in epicardial progenitors and mesenchyme of visceral organs. *Mech. Dev.* 73: 23-32.
- Robb, L., Mifsud, L., Hartley, L., Biben, C., Copeland, N.G., Gilbert, D.J., Jenkins, N.A. and Harvey, R.P. 1998. epicardin: A novel basic helix-loop-helix transcription factor gene expressed in epicardium, branchial arch myoblasts, and mesenchyme of developing lung, gut, kidney, and gonads. *Dev. Dyn.* 213: 105-113.
- Quaggin, S.E., Schwartz, L., Cui, S., Igarashi, P., Deimling, J., Post, M. and Rossant, J. 1999. The basic helix-loop-helix protein POD-1 is critically important for kidney and lung organogenesis. *Development* 126: 5771-5783.
- Miyagishi, M., Nakajima, T. and Fukamizu, A. 2000. Molecular characterization of mesoderm-restricted basic helix-loop-helix protein, POD-1/capsulin. *Int. J. Mol. Med.* 5: 27-31.
- Patterson, M. 2000. A mean spleen gene. *Nat. Rev. Genet.* 1: 8.
- Tamura, M., Kanno, Y., Chuma, S., Saito, T. and Nakatsuji, N. 2001. POD-1/capsulin shows a sex- and stage-development expression pattern in the mouse gonad development and represses expression of Ad4BP/SF-1. *Mech. Dev.* 102: 135-144.

## CHROMOSOMAL LOCATION

Genetic locus: Tcf21 (mouse) mapping to 10 A3.

## PRODUCT

POD-1 (m): 293T Lysate represents a lysate of mouse POD-1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

POD-1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive POD-1 antibodies. Recommended use: 10-20 µl per lane.

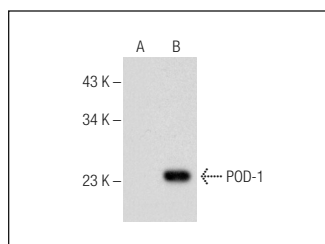
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

POD-1 (A-6): sc-377225 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse POD-1 expression in POD-1 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



POD-1 (A-6): sc-377225. Western blot analysis of POD-1 expression in non-transfected: sc-117752 (A) and mouse POD-1 transfected: sc-122671 (B) 293T whole cell lysates.

## 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.

## RESEARCH USE

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

## PROTOCOLS

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