



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) 



POD-1 (h3): 293T Lysate: sc-159236

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

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. Patterson, M. 2000. A mean spleen gene. *Nat. Rev. Genet.* 1: 8.
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 (human) mapping to 6q23.2.

PRODUCT

POD-1 (h3): 293T Lysate represents a lysate of human POD-1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

POD-1 (h3): 293T Lysate is suitable as a Western Blotting positive control for human 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.

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 for detailed protocols and support products.