

POD-1 (E-13): sc-15006

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.

CHROMOSOMAL LOCATION

Genetic locus: TCF21 (human) mapping to 6q23.2; Tcf21 (mouse) mapping to 10 A3.

SOURCE

POD-1 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of POD-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-15006 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-15006 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

POD-1 (E-13) is recommended for detection of POD-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

POD-1 (E-13) is also recommended for detection of POD-1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for POD-1 siRNA (h): sc-38185, POD-1 siRNA (m): sc-38186, POD-1 shRNA Plasmid (h): sc-38185-SH, POD-1 shRNA Plasmid (m): sc-38186-SH, POD-1 shRNA (h) Lentiviral Particles: sc-38185-V and POD-1 shRNA (m) Lentiviral Particles: sc-38186-V.

POD-1 (E-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

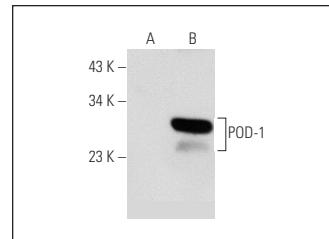
Molecular Weight of POD-1: 26 kDa.

Positive Controls: KNRK + PMA nuclear extract: sc-2142, POD-1 (h): 293T Lysate: sc-114112 or HeLa nuclear extract: sc-2120.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



POD-1 (E-13): sc-15006. Western blot analysis of POD-1 expression in non-transfected: sc-117752 (A) and human POD-1 transfected: sc-159236 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Boulberdaa, M., et al. 2011. Genetic inactivation of prokineticin receptor-1 leads to heart and kidney disorders. *Arterioscler. Thromb. Vasc. Biol.* 31: 842-850.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. 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 or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **POD-1 (A-6): sc-377225**, our highly recommended monoclonal alternative to POD-1 (E-13).