SANTA CRUZ BIOTECHNOLOGY, INC.

PARM-1 (C-13): sc-136797



BACKGROUND

PARM-1 (prostate androgen-regulated mucin-like protein 1), also known as WSC4 or Cipar1, is a 310 amino acid single-pass type I membrane protein that is widely expressed with highest levels in heart, kidney and placenta. Induced by androgens, PARM-1 may participate in regulating telomerase activity and in the expression of TP1 (telomerase associated protein 1), thereby enabling specific prostatic cells to resist apoptosis. In rats, an increase in PARM-1 expression in response to ER stress inducers, such as thapsigargin and tunicamycin, result in apoptotic cell death. While down-regulation of PARM-1 expression enhances apoptotic response in cardiac myocytes to ER stresses and represses or augments expression of ER stress associated proteins PERK, ATF- 6α and GADD 153 (also known as CHOP). This suggest that PARM-1 expression is regulated by ER stress and plays a protective role in cardiac myocytes. Localized to the Golgi apparatus and the endoplasmic reticulum, PARM-1 is highly N- and O-glycosylated.

REFERENCES

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- Buttyan, R., et al. 2000. The effects of androgen deprivation on the prostate gland: cell death mediated by vascular regression. Curr. Opin. Urol. 10: 415-420.
- Cornet, A.M., et al. 2003. Prostatic androgen repressed message-1 (PARM-1) may play a role in prostatic cell immortalisation. Prostate 56: 220-230.
- Fladeby, C., et al. 2008. Human PARM-1 is a novel mucin-like, androgenregulated gene exhibiting proliferative effects in prostate cancer cells. Int. J. Cancer 122: 1229-1235.
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- Isodono, K., et al. 2010. PARM-1 is an endoplasmic reticulum molecule involved in endoplasmic reticulum stress-induced apoptosis in rat cardiac myocytes. PLoS ONE 5: e9746.

CHROMOSOMAL LOCATION

Genetic locus: PARM1 (human) mapping to 4q13.3; Parm1 (mouse) mapping to 5 E2.

SOURCE

PARM-1 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of PARM-1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-136797 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

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

PARM-1 (C-13) is also recommended for detection of PARM-1 in additional species, including equine, bovine, porcine and avian.

Suitable for use as control antibody for PARM-1 siRNA (h): sc-89313, PARM-1 siRNA (m): sc-140523, PARM-1 shRNA Plasmid (h): sc-89313-SH, PARM-1 shRNA Plasmid (m): sc-140523-SH, PARM-1 shRNA (h) Lentiviral Particles: sc-89313-V and PARM-1 shRNA (m) Lentiviral Particles: sc-140523-V.

Molecular Weight of PARM-1 precursor: 30 kDa.

Molecular Weight of glycoslylated PARM-1: 100 kDa.

Positive Conrols: mouse pancreas extract: sc-364244.



PARM-1 (C-13): sc-136797. Western blot analysis of PARM-1 expression in mouse pancreas tissue extract

STORAGE

Store at 4° C, **D0 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.