SANTA CRUZ BIOTECHNOLOGY, INC.

PELP1 (R-17): sc-34183

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The estrogen receptor (ER) plays an important role in cancer progression. (Proline-, glutamic acid-, and leucine-rich protein-1) PELP1/MNAR modulator of nongenomic activity of estrogen receptor (ER), a novel coregulatory protein, modulates genomic as well as nongenomic activity of estrogen receptors. PELP1 plays an essential role in the proliferation of cancerous endometrial cells. PELP1 expression, in both the stroma and epithelial cells, and localization are widely deregulated in endometrial cancers. In addition, PELP1 and ER β localize predominantly in the cytoplasm of high-grade endometrial tumors. PELP1 coactivates ER-mediated transcription and also serves as a corepressor of other nuclear hormone receptors (NR)- and non-NR sequence-specific transcription factors, including GR, Nur77, AP1, NFκB, and TCF/SRF. PELP1 participates in chromatin remodeling activity via displacement of histone 1 in cancer cells. It is expressed in all stages of endometrium.

REFERENCES

1. Balasenthil, S. and Vadlamudi, R.K. 2003. Functional interactions between the estrogen receptor coactivator PELP1/MNAR and retinoblastoma protein. J. Biol. Chem. 278: 22119-22127.
2. Choi, Y.B., Ko, J.K. and Shin, J. 2004. The transcriptional corepressor, PELP1, recruits HDAC2 and masks histones using two separate domains. J. Biol. Chem. 279: 50930-50941.
3. Nair, S.S., Mishra, S.K., Yang, Z., Balasenthil, S., Kumar, R. and Vadlamudi, R.K. 2004. Potential role of a novel transcriptional coactivator PELP1 in Histone H1 displacement in cancer cells. Cancer Res. 64: 6416-6423.
4. Mishra, S.K., Balasenthil, S., Nguyen, D. and Vadlamudi, R.K. 2004. Cloning and functional characterization of PELP1/MNAR promoter. Gene 330: 115-122.
5. Vadlamudi, R.K., Balasenthil, S., Broaddus, R.R., Gustafsson, J.A. and Kumar, R. 2004. Deregulation of estrogen receptor coactivator proline-, glutamic acid-, and leucine-rich protein-1/modulator of nongenomic activity of estrogen receptor in human endometrial tumors. J. Clin. Endocrinol. Metab. 89: 6130-6138.

CHROMOSOMAL LOCATION

Genetic locus: PELP1 (human) mapping to 17p13.2; Pelp1 (mouse) mapping to 11 B3.

SOURCE

PELP1 (R-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PELP1 of human origin.

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 or our catalog for detailed protocols and support products.

PRODUCT

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

Blocking peptide available for competition studies, sc-34183 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PELP1 (R-17) is recommended for detection of PELP1 of human, rat and, to a lesser extent, mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

PELP1 (R-17) is also recommended for detection of PELP1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for PELP1 siRNA (h): sc-45287, PELP1 siRNA (m): sc-45288, PELP1 shRNA Plasmid (h): sc-45287-SH, PELP1 shRNA Plasmid (m): sc-45288-SH, PELP1 shRNA (h) Lentiviral Particles: sc-45287-V and PELP1 shRNA (m) Lentiviral Particles: sc-45288-V.

Molecular Weight of PELP1: 160 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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) 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.

RESEARCH USE

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