

PELP1 (E-15): sc-34187

BACKGROUND

The estrogen receptor plays an important role in cancer progression. PELP1/MNAR [proline-, glutamic acid- and leucine-rich protein-1]/modulator of nongenomic activity of estrogen receptor (ER)), a novel co-regulatory 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 tested, including GR, Nur77, AP1, NF κ B and TCF/SRF. PELP1 participates in chromatin remodeling activity via displacement of Histone 1 in cancer cells. PELP1 is expressed in all stages of endometriosis.

REFERENCES

- Balasenthil, S., et al. 2003. Functional interactions between the estrogen receptor co-activator PELP1/MNAR and retinoblastoma protein. *J. Biol. Chem.* 278: 22119-22127.
- Choi, Y.B., et al. 2004. The transcriptional corepressor, PELP1, recruits HDAC2 and masks histones using two separate domains. *J. Biol. Chem.* 279: 50930-50941.
- Nair, S.S., et al. 2004. Potential role of a novel transcriptional co-activator PELP1 in Histone H1 displacement in cancer cells. *Cancer Res.* 64: 6416-6423.
- Mishra, S.K., et al. 2004. Cloning and functional characterization of PELP1/MNAR promoter. *Gene* 330: 115-122.
- Vadlamudi, R.K., et al. 2004. Deregulation of estrogen receptor co-activator proline-, glutamic acid- and leucine-rich protein-1/modulator of non-genomic 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 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PELP1 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-34187 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

PELP1 (E-15) is recommended for detection of PELP1 of mouse 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).

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.

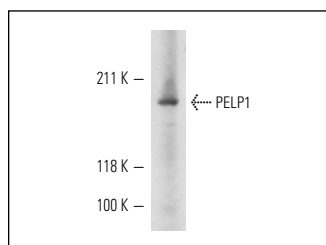
Molecular Weight of PELP1: 160 kDa.

Positive Controls: mouse testis extract: sc-2405, RAW 264.7 whole cell lysate: sc-2211 or HeLa whole cell lysate: sc-2200.

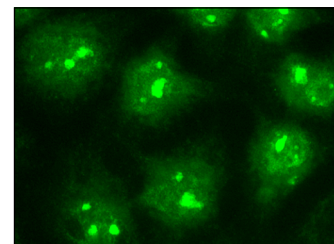
RECOMMENDED SECONDARY REAGENTS

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) 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



PELP1 (E-15): sc-34187. Western blot analysis of PELP1 expression in mouse testis tissue extract.



PELP1 (E-15): sc-34187. Immunofluorescence staining of methanol-fixed HeLa cells showing nucleolar and nuclear localization.

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.