PELP1 (h): 293T Lysate: sc-117220



The Power to Question

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 co-activates 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 endometrium.

REFERENCES

- Balasenthil, S. and Vadlamudi, R.K. 2003. Functional interactions between the estrogen receptor co-activator PELP1/MNAR and retinoblastoma protein. J. Biol. Chem. 278: 22119-22127.
- 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.
- Nair, S.S., Mishra, S.K., Yang, Z., Balasenthil, S., Kumar, R. and Vadlamudi, R.K. 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., Balasenthil, S., Nguyen, D. and Vadlamudi, R.K. 2004. Cloning and functional characterization of PELP1/MNAR promoter. Gene 330: 115-122.
- Vadlamudi, R.K., Balasenthil, S., Broaddus, R.R., Gustafsson, J.A. and Kumar, R. 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.

PRODUCT

PELP1 (h): 293T Lysate represents a lysate of human PELP1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

PELP1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive PELP1 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.

RESEARCH USE

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

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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com