



ERR γ (h2): 293T Lysate: sc-177199

BACKGROUND

Estrogen and progesterone receptors are members of a family of transcription factors that are regulated by the binding of their cognate ligands. The interaction of hormone-bound estrogen receptors with estrogen responsive elements (EREs) alters transcription of ERE-containing genes. Estrogen receptor-related proteins, (ERR α , β and γ), are orphan nuclear receptors. Like estrogen receptors, ERRs bind specifically to EREs to activate reporter genes. EREs are constitutively active without binding to estrogen. The biological response to progesterone is mediated by two distinct forms of the human progesterone receptor (PR-A and PR-B), which arise from alternative splicing. In most cells, PR-B functions as a transcriptional activator of progesterone-responsive genes, whereas PR-A functions as a transcriptional inhibitor of all steroid hormone receptors. mPR is a membrane progesterin receptor. The predicted 436-amino acid ERR γ protein which presumably localizes to the nucleus, is expressed in the heart, kidney, brain, lung, bone marrow, adrenal gland, trachea, spinal cord and thyroid gland tissues.

REFERENCES

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2. Hong, H., Yang, L. and Stallcup, M.R. 1999. Hormone-independent transcriptional activation and coactivator binding by novel orphan nuclear receptor ERR3. *J. Biol. Chem.* 274: 22618-22626.
3. Heard, D.J., Norby, P.L., Holloway, J. and Vissing, H. 2000. Human ERR γ , a third member of the estrogen receptor-related receptor (ERR) subfamily of orphan nuclear receptors: tissue-specific isoforms are expressed during development and in the adult. *Mol. Endocrinol.* 14: 382-392.
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CHROMOSOMAL LOCATION

Genetic locus: ESRRG (human) mapping to 1q41.

PRODUCT

ERR γ (h2): 293T Lysate represents a lysate of human ERR γ transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

ERR γ (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive ERR γ antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

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.

RESEARCH USE

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

PROTOCOLS

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