

ERR α (N-13): sc-32970

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. The C-terminal region of the estrogen receptor contains a ligand binding domain, the N-terminus serves as a transactivation domain, and the DNA binding domain is centrally located. Two forms of estrogen receptor have been identified, ER α and ER β , which are differentially activated by various ligands. Estrogen receptor-related proteins, (ERRs 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.

REFERENCES

- Chen, F., et al. 1999. Identification of two hERR2-related novel nuclear receptors utilizing bioinformatics and inverse PCR. *Gene* 228: 101-109.
- Hong, H., et al. 1999. Hormone-independent transcriptional activation and coactivator binding by novel orphan nuclear receptor ERR3. *J. Biol. Chem.* 274: 22618-22626.
- Greschik, H., et al. 2002. Structural and functional evidence for ligand-independent transcriptional activation by the estrogen-related receptor 3. *Mol. Cell.* 9: 303-313.
- Hentschke, M., et al. 2003. Identification of PNRC2 and TLE1 as activation function-1 cofactors of the orphan nuclear receptor ERR γ . *Biochem. Biophys. Res. Commun.* 312: 975-982.

CHROMOSOMAL LOCATION

Genetic locus: ESRRA (human) mapping to 11q13; Esrra (mouse) mapping to 19 A.

SOURCE

ERR α (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ERR α of human 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-32970 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

ERR α (N-13) is recommended for detection of ERR α of 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 ERR α siRNA (h): sc-44706, ERR α shRNA Plasmid (h): sc-44706-SH and ERR α shRNA (h) Lentiviral Particles: sc-44706-V.

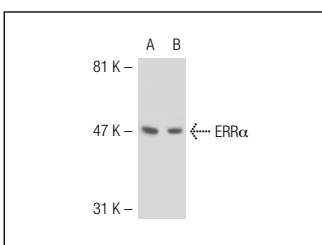
Molecular Weight of ERR α : 53 kDa.

Positive Controls: ERR α (h): 293T Lysate: sc-112428.

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



ERR α (N-13): sc-32970. Western blot analysis of ERR α expression in non-transfected: sc-117752 (A) and human ERR α transfected: sc-112428 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures

MONOS
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Try **ERR α (2ERR2): sc-65718** or **ERR α (2ERR7): sc-65720**, our highly recommended monoclonal alternatives to ERR α (N-13).