SANTA CRUZ BIOTECHNOLOGY, INC.

ERβ (H-150): sc-8974

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Estrogen receptors (ER) are members of the steroid/thyroid hormone receptor superfamily of ligand-activated transcription factors. Estrogen receptors, including ERα and ERβ, contain DNA binding and ligand binding domains and are critically involved in regulating the normal function of reproductive tissues. ERα and ERβ have been shown to be differentially activated by various ligands. Receptor-ligand interactions trigger a cascade of events, including dissociation from heat shock proteins, receptor dimerization, phosphorylation and the association of the hormone activated receptor with specific regulatory elements in target genes. Evidence suggests that ERα and ERβ may be regulated by distinct mechanisms even though they share many functional characteristics.

CHROMOSOMAL LOCATION

Genetic locus: ESR2 (human) mapping to 14q23.2; Esr2 (mouse) mapping to 12 C3.

SOURCE

ERβ (H-150) is a rabbit polyclonal antibody raised against amino acids 1-150 of ERβ of human origin.

PRODUCT

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

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-8974 X, 200 µg/0.1 ml.

APPLICATIONS

ERβ (H-150) is recommended for detection of ERβ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 ERβ siRNA (h): sc-35325, ERβ siRNA (m): sc-35326, ERβ siRNA (r): sc-77356, ERβ shRNA Plasmid (h): sc-35325-SH, ERβ shRNA Plasmid (m): sc-35326-SH, ERβ shRNA Plasmid (r): sc-77356-SH, ERβ shRNA (h) Lentiviral Particles: sc-35325-V, ERβ shRNA (m) Lentiviral Particles: sc-35326-V and ERβ shRNA (r)

ERβ (H-150) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ERβ: 56 kDa.

Positive Controls: F9 cell lysate: sc-2245, NIH/3T3 whole cell lysate: sc-2210 or mouse thymus extract: sc-2406.

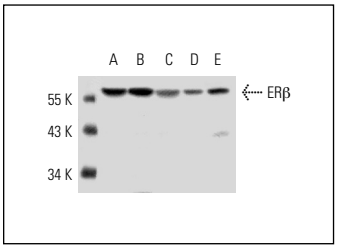
STORAGE

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

RESEARCH USE

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

DATA



ERβ (H-150): sc-8974. Western blot analysis of ERβ expression in I-11.15 (**A**), F9 (**B**) and NIH/3T3 (**C**) whole cell lysates and mouse thymus (**D**) and mouse spleen (**E**) tissue extracts.

SELECT PRODUCT CITATIONS

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4. Masuyama, H., et al. 2004. Involvement of suppressor for Gal 1 in the ubiquitin/proteasome-mediated degradation of estrogen receptors. J. Biol. Chem. 279: 12020-12026.
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7. Szabo, P.E., et al. 2004. Parent-of-origin-specific binding of nuclear hormone receptor complexes in the H19-Igf2 imprinting control region. Mol. Cell. Biol. 24: 4858-4868.
8. Jiang, W.G., et al. 2005. Com-1/P8 in oestrogen regulated growth of breast cancer cells, the ER-β connection. Biochem Biophys Res Commun. 330: 253-262.
9. Siewit, C.L., et al. 2010. Cadmium promotes breast cancer cell proliferation by potentiating the interaction between ERα and c-Jun. Mol Endocrinol. 24: 981-992.
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