

ER β (Y-19): sc-6821

BACKGROUND

Estrogen receptors (ER) are members of the steroid/thyroid hormone receptor superfamily of ligand-activated transcription factors. Estrogen receptors, including ER α and ER β , contain DNA binding and ligand binding domains and are critically involved in regulating the normal function of reproductive tissues. ER α and ER β 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 ER α and ER β may be regulated by distinct mechanisms even though they share many functional characteristics.

CHROMOSOMAL LOCATION

Genetic locus: Esr2 (mouse) mapping to 12 C3.

SOURCE

ER β (Y-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ER β 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-6821 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-6821 X, 200 μ g/0.1 ml.

APPLICATIONS

ER β (Y-19) is recommended for detection of estrogen receptor β of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 ER β siRNA (m): sc-35326, ER β siRNA (r): sc-77356, ER β shRNA Plasmid (m): sc-35326-SH, ER β shRNA Plasmid (r): sc-77356-SH, ER β shRNA (m) Lentiviral Particles: sc-35326-V and ER β shRNA (r) Lentiviral Particles: sc-77356-V.

ER β (Y-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ER β : 56 kDa.

Positive Controls: mouse spleen extract: sc-2391, mouse thymus extract: sc-2406 or mouse liver extract: sc-2256.

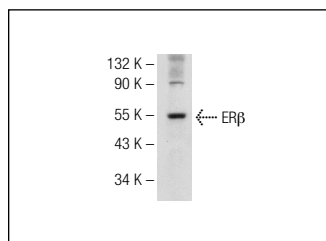
STORAGE

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



ER β (Y-19): sc-6821. Western blot analysis of ER β expression in mouse liver tissue extract.

SELECT PRODUCT CITATIONS

1. Tremblay, A., et al. 1999. Ligand-independent recruitment of SRC-1 to estrogen receptor β through phosphorylation of activation function AF-1. *Mol. Cell* 3: 513-519.
2. Vasconsuelo, A., et al. 2008. 17 β -estradiol abrogates apoptosis in murine skeletal muscle cells through estrogen receptors: role of the phosphatidylinositol 3-kinase/Akt pathway. *J. Endocrinol.* 196: 385-397.
3. Saqui-Salces, M., et al. 2008. Estrogen and progesterone receptor isoforms expression in the stomach of Mongolian gerbils. *World J. Gastroenterol.* 14: 5701-5706.
4. González, M., et al. 2008. Oestrogen receptor α and β in female rat pituitary cells: an immunochemical study. *Gen. Comp. Endocrinol.* 155: 857-868.
5. Uzelac, P.S., et al. 2010. Dysregulation of leptin and testosterone production and their receptor expression in the human placenta with gestational diabetes mellitus. *Placenta* 31: 581-588.
6. Zhang, L., et al. 2010. Estrogen receptor β -selective agonists stimulate calcium oscillations in human and mouse embryonic stem cell-derived neurons. *PLoS ONE* 5: e11791.
7. Hernández-Hernández, O.T., et al. 2010. Progesterone and estradiol effects on SRC-1 and SRC-3 expression in human astrocytoma cell lines. *Endocrine* 37: 194-200.
8. Snyder, M.A., et al. 2010. Multiple ER β antisera label in ER β knockout and null mouse tissues. *J. Neurosci. Methods* 188: 226-234.
9. Alfaro-Lira, S., et al. 2012. Malignant transformation of rat kidney induced by environmental substances and estrogen. *Int. J. Environ. Res. Public Health* 9: 1630-1648.

MONOS
Satisfaction
Guaranteed

Try **ER β (B-1): sc-390243** or **ER β (1531): sc-53494**, our highly recommended monoclonal alternatives to ER β (Y-19).