SANTA CRUZ BIOTECHNOLOGY, INC.

ERβ (L-20): sc-6822



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 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 (human) mapping to 14q23.2; Esr2 (mouse) mapping to 12 C3.

SOURCE

ER β (L-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ER β of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-6822 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-6822 X, 200 $\mu g/0.1$ ml.

APPLICATIONS

ERβ (L-20) is recommended for detection of ERβ of human and, to a lesser extent, 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).

 $\text{ER}\beta$ (L-20) is also recommended for detection of $\text{ER}\beta$ in additional species, including canine.

Suitable for use as control antibody for ER β siRNA (h): sc-35325, ER β siRNA (m): sc-35326, ER β shRNA Plasmid (h): sc-35325-SH, ER β shRNA Plasmid (m): sc-35326-SH, ER β shRNA (h) Lentiviral Particles: sc-35325-V and ER β shRNA (m) Lentiviral Particles: sc-35326-V.

 $\mbox{ER}\beta$ (L-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ERB: 56 kDa.

STORAGE

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

SELECT PRODUCT CITATIONS

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- 5. García-Arencibia, M., et al. 2005. Identification of two functional estrogen response elements complexed with AP-1-like sites in the human Insulin receptor gene promoter. J. Steroid Biochem. Mol. Biol. 94: 1-14.
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- 8. Chen, X.N., et al. 2008. Estrogen receptor- α and - β regulate the human corticotropin-releasing hormone gene through similar pathways. Brain Res. 1223: 1-10.
- 9. Grasselli, A., et al. 2008. Estrogen receptor- α and endothelial nitric oxide synthase nuclear complex regulates transcription of human telomerase. Circ. Res. 103: 34-42.
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- Pierdominici, M., et al. 2010. Estrogen receptor profiles in human peripheral blood lymphocytes. Immunol. Lett. 132: 79-85.
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- de Seranno, S., et al. 2010. Role of estradiol in the dynamic control of tanycyte plasticity mediated by vascular endothelial cells in the median eminence. Endocrinology 151: 1760-1772.
- Townsend, E.A., et al. 2010. Rapid effects of estrogen on intracellular Ca²⁺ regulation in human airway smooth muscle. Am. J. Physiol. Lung Cell Mol. Physiol. 298: L521-L530.

RESEARCH USE

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