# SANTA CRUZ BIOTECHNOLOGY, INC.

# ERβ (N-19): sc-6820



### BACKGROUND

Estrogen receptors (ER) are members of the steroid/thyroid hormone receptor superfamily of ligand-activated transcription factors. Estrogen receptors, including ER $\alpha$  and ER $\beta$ , contain DNA binding and ligand binding domains and are critically involved in regulating the normal function of reproductive tissues. They are located in the nucleus, though some estrogen receptors associate with the cell surface membrane and can be rapidly activated by exposure of cells to estrogen. ER $\alpha$  and ER $\beta$  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 $\alpha$  and ER $\beta$  may be regulated by distinct mechanisms even though they share many functional characteristics.

#### CHROMOSOMAL LOCATION

Genetic locus: ESR2 (human) mapping to 14q23.2.

#### SOURCE

ER $\beta$  (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ER $\beta$  of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6820 P, (100  $\mu$ 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-6820 X, 200  $\mu g/0.1$  ml.

#### **APPLICATIONS**

ER $\beta$  (N-19) is recommended for detection of estrogen receptor  $\beta$  of 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 ER $\beta$  siRNA (h): sc-35325, ER $\beta$  shRNA Plasmid (h): sc-35325-SH and ER $\beta$  shRNA (h) Lentiviral Particles: sc-35325-V.

 $\mathsf{ER}\beta$  (N-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ER<sub>B</sub>: 56 kDa.

#### 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





 $\text{ER}\beta$  (N-19): sc-6820. Western blot analysis of human recombinant  $\text{ER}\beta$  fusion protein.

 $ER\beta$  (N-19): sc-6820. Western blot analysis of  $ER\beta$  expression in mouse liver tissue extract.

## SELECT PRODUCT CITATIONS

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