



Qty: 100 µg/400 µl

Rabbit anti-Estrogen

Receptor-β

Catalog No. 51-7700

Lot No. See product label

Rabbit anti-Estrogen Receptor-β

FORM

This polyclonal antibody is supplied as a 400 µl aliquot at a concentration of 0.25 mg/ml in phosphate buffered saline, pH 7.4 containing 0.1% sodium azide. The antibody is epitope-affinity-purified from rabbit antiserum.

POLYCLONAL ANTIBODY DESIGNATION (PAD): D7N

ISOTYPE: Rabbit Ig

IMMUNOGEN

A 19 amino acid synthetic peptide derived from the C-terminus of the human Estrogen Receptor-β protein.

SPECIFICITY

This antibody is specific for the human Estrogen Receptor -β protein (~53 kDa). Antibody reactivity was confirmed by Western blotting using recombinant human Estrogen Receptor-beta and MCF-7 cell lysate.

REACTIVITY

Sample	ELISA	Western Blot
Human		++
Immunogen	++	

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA: 1 µg/ml
Western Blotting: 1-2 µg/ml

STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long term storage. Avoid repeated freezing and thawing.

(cont'd)

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BACKGROUND

Estrogen receptor (ER) is a member of the steroid-receptor family. Unlike protein growth factors that bind to receptors on the cell surface and activate signal-transduction cascades to influence gene expression, the steroid hormones bind to intracellular receptors, which then bind to DNA and regulate gene expression directly. ER- β has a molecular mass of approximately 53 kDA and is composed of six regions, A to F, on the basis of different amino acid sequence homology⁽²⁾. The A/B region contains a transcription activation function. Region C encodes the DNA binding domain. Region D is involved in binding to hsp90, as well as containing nuclear localization signals and plays a part in stabilizing DNA binding by the DNA binding domain. Region E contains the hormone/ligand binding domain as well as hormone-inducible transcription activation function. Region F appears to play a role in modulating transcriptional activation by ER- α .

ER- β was discovered in 1996 in rat prostate, as well as in secretory epithelial cells of the prostate and granulosa cells of the ovary.⁽¹⁾ Later, human ER- β was discovered and characterized and found to be expressed in human thymus, spleen, ovary, and testis.⁽³⁾

REFERENCES

1. Kuiper, G et al. Cloning of a novel receptor expressed in rat prostate and ovary. *Proc Natl Acad Sci USA*. 93(12):5925-30, 1996.
2. Krust, A et al. The chicken oestrogen receptor sequence: homology with v-erbA and the human oestrogen and glucocorticoid receptor. *Embo J*. 5(5):897-7, 1986.
3. Mosselman S. J., Polman, et. al. ER beta: identification and characterization of a novel human estrogen receptor. *FEBS Lett* 392(1):49-53, 1996.

RELATED PRODUCTS

<u>Primary antibodies</u>	<u>Clone</u>	<u>Catalog No.</u>
Mouse anti-Estrogen Receptor (0.5 ml)	1D5	18-7149
Mouse anti-Estrogen Receptor (1 ml)	1D5	18-0149
Mouse ER/PR Combo Pack	1D5/PR-2C5	18-9001
Mouse anti-Estrogen Receptor	ER-7G5	18-0195
Rabbit anti-Estrogen Receptor	Polyclonal	18-0174
<u>Immunoassay reagents</u>	<u>Conjugate</u>	<u>Catalog No.</u>
Goat anti-Rabbit IgG (H+L) (ZyMAX™ Grade)	Purified	81-6100
	FITC	81-6111
	TRITC	81-6114
	Cy™3	81-6115
	Cy™5	81-6116
	HRP	81-6120
	AP	81-6122
	Biotin	81-6140
Protein A	Sepharose® 4B	10-1041
Rec-Protein G	Sepharose® 4B	10-1241

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