Polyclonal Anti-Estrogen receptor β, ER β *(*Sepharose Bead Conjugate)

Catalogue No. PA11226-S

Lot No. 08J01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

Human, rat, mouse. No cross reactivity with other proteins.

Recommended application

(Immunoprecipitation(IP)

Immunogen

A synthetic peptide mapping at the N-terminal of human ERβ, different from the related mouse sequence by four amino acids.

Purification

Immunogen affinity purified.

Formulation

50% slurry in PBS pH 7.2 with 0.01mg NaN_3a_3 preservative.

Storage

Store at 4˚C for frequent use.

Description:

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

BACKGROUND

Estrogen receptor-beta, referred to as ESR2, is a member of the superfamily of nuclear receptors, which can transduce extracellular signals into transcriptional responses. This gene is mapped to 14q and comprises 8 exons spanning approximately 40 kb. ESR2 is expressed in multiple tissues, including developing spermatids of the testis and in ovarian granulosa cells1. ESR-beta is homologous to the previously identified ESR-alpha and has an overlapping but nonidentical tissue distribution. The DNA-binding domain of ESR-beta is 96% conserved compared to ESR, and the ligand-binding domain shows 58% conserved residues. ESR-beta is expressed in human thymus, spleen, ovary, and testis2. Rat ESR-beta is expressed in rat prostate and ovary and is homologous to rat ESR (95% conserved DNA-binding domain; 55% conserved ligand-binding domain)3. ESR2 mRNA was coexpressed with ESR1 and its splice variants in 60% of prolactinomas, 100% of mixed growth hormone /prolactin tumors, and 29% of gonadotroph tumors. ESR2 gene expression was not limited to ESR1-positive tumor subtypes, however, and was also found in 100% of null cell tumors, 80% of somatotroph tumors, and 60% of corticotroph tumors4.

REFERENCE

1. Enmark, E.; Pelto-Huikko, M.; Grandien, K.; Lagercrantz, S.; Lagercrantz, J.; Fried, G.; Nordenskjold, M.; Gustafsson, J.-A. : Human estrogen receptor beta-gene structure, chromosomal localization, and expression pattern. J. Clin. Endocr. Metab. 82: 4258-4265, 1997.
2. Mosselman, S.; Polman, J.; Dijkema, R. : ER-beta: identification and characterization of a novel human estrogen receptor. FEBS Lett. 392: 49-53, 1996.
3. Kuiper, G. G. J. M.; Enmark, E.; Pelto-Huikko, M.; Nilsson, S.; Gustafsson, J.-A. : Cloning of a novel estrogen receptor expressed in rat prostate and ovary. Proc. Nat. Acad. Sci. 93: 5925-5930, 1996. 4. Chaidarun, S. S.; Swearingen, B.; Alexander, J. M. : Differential expression of estrogen receptor-beta
(ER-beta) in human pituitary tumors: functional interactions with ER-alpha and a tumor-specific splice variant. J. Clin. Endocr. Metab. 83: 3308-3315, 1998.

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