

## Anti-estrogen receptor alpha [D75] Bulk Size Ab02565-10.0-BT

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Human IgG1, Kappa

**Clone Number:** D75

**Alternative Name(s) of Target:** Estrogen receptor; ER; ER-alpha; Estradiol receptor; Nuclear receptor subfamily 3 group A member 1; ESR1

**UniProt Accession Number of Target Protein:** P03372

**Published Application(s):** EMSA, functional assay, IP, WB, ELISA, IF, IHC

**Published Species Reactivity:** Human

**Immunogen:** This antibody was raised by immunizing a Lewis rat, with purified estradiol-receptor complex of calf uterine nuclei.

**Specificity:** This antibody is specific for human estrogen receptor. The estrogen receptor is a nuclear hormone receptor. The steroid hormones and their receptors are involved in the regulation of eukaryotic gene expression and affect cellular proliferation and differentiation in target tissues. Ligand-dependent nuclear transactivation involves either direct homodimer binding to a palindromic estrogen response element (ERE) sequence or association with other DNA-binding transcription factors, such as AP-1/c-Jun, c-Fos, ATF-2, Sp1 and Sp3, to mediate ERE-independent signaling.

**Application Notes:** Crude nuclear E<sup>\*</sup>R of calf uterus (0.1 pmol), normal rat serum (10 Ml), and hybridoma medium were used in a double antibody immunoprecipitation with this antibody (Greene et al, 1980; pmid:6928610). ELISA was preformed with this antibody on human MCF-7 cell cytosol (Greene et al, 1982; pmid:6979662). Fresh breast cancer tumor was immunostained using this antibody (Miller et al, 1993; pmid:8490902). Sucrose Density Gradient Analysis was preformed on an extract made from MCF-7 human breast cancer cell line using this antibody (Wong et al, 1991; pmid:1705046). This antibody was used for immunohistochemistry on human breast cancer (Wong et al, 1991; pmid:1705046). ELISA was preformed on human tumor whole-cell extract using this antibody (Scott et al, 1991; pmid:1864980). An immunohistochemistry was preformed on human breast cancer tissue using this antibody (Miller et al, 1993; pmid:8490902). Immunohistochemistry was preformed on tumor cells from humans with recurrent breast cancer. For this experiment this antibody was used (Rasmussen and Kamby, 1989; pmid:2616369). Western blot was preformed on SV40-transformed HBEC, and MCF-7, T47D, MDA-MB-231 cells using this

antibody (Kang et al, 1997; pmid:9054615). Extracts from infected Sf9 cells were analyzed by Western blotting using this antibody (Beekman et al, 1993; pmid:8264659). Gel shift was preformed on human breast tumor sample and control MCF-7 extracts using this antibody (Montgomery et al, 1993; pmid:8219255).

**Antibody First Published in:** Greene et al. Monoclonal antibodies to estrophilin: Probes for the study of estrogen receptors Proc Natl Acad Sci U S A. 1980 Jan;77(1):157-61. [PMID:6928610](#)

**Note on publication:** The paper describes the antibody being raised by immunizing lewis rats with purified estradiol-receptor complex of calf uterine nuclei.

## Product Form

**Size:** 1 mg Purified antibody in bulk size.

**Purification:** Protein A affinity purified

**Supplied In:** PBS only.

**Storage Recommendation:** Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommed this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.