Anti-Estrogen receptor [JS34/32] Standard Size Ab02757-10.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG2b format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Fc Silent™, Kappa
Clone Number: JS34/32
Alternative Name(s) of Target: ER; ER-alpha; Estradiol receptor; Nuclear receptor subfamily 3 group A member 1
UniProt Accession Number of Target Protein: P49884
Published Application(s): functional assay, IP, IHC
Published Species Reactivity: Bovine, Rat, Human
Immunogen: This antibody was raised by immunizing Balb/c mice with bovine estrogen receptor purified from calf uterus.
Specificity: This antibody is specific for human, bovine and rat estrogen receptor. The different molecular forms of the estrogen receptor also showed no difference in binding affinity. 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.
Application Notes: Aliquots of 16a- [125I]iodo17P-estradiol-labeled receptor were immunoprecipitated with the mouse IgG2b version of this antibody (Moncharmont et al, 1982; pmid:7159574). To assess the localization of estrogen receptor (ER) in rat brain, pituitary and uterus, immunohistochemistry was performed on the brain, pituitary and uterus of rats (Sar and Parikh, 1986; pmid:2422450). To test whether the role of estrogen in breast cancer is dependent on a modified expression of their receptor, immunohistochemistry was performed on samples of human breast cancer using the mouse version of this antibody (Fabris et al, 1987; pmid:3695478). Determination of antibody interaction with microsomal and cytosolic estrogen-binding proteins was carried out by monitoring the shift in sedimentation coefficient of estrogen-estrophile complexes that occurs when they are bound by the mouse version of this antibody. This was done to characterize estrogen-binding sites associated with the endoplasmic reticulum of rat uterus (Evans Jr and Muldoon, 1991; pmid:2020979). To demonstrate the existence of receptors for

estradiol in rabbit articular cartilage and to measure their concentration and dissociation constants, immunoprecipitation on cell cultures from rabbit cartilage tissue was performed using the mouse version of this antibody (Dayani et al, 1988; pmid:3419165). Immunohistochemistry was performed on human breast cancer tissue using the mouse version of this antibody, to show that immunohistochemistry is a viable method to assay cancer tissue (Marchetti et al, 1987; pmid:2436766).
Antibody First Published in: Moncharmont et al. Monoclonal antibodies against estrogen receptor: interaction with different molecular forms and functions of the receptor. Biochemistry. 1982 Dec 21;21(26):6916-21. PMID:7159574
Note on publication: Hybridoma cells have been produced by fusing SP2/O-Ag14 mouse myeloma cells with spleen cells from a mouse immunized with a purified preparation of estrogen receptor from calf uterus.

Product Form

Size: 200 µg Purified antibody.
Purification: Protein A affinity purified
Supplied In: PBS with 0.02% Proclin 300.
Storage Recommendation: Store at 4^{o}C for up to 3 months. For longer storage, aliquot and store at -20^{o}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.