

Estrogen Receptor α (PTR2124) Mouse mAb

Catalog No :	YM4446
Reactivity :	Human
Applications :	WB;IHC;ELISA
Target :	ESR1
Gene Name :	ESR1 ESR NR3A1
Protein Name :	Estrogen receptor (ER) (ER-alpha) (Estradiol receptor) (Nuclear receptor subfamily 3 group A member 1)
Human Gene Id :	2099
Human Swiss Prot No :	P03372
Mouse Gene Id :	13982
Mouse Swiss Prot No :	P19785
Rat Gene Id :	24890
Rat Swiss Prot No :	P06211
Immunogen :	Synthesized peptide derived from human Estrogen Receptor α . AA range: 450-595
Specificity :	This antibody detects endogenous levels of Estrogen Receptor α at Human; Predict react with mouse, rat
Formulation :	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source :	Monoclonal, Mouse IgG2b, Kappa
Dilution :	WB 1:500-2000 IHC 1:50-200,ELISA 1:5000-20000
Purification :	The antibody was affinity-purified from mouse ascites by affinity-

chromatography using specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year (Do not lower than -25°C)

Observed Band : 67kD

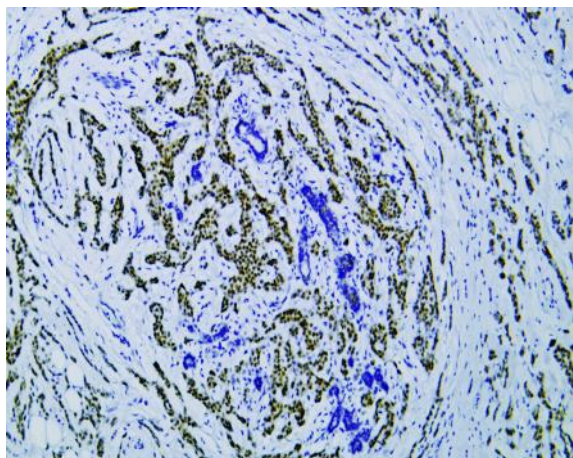
Background : estrogen receptor 1 (ESR1) Homo sapiens This gene encodes an estrogen receptor, a ligand-activated transcription factor composed of several domains important for hormone binding, DNA binding, and activation of transcription. The protein localizes to the nucleus where it may form a homodimer or a heterodimer with estrogen receptor 2. Estrogen and its receptors are essential for sexual development and reproductive function, but also play a role in other tissues such as bone. Estrogen receptors are also involved in pathological processes including breast cancer, endometrial cancer, and osteoporosis. Alternative promoter usage and alternative splicing result in dozens of transcript variants, but the full-length nature of many of these variants has not been determined. [provided by RefSeq, Mar 2014],

Function : 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. Ligand binding induces a conformational change allowing subsequent or combinatorial association with multiprotein coactivator complexes through LXXLL motifs of their respective components. Mutual transrepression occurs between the estrogen receptor (ER) and NF-kappa-B in a cell-type specific manner. Decreases NF-kappa-B DNA-binding activity and inhibits NF-kappa-B-mediated transcription from the IL6 promoter

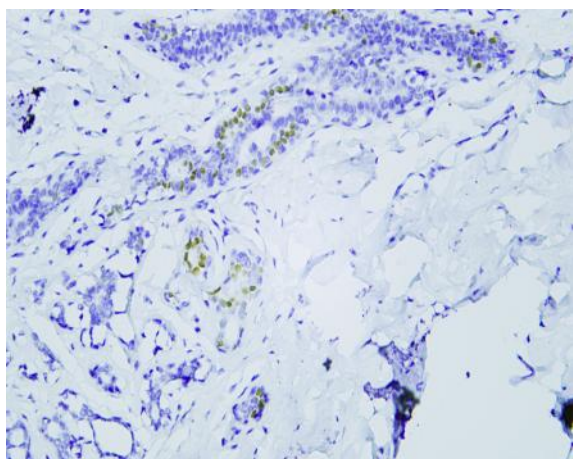
Subcellular Location : [Isoform 1]: Nucleus . Cytoplasm . Cell membrane ; Peripheral membrane protein ; Cytoplasmic side . A minor fraction is associated with the inner membrane.; [Isoform 3]: Nucleus. Cytoplasm. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell membrane; Single-pass type I membrane protein. Associated with the inner membrane via palmitoylation (Probable). At least a subset exists as a transmembrane protein with a N-terminal extracellular domain. .; Nucleus. Golgi apparatus. Cell membrane. Colocalizes with ZDHHC7 and ZDHHC21 in the Golgi apparatus where most probably palmitoylation occurs. Associated with the plasma membrane when palmitoylated.

Expression : Widely expressed (PubMed:10970861). Not expressed in the pituitary gland (PubMed:10970861). ; [Isoform 3]: Widely expressed, however not expressed in the pituitary gland.

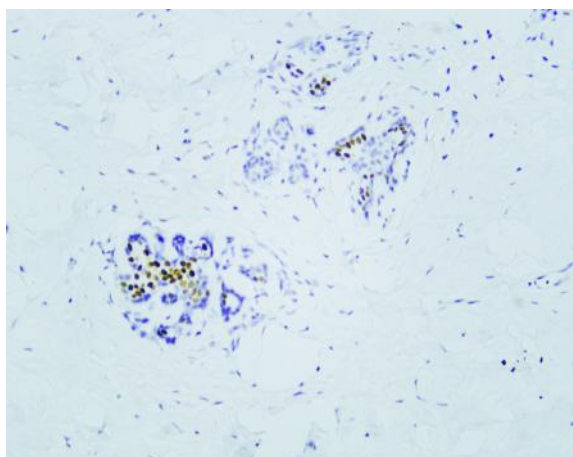
Products Images



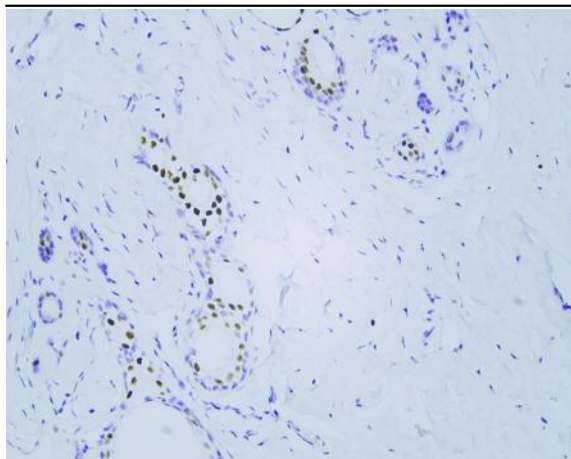
Human breast carcinoma tissue was stained with Anti-Estrogen Receptor α (PTR2124) Antibody



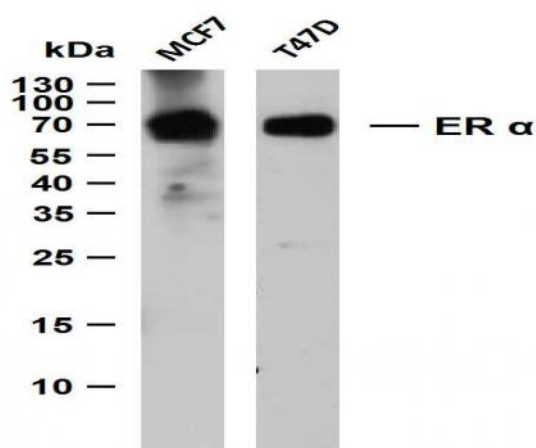
Human breast tissue was stained with Anti-Estrogen Receptor α (PTR2124) Antibody



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Various whole cell lysates were separated by 12% SDS-PAGE, and the membrane was blotted with anti-ER α (PTR2124)antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: MCF7 Lane 2: T47D Predicted band size: 67kDa Observed band size: 67kDa