
Product Name: Phospho-ER alpha (S118) (6G16) Rabbit Monoclonal Antibody**Catalog #: AMRe05896**

For research use only.

Summary

Description	Recombinant rabbit monoclonal antibody
Host	Rabbit
Application	WB,ICC/IF
Reactivity	Human
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Concentration	0.5mg/ml. The concentration of this product may be batch-dependent.
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ICC/IF 1:100-1:200
Molecular Weight	66kDa

Antigen Information

Gene Name	ESR1
Alternative Names	ESR1; Era; Eralpha; Estrogen receptor; Estradiol receptor; ER-alpha; Estrogen receptor 1; NR3A1; ER; ESR; ESRA; Estrogen receptor alpha;
Gene ID	2099.0
SwissProt ID	P03372
Immunogen	A synthetic phosphopeptide corresponding to residues surrounding Ser118 of human Estrogen Receptor alpha

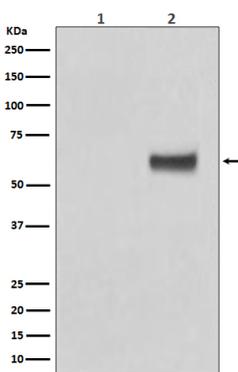
Background

Estrogen receptor α (ER α), a member of the steroid receptor superfamily, contains highly conserved DNA binding (DBD) and ligand binding domains (LBD). Through its estrogen-independent and estrogen-dependent activation domains (AF-1 and AF-2, respectively), ER α regulates transcription by recruiting coactivator proteins and interacting with general transcriptional machinery. Phosphorylation provides an important mechanism to regulate ER α activity. ER α is phosphorylated on multiple sites. 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 and displace RELA/p65 and associated coregulators from the promoter. Recruited to the NF-kappa-B response element of the CCL2 and IL8 promoters and can displace CREBBP. Present with NF-kappa-B components RELA/p65 and NFKB1/p50 on ERE sequences. Can also act synergistically with NF-kappa-B to activate transcription involving respective recruitment adjacent response elements; the function involves CREBBP. Can activate the transcriptional activity of TFF1. Also mediates membrane-initiated estrogen signaling involving various kinase cascades. Essential for MTA1-mediated transcriptional regulation of BRCA1 and BCAS3 (PubMed:17922032).

Research Area

Signal Transduction

Image Data



Western blot analysis of Phospho-ER alpha (S118) expression in (1) MCF7 cell lysate; (2) MCF7 cell lysate treated with b-Estradiol and EGF.