10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Estrogen Receptor?α Antibody
Mouse Anti Human Monoclonal Antibody
Catalog # AP53403

Specification

Anti-Estrogen Receptor?α Antibody - Product Information

Application	**WB**
Primary Accession	P03372
Other Accession	NM_000125
Reactivity	**Transfected**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG2b**
Immunogen	**Purified recombinant human Estrogen Receptor αMMP-2 protein expressed in E.coli.**
Purification	**Affinity purified**
Calculated MW	**67 KDa**

Anti-Estrogen Receptor?α Antibody - Additional Information

Gene ID 2099

Other Names
Atherosclerosis, susceptibility to, included;DKFZp686N23123;ER Alpha;ER;ER Beta;ER-alpha;ER[a];ER[b];Era;ERalpha;Erb;Erb2;ERbeta;ESR;ESR BETA;ESR1;ESR1_HUMAN;ESR2;ESRA;ESRB;Estr;Estra;Estradiol Receptor alpha;Estradiol receptor;Estradiol Receptor beta;ESTRB;Estrogen nuclear receptor alpha;Estrogen receptor 1 (alpha);Estrogen Receptor 1;Estrogen receptor 2 (ER beta);Estrogen Receptor 2;Estrogen receptor 2 ER beta;Estrogen receptor alpha;Estrogen receptor alpha 3*, 4, 5, 6, 7*/822 isoform;Estrogen receptor alpha delta 3*, 4, 5, 6, 7*, 8*/941 isoform;Estrogen receptor alpha delta 3*, 4, 5, 6, 7*/819 2 isoform;Estrogen receptor alpha delta 4 +49 isoform;Estrogen receptor alpha delta 4*, 5, 6, 7*/654 isoform;Estrogen receptor alpha delta 4*, 5, 6, 7, 8*/901 isoform;Estrogen receptor alpha E1 E2 1 2;Estrogen receptor alpha E1 N2 E2 1 2;Estrogen receptor;Estrogen receptor beta 4;Estrogen resistance, included;ESTRR;HDL cholesterol, augmented response of, to hormone replacement, included;Myocardial infarction, susceptibility to, included;NR3A1;NR3A2;Nuclear receptor subfamily 3 group A member 1;Nuclear receptor subfamily 3 group A member 2;OTTHUMP00000017718;OTTHUMP00000017719;RNESTROR.

Dilution
WB~~1:1000

Format
PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

Anti-Estrogen Receptor?α Antibody - Protein Information

Name ESR1

Synonyms ESR, NR3A1

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 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). Maintains neuronal survival in response to ischemic reperfusion injury when in the presence of circulating estradiol (17-beta-estradiol/E2) (By similarity).

Cellular Location
[Isoform 1]: Nucleus {ECO:0000255|PROSITE- ProRule:PRU00407, ECO:0000269|PubMed:12682286, ECO:0000269|PubMed:20074560}. Cytoplasm. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Note=A minor fraction is associated with the inner membrane Nucleus. Golgi apparatus. Cell membrane. Note=Colocalizes with ZDHHC7 and ZDHHC21 in the Golgi apparatus where most probably palmitoylation occurs. Associated with the plasma membrane when palmitoylated

Tissue Location
Widely expressed (PubMed:10970861). Not expressed in the pituitary gland (PubMed:10970861)

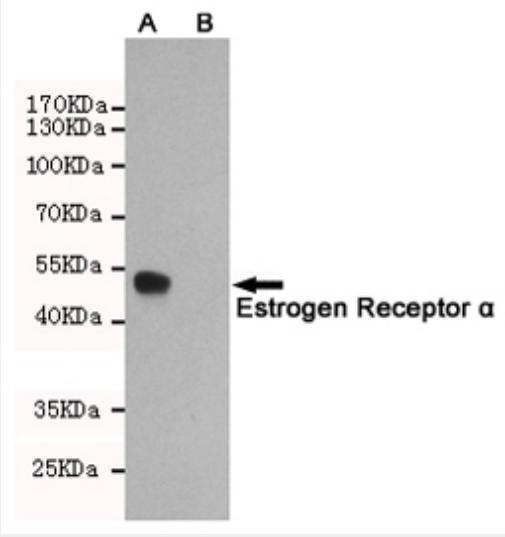
Anti-Estrogen Receptor?α Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Estrogen Receptor?α Antibody - Images

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Western blot analysis of extracts from CHO-K1 (B) and CHO-K1 transfected by Estrogen Receptor?α fragment(A) cell lysates using Estrogen Receptor?α mouse mAb (1:2000 diluted). Predicted band size:50KDa. Observed band size:50KDa.

Anti-Estrogen Receptor?α Antibody - Background

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 eith