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

Anti-ER alpha ESR1 Rabbit Monoclonal Antibody
Catalog # ABO13910

Specification

Anti-ER alpha ESR1 Rabbit Monoclonal Antibody - Product Information

Application	**WB, IHC, IF, ICC, FC**
Primary Accession	P03372
Host	**Rabbit**
Isotype	**Rabbit IgG**
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Format	**Liquid**

Description
Anti-ER alpha ESR1 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-ER alpha ESR1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 2099

Other Names
Estrogen receptor, ER, ER-alpha, Estradiol receptor, Nuclear receptor subfamily 3 group A member 1, ESR1, ESR, NR3A1

Calculated MW
66216 MW KDa

Application Details
WB 1:500-1:2000
IHC 1:50-1:100
ICC/IF 1:50-1:100
FC 1:30

Subcellular Localization
Isoform 1: Nucleus. Cytoplasm. Cell membrane ; Peripheral membrane protein ; Cytoplasmic side. A minor fraction is associated with the inner membrane.

Tissue Specificity
Widely expressed. Isoform 3 is not expressed in the pituitary gland..

Contents
Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen
A synthesized peptide derived from human ER alpha

Purification
Affinity-chromatography

Storage	**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for**

up to one month. Avoid repeated freeze-thaw cycles.

Anti-ER alpha ESR1 Rabbit Monoclonal 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-ER alpha ESR1 Rabbit Monoclonal 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-ER alpha ESR1 Rabbit Monoclonal Antibody - Images

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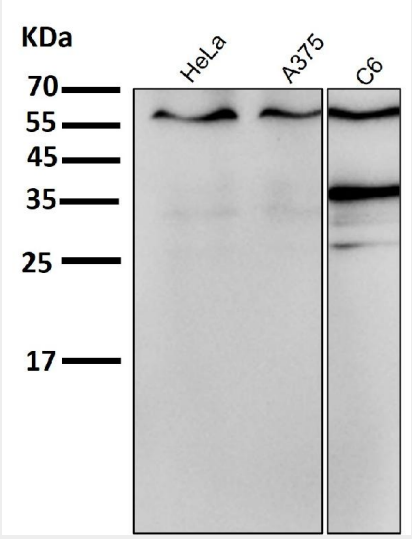
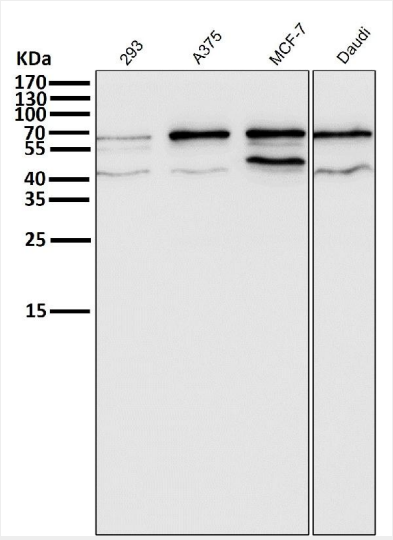
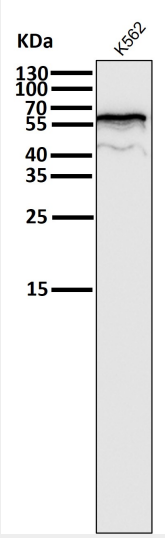


All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



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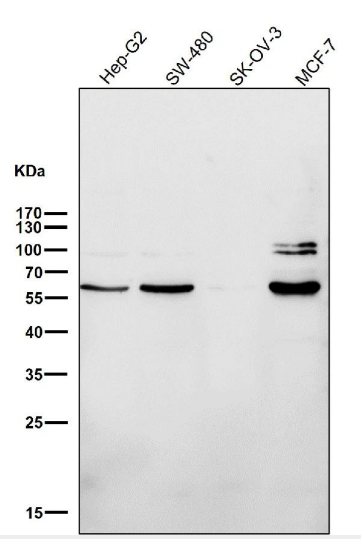
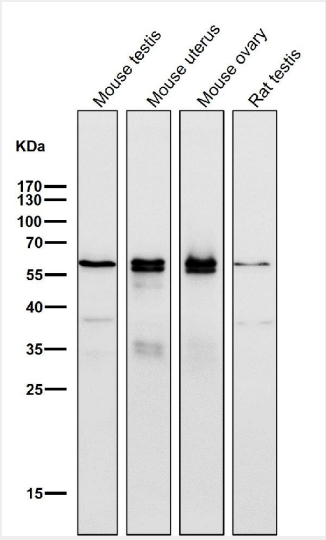
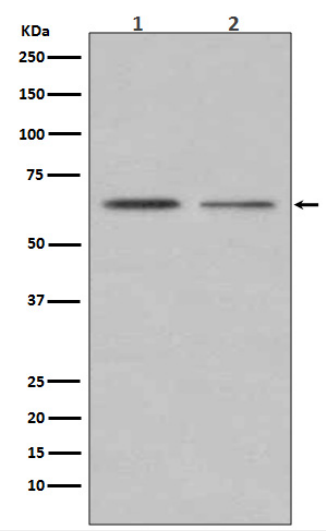


All lanes use the Antibody at 1:500 dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:500 dilution for 1 hour at room temperature.



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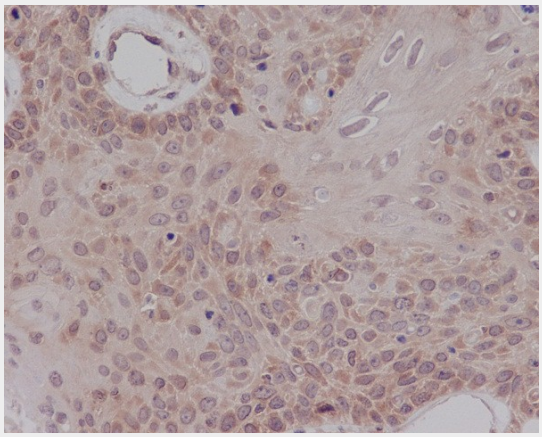
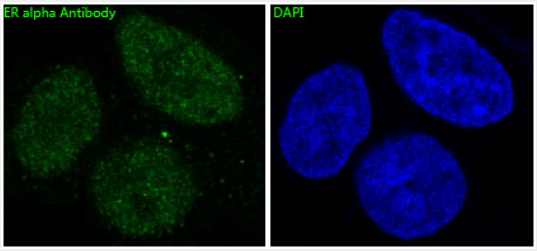
Western blot analysis of ER alpha expression in (1) MCF7 cell lysate; (2)T47-D cell lysate.



Immunohistochemical analysis of paraffin-embedded human cervix carcinoma, using ER alpha Antibody.



Immunofluorescent analysis of MCF7 cells, using ER alpha Antibody.