

# Anti-Phospho-ER alpha (S118) ESR1 Rabbit Monoclonal Antibody

Catalog # ABO13182

## Specification

# Anti-Phospho-ER alpha (S118) ESR1 Rabbit Monoclonal Antibody - Product Information

WB, IHC, IF, ICC Application **Primary Accession** P03372 Rabbit Host Isotype Rabbit IgG Reactivity Human Clonality Monoclonal Format Liquid Description Anti-Phospho-ER alpha (S118) ESR1 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human.

# Anti-Phospho-ER alpha (S118) 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<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200

**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-Phospho-ER alpha (S118) 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:<a href="http://www.uniprot.org/citations/17922032" target=" blank">17922032</a>). 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)

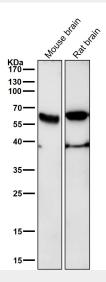
## Anti-Phospho-ER alpha (S118) ESR1 Rabbit Monoclonal Antibody - Protocols

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

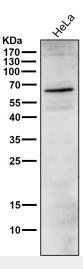
- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## Anti-Phospho-ER alpha (S118) ESR1 Rabbit Monoclonal Antibody - Images

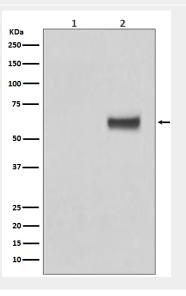




All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.

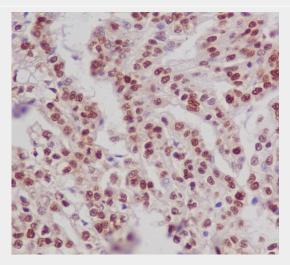


All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.

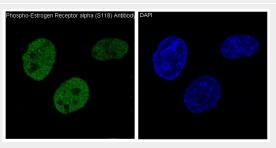




Western blot analysis of Phospho-ER alpha (S118) expression in (1) MCF7 cell lysate; (2) MCF7 cell lysate treated with b-Estradiol and EGF.



Immunohistochemical analysis of paraffin-embedded human kidney, using Phospho-ER alpha (S118) Antibody.



Immunofluorescent analysis of MCF7 cells treated with EGF, using Phospho-ER alpha (S118) Antibody.