

**Anti-Estrogen Receptor alpha (pS118) Antibody**  
**Rabbit polyclonal antibody to Estrogen Receptor alpha (pS118)**  
**Catalog # AP60003****Specification**

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**Anti-Estrogen Receptor alpha (pS118) Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P03372</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	66216

**Anti-Estrogen Receptor alpha (pS118) Antibody - Additional Information****Gene ID** 2099**Other Names**

ESR; NR3A1; Estrogen receptor; ER; ER-alpha; Estradiol receptor; Nuclear receptor subfamily 3 group A member 1

**Target/Specificity**

Recognizes endogenous levels of Estrogen Receptor alpha (pS118) protein.

**Dilution**

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

IHC~~1:100~500

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

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

**Anti-Estrogen Receptor alpha (pS118) 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

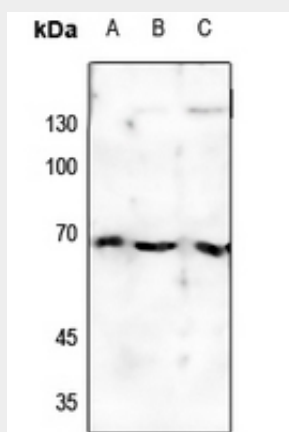
Widely expressed (PubMed:10970861). Not expressed in the pituitary gland (PubMed:10970861)

### Anti-Estrogen Receptor alpha (pS118) Antibody - Protocols

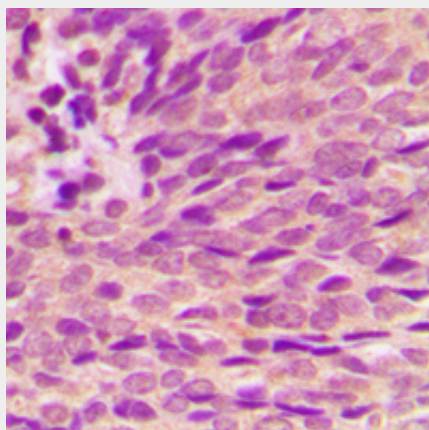
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-Estrogen Receptor alpha (pS118) Antibody - Images



Western blot analysis of Estrogen Receptor alpha (pS118) expression in HEK293T (A), Hela (B), H446 (C) whole cell lysates.



Immunohistochemical analysis of Estrogen Receptor alpha (pS118) staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

#### **Anti-Estrogen Receptor alpha (pS118) Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Estrogen Receptor alpha (pS118). The exact sequence is proprietary.