

## Product datasheet for **AP01582PU-N**

### Estrogen Receptor 1 (ESR1) pSer106 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IHC, WB
Recommended Dilution:	ELISA: 1/5000-1/10000. Western Blot: 1/500-1/1000. Immunohistochemistry: 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of Estrogen Receptor-alpha pSer106 protein.
Formulation:	Phosphate buffered saline (PBS), pH~7.2 containing 15 mM Sodium Azide as preservative. State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE).
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Gene Name:	estrogen receptor 1
Database Link:	<a href="#">Entrez Gene 2099 Human P03372</a>



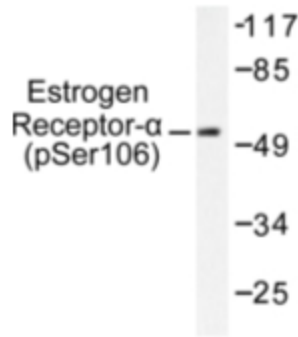
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**Background:**

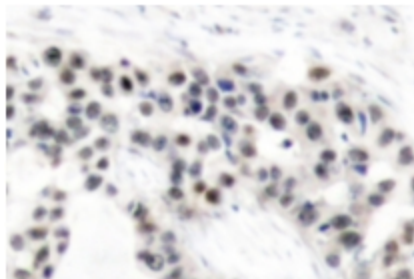
Estrogen receptor  $\alpha$  (ER $\alpha$ , ER, ESR, ESRA, Era, NR3A1, estrogen receptor 1) is a ligand-activated transcription factor composed of several domains important for hormone binding, DNA binding and activation of transcription. Alternative splicing results in several ER $\alpha$  mRNA transcripts, which differ primarily in their 5' untranslated regions. ER $\alpha$  undergoes phosphorylation in response to estradiol binding. Human ER $\alpha$  is predominately phosphorylated on Ser 118 and to a lesser extent on Ser 104 and Ser 106. In response to activation of the mitogen-activated protein kinase pathway, phosphorylation occurs on Ser 118 and Ser 167. These Serine residues are all located within the activation function 1 region of the N-terminal domain of ER $\alpha$ . In contrast, activation of protein kinase A increases the phosphorylation of Ser 236, which is located in the DNA-binding domain. Src kinase-dependent Tyr 537 phosphorylation may enhance estrogen binding to ER $\alpha$ . Mutation of Tyr 537 of the human ER $\alpha$  produces receptors having a range of constitutive activity.

**Synonyms:**

ER alpha, Estradiol receptor, ESR1, ESR, NR3A1

**Product images:**


Western blot (WB) analysis of Estrogen Receptor-alpha pSer106 antibody in extracts from MCF7 cells.



Immunohistochemistry (IHC) analysis of Estrogen Receptor-alpha pSer106 antibody in paraffin-embedded human breast carcinoma tissue.