

**AP02370PU-N****Polyclonal Antibody to Estrogen receptor alpha pSer118 - Aff - Purified**

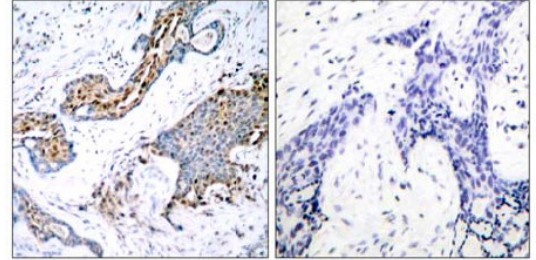
<b>Alternate names:</b>	ER alpha, ESR, ESR1, Estradiol receptor, NR3A1, Nuclear receptor subfamily 3 group A member 1
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	Estrogen Receptor alpha is a 65 kDa protein and a member of the steroid family of nuclear receptors. Estrogen Receptor alpha is a ligand-activated transcription factor that, when bound to estrogen, induces a conformational change that allows dimerization and binding to estrogen response element sequences. When bound to DNA, Estrogen Receptor alpha can positively or negatively regulate gene transcription. Like other steroid hormone receptors, Estrogen Receptors are intracellular proteins. Estrogen Receptors play an important role in regulating mammary gland growth and differentiation. Breast tumors that are ER positive may also show a more favorable response to anti-estrogen therapies.
<b>Uniprot ID:</b>	<a href="#">P03372</a>
<b>NCBI:</b>	<a href="#">NP_000116.2</a>
<b>GeneID:</b>	<a href="#">2099</a>
<b>Host:</b>	Rabbit
<b>Immunogen:</b>	Synthetic phosphopeptide derived from Human Estrogen Receptor-alpha around the phosphorylation site of serine 118 (Q-L-SP-P-F).
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction <b>Purification:</b> Immunoaffinity chromatography <b>Buffer System:</b> PBS (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150 mM NaCl containing 0.02% Sodium Azide as preservative and 50% Glycerol as stabilizer
<b>Applications:</b>	<b>Western blot:</b> 1/500-1/1000. <b>Immunohistochemistry on Paraffin Sections:</b> 1/50-1/100. <b>Immunofluorescence:</b> 1/100-1/200. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Molecular Weight:</b>	66 kDa
<b>Specificity:</b>	Estrogen Receptor-alpha (phospho-Ser118) antibody detects endogenous levels of Estrogen Receptor-alpha only when phosphorylated at serine 118. <b>Species:</b> Human. Other species not tested.
<b>Storage:</b>	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

**General Readings:**

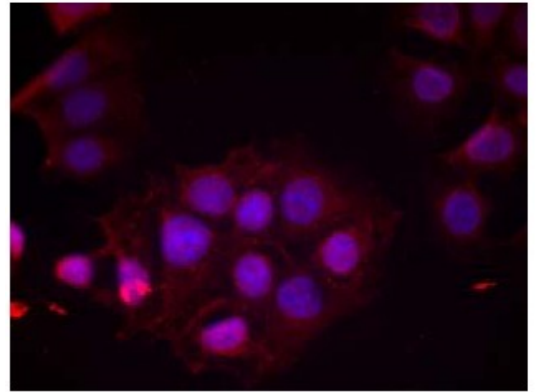
1. Medunjanin S, et al. (2005). J Biol Chem.80 (38):33006-33014.
2. Masuhiro Y, et al. (2005). Proc Natl Acad Sci U S A.102 (23): 8126-8131.
3. Pentecost BT, et al. (2005). Mol Cell Endocrinol.238 (1-2): 9-25.
4. Park KJ, et al. (2005). Mol Cell.18 (1): 71-82.

**Pictures:**

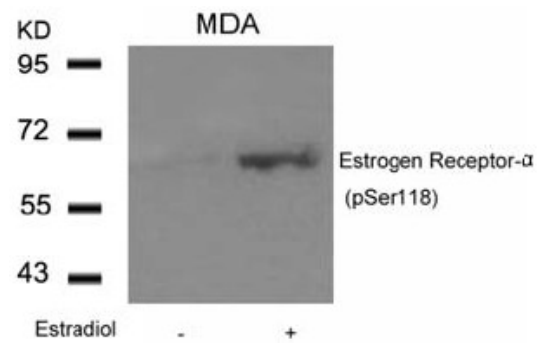
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Estrogen Receptor-alpha (pSer118) antibody (left) or the same antibody preincubated with blocking peptide (right)



Immunofluorescence staining of methanol-fixed MCF cells using Estrogen Receptor-alpha (pSer118) Antibody



Western Blot analysis of extracts from MDA cells untreated or treated with Estradiol using Estrogen Receptor-alpha (pSer118) Antibody



Western blot analysis of extracts from COS7 cells, treated with starve or calf intestinal phosphatase (CIP) using Estrogen Receptor-alpha (pSer118) Antibody

