



# ESR1 Antibody

<b>Product Code</b>	CSB-PA11399A0Rb
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	P03372
<b>Immunogen</b>	Recombinant Human Estrogen receptor protein (10-591AA)
<b>Raised In</b>	Rabbit
<b>Species Reactivity</b>	Human, Rat
<b>Tested Applications</b>	ELISA, WB, IHC, ChIP; Recommended dilution: WB:1:1000-1:5000, IHC:1:20-1:200
<b>Relevance</b>	<p>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. Isoform 3 is involved in activation of NOS3 and endothelial nitric oxide production. Isoforms lacking one or several functional domains are thought to modulate transcriptional activity by competitive ligand or DNA binding and/or heterodimerization with the full length receptor. Isoform 3 can bind to ERE and inhibit isoform 1.</p>
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
<b>Purification Method</b>	>95%, Protein G purified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal



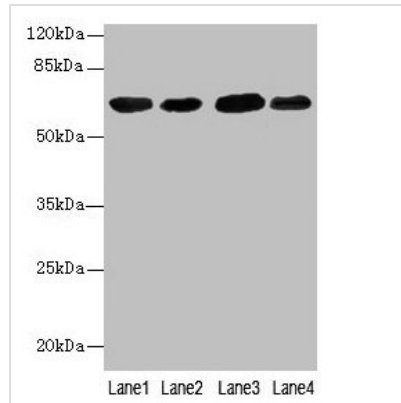
**Alias** Estrogen receptor (ER) (ER-alpha) (Estradiol receptor) (Nuclear receptor subfamily 3 group A member 1), ESR1, ESR NR3A1

**Species** Human

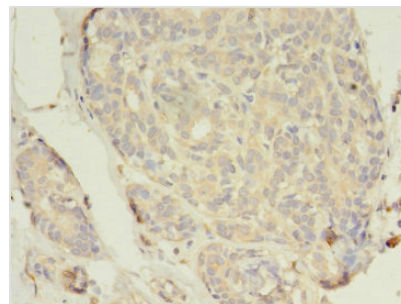
**Research Area** Signal Transduction

**Target Names** ESR1

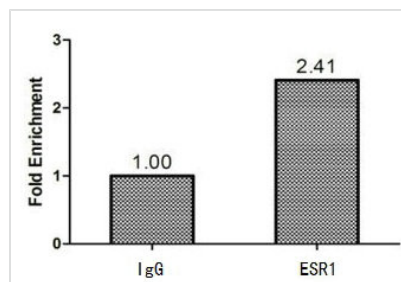
**Image**



Western blot  
 All lanes: ESR1 antibody at 7µg/ml  
 Lane 1: Hela whole cell lysate  
 Lane 2: MCF-7 whole cell lysate  
 Lane 3: Rat brain tissue  
 Lane 4: Colo320 whole cell lysate  
 Secondary  
 Goat polyclonal to rabbit IgG at 1/10000 dilution  
 Predicted band size: 67, 54, 48, 36 kDa  
 Observed band size: 67 kDa



Immunohistochemistry of paraffin-embedded human breast cancer using CSB-PA11399A0Rb at dilution of 1:100



Chromatin Immunoprecipitation MCF-7 ( $1.1 \times 10^6$ ) were cross-linked with formaldehyde, sonicated, and immunoprecipitated with 4µg anti-ESR1 or a control normal rabbit IgG. The resulting ChIP DNA was quantified using real-time PCR with primers (CSB-PP11399HU) against the ESR1 promoter.