



# ESR1 Monoclonal Antibody

<b>Product Code</b>	CSB-MA442659
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	P03372
<b>Immunogen</b>	Synthesized peptide derived from human Estrogen Receptor $\alpha$
<b>Raised In</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Tested Applications</b>	ELISA, IHC; Recommended dilution: 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>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Purification Method</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
<b>Isotype</b>	IgG2b, Kappa
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Monoclonal Antibody



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**Immunogen Species** Homo sapiens (Human)

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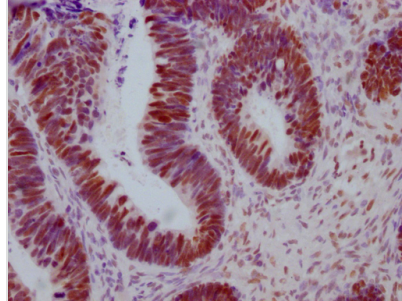
**Target Names** ESR1

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**Clone No.** 2C10

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**Image**



IHC image of CSB-MA442659 diluted at 1:100 and staining in paraffin-embedded human ovarian cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-mouse IgG polymer labeled by HRP and visualized using 0.05% DAB.

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**Usage**

For Research Use Only. Not for use in diagnostic or therapeutic procedures.