Datasheet for ABIN7152043

anti-Estrogen Receptor alpha antibody (AA 10-591)

3 Images

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Overview

Quantity:	100 µg
Target:	Estrogen Receptor alpha (ESR1)
Binding Specificity:	AA 10-591
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Estrogen Receptor alpha antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Chromatin Immunoprecipitation (ChIP)

Product Details

Immunogen:	Recombinant Human Estrogen receptor protein (10-591AA)
Isotype:	IgG
Cross-Reactivity:	Human, Rat
Purification:	>95%, Protein G purified

Target Details

Target:	Estrogen Receptor alpha (ESR1)
Alternative Name:	ESR1 (ESR1 Products)
Background:	Background: 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. Aliases: 7*/654 isoform antibody, 7*/819 2 isoform antibody, 7*/822 isoform antibody, 8*/901 isoform antibody, 8*/941 isoform antibody, DKFZp686N23123 antibody, ER alpha antibody, ER antibody, ER-alpha antibody, Era antibody, ESR antibody, ESR1 antibody, ESR1_HUMAN antibody, ESRA antibody, Estradiol receptor antibody, Estrogen nuclear receptor alpha antibody, Estrogen receptor 1 antibody, Estrogen receptor alpha 3*,4,5,6,7*/822 isoform antibody, Estrogen receptor alpha antibody, Estrogen receptor alpha delta 3*,4,5,6,7*,8*/941 isoform antibody, Estrogen receptor alpha delta 3*,4,5,6,7*/819 2 isoform antibody, Estrogen receptor alpha delta 4 +49 isoform antibody, Estrogen receptor alpha delta 4*,5,6,7*/654 isoform antibody, Estrogen receptor alpha delta 4*,5,6,7,8*/901 isoform antibody, Estrogen receptor alpha E1 E2 1 2 antibody, Estrogen receptor alpha E1 N2 E2 1 2 antibody, Estrogen receptor antibody, ESTRR antibody, NR3A1 antibody, Nuclear receptor subfamily 3 group A member 1 antibody
UniProt:	P03372
Pathways:	Nuclear Receptor Transcription Pathway, EGFR Signaling Pathway, Retinoic Acid Receptor Signaling Pathway, Intracellular Steroid Hormone Receptor Signaling Pathway, Steroid Hormone Mediated Signaling Pathway, Ribonucleoprotein Complex Subunit Organization,

Target Details

Ribosome Assembly

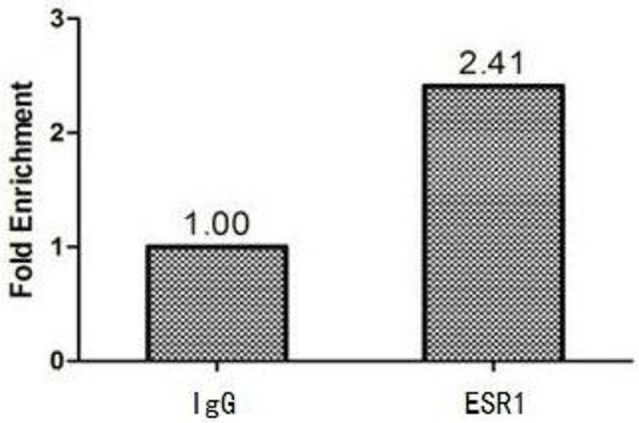
Application Details

Application Notes:	Recommended dilution: WB:1:1000-1:5000, IHC:1:20-1:200,
Restrictions:	For Research Use only

Handling

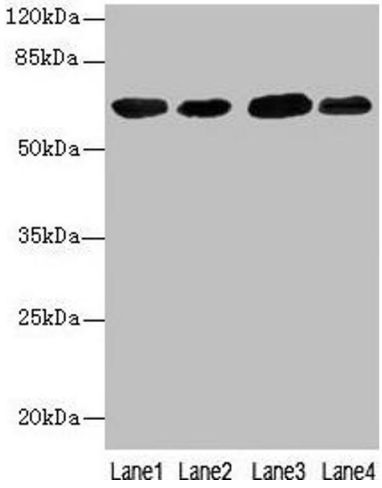
Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



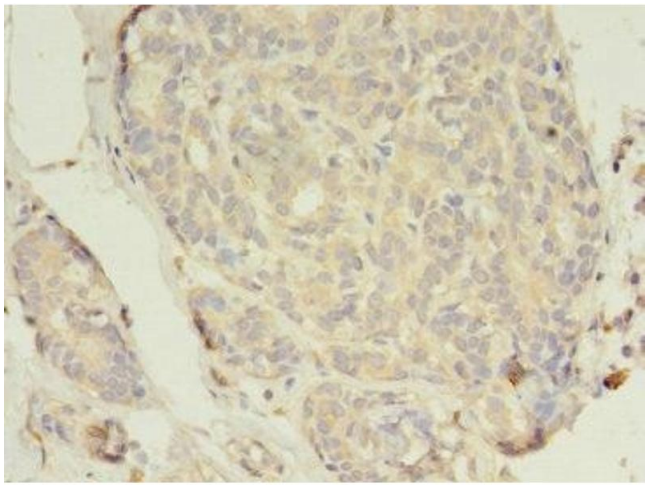
Immunohistochemistry

Image 1. Chromatin Immunoprecipitation MCF-7 (1.1*10 6) were cross-linked with formaldehyde, sonicated, and immunoprecipitated with 4 µg anti-ESR1 or a control normal rabbit IgG. The resulting ChIP DNA was quantified using real-time PCR with primers against the ESR1 promoter.



Western Blotting

Image 2. Western blot All lanes: ESR1 antibody at 7 µg/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

Image 3. Immunohistochemistry of paraffin-embedded human breast cancer using ABIN7152043 at dilution of 1:100