

Rabbit Anti-Estrogen Receptor alpha Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP52087**Specification****Rabbit Anti-Estrogen Receptor alpha Polyclonal Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	P06211
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	67030

Rabbit Anti-Estrogen Receptor alpha Polyclonal Antibody - Additional Information**Gene ID** 24890**Other Names**

Esr; ER-alpha; RNESTROR; Estrogen receptor; ER; Estradiol receptor; Nuclear receptor subfamily 3 group A member 1; Esr1; Estr; Nr3a1

Dilution

WB~1:100~1:500<br \>IHC-P~1:100~1:500

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Rabbit Anti-Estrogen Receptor alpha Polyclonal Antibody - Protein Information**Name** Esr1**Synonyms** Esr, Estr, Nr3a1**Function**

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. Essential for MTA1-mediated transcriptional regulation of BRCA1 and BCAS3 (By similarity). Maintains neuronal survival in response to ischemic reperfusion injury when in the presence of circulating estradiol (17-beta-estradiol/E2) (PubMed:21808025).

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00407}. Cytoplasm. Golgi apparatus. Cell membrane. Note=Colocalizes with ZDHHC7 and ZDHHC21 in the Golgi apparatus where most probably palmitoylation occurs. Associated with the plasma membrane when palmitoylated.

Tissue Location

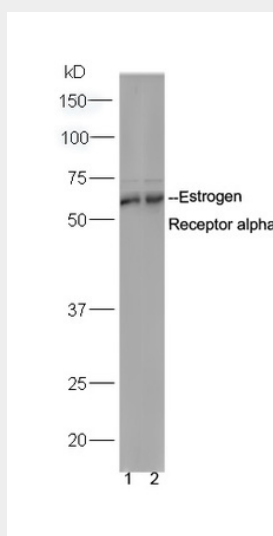
Expressed in the CA1 region of the hippocampus, expression decreases with age (at protein level) (PubMed:21808025) Expressed in the uterus (at protein level) (PubMed:21808025)

Rabbit Anti-Estrogen Receptor alpha Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

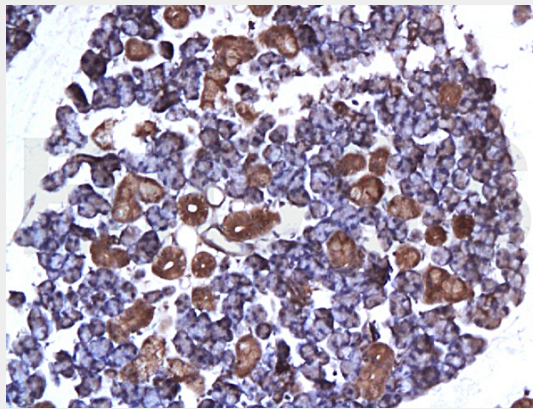
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Rabbit Anti-Estrogen Receptor alpha Polyclonal Antibody - Images



Lane 1: MCF-7 Lane 2: DU145 lysates probed with Anti-Estrogen Receptor alpha Polyclonal Antibody, Unconjugated (AP52087) at 1:300 in 4°C. Followed by conjugation to secondary

antibody at 1:5000 90min in 37°C.



Formalin-fixed and paraffin embedded: rat submaxillary gland labeled with Anti-ER-alpha Polyclonal Antibody (AP52087), Unconjugated at 1:200 followed by conjugation to the secondary antibody and DAB staining

Rabbit Anti-Estrogen Receptor alpha Polyclonal Antibody - 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. Essential for MTA1-mediated transcriptional regulation of BRCA1 and BCAS3 (By similarity).