

# Estrogen Receptor α (ABT4R) Rabbit mAb (Ready to Use)

CatalogNo: YM7116R Recombinant R

# Key Features

Host Species

Rabbit

Reactivity • Human, Applications
• IHC

IsotypeIgG1,Kappa

#### **Recommended Dilution Ratios**

Ready to use for IHC

#### **Storage**

Storage*	2°C to 8°C/1 year
Formulation	The prediluted ready-to-use antibody is diluted in phosphate buffer saline containing stabilizing protein and 0.05% Proclin 300

## **Basic Information**

Clonality	Monoclonal
Clone Number	ABT4R

## Immunogen Information

ImmunogenSynthesized peptide derived from human Estrogen Receptor α. AA range:450-595SpecificityThis antibody detects endogenous levels of ESR1

## **Target Information**

- Gene nameEstrogen receptor (ER) (ER-alpha) (Estradiol receptor) (Nuclear receptor subfamily 3 group<br/>A member 1)
- Protein NameEstrogen receptor (ER) (ER-alpha) (Estradiol receptor) (Nuclear receptor subfamily 3 group<br/>A member 1)

Organism	Gene ID	UniProt ID
Human	<u>2099;</u>	<u>P03372;</u>
Mouse	<u>13982;</u>	<u>P19785;</u>
Rat	<u>24890;</u>	<u>P06211;</u>

- Cellular Localization [Isoform 1]: Nucleus . Cytoplasm . Cell membrane ; Peripheral membrane protein ; Cytoplasmic side . A minor fraction is associated with the inner membrane.; [Isoform 3]: Nucleus. Cytoplasm. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell membrane; Single-pass type I membrane protein. Associated with the inner membrane via palmitoylation (Probable). At least a subset exists as a transmembrane protein with a Nterminal extracellular domain. .; Nucleus. Golgi apparatus. Cell membrane. Colocalizes with ZDHHC7 and ZDHHC21 in the Golgi apparatus where most probably palmitoylation occurs. Associated with the plasma membrane when palmitoylated.
- **Tissue specificity** Widely expressed (PubMed:10970861). Not expressed in the pituitary gland (PubMed:10970861). ; [Isoform 3]: Widely expressed, however not expressed in the pituitary gland.
- **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-Bmediated 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 .; [Isoform 3]: 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 . Binds to ERE and inhibits isoform 1.

#### Validation Data

# **Contact information**

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Please scan the QR code to access additional product information: Estrogen Receptor α (ABT4R) Rabbit mAb (Ready to Use)

For Research Use Only. Not for Use in Diagnostic Procedures.

Antibody | ELISA Kits | Protein | Reagents