

## ER $\alpha$ (Phospho Ser102) Rabbit pAb

CatalogNo: YP1094 **Orthogonal Validated** 

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human, Mouse, Rat

#### Applications

- WB, IHC, IF, ELISA

#### MW

- 66kD (Calculated)

#### Isotype

- IgG

### Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

### Recommended Dilution Ratios

**IHC 1:100-1:300**

**WB 1:1000-1:5000**

**ELISA 1:5000**

**IF 1:50-200**

### Basic Information

**Clonality** Polyclonal

### Immunogen Information

**Immunogen** The antiserum was produced against synthesized peptide derived from human Estrogen Receptor-alpha around the phosphorylation site of Ser102. AA range:71-120

**Specificity**

Phospho-ER $\alpha$  (S102) Polyclonal Antibody detects endogenous levels of ER $\alpha$  protein only when phosphorylated at S102. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):LNSVS

**| Target Information**

**Gene name** ESR1

**Protein Name** Estrogen receptor

Organism	Gene ID	UniProt ID
Human	<a href="#">2099</a> ;	<a href="#">P03372</a> ;
Mouse	<a href="#">13982</a> ;	<a href="#">P19785</a> ;
Rat	<a href="#">24890</a> ;	<a href="#">P06211</a> ;

**Cellular Localization**

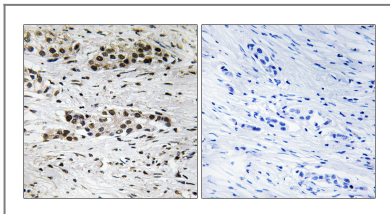
[Isoform 1]: Nucleus . Cytoplasm . Cell membrane ; Peripheral membrane protein ; Cytoplasmic side . A minor fraction is associated with the inner membrane.; [Isoform 3]: Nucleus. Cytoplasm. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell membrane; Single-pass type I membrane protein. Associated with the inner membrane via palmitoylation (Probable) . At least a subset exists as a transmembrane protein with a N-terminal 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.

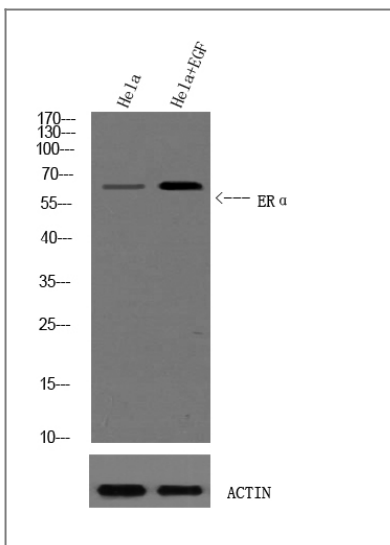
## Function

Domain: Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal steroid-binding domain. ,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. ,online information: Estrogen receptor entry ,polymorphism: Genetic variations in ESR1 are correlated with bone mineral density (BMD). Low BMD is a risk factor for osteoporotic fracture. Osteoporosis is characterized by reduced bone mineral density, disruption of bone microarchitecture, and the alteration of the amount and variety of non-collagenous proteins in bone. Osteoporotic bones are more at risk of fracture. ,PTM: Glycosylated; contains N-acetylglucosamine, probably O-linked. ,PTM: Phosphorylated by cyclin A/CDK2. Phosphorylation probably enhances transcriptional activity. ,similarity: Belongs to the nuclear hormone receptor family. ,similarity: Belongs to the nuclear hormone receptor family. NR3 subfamily. ,similarity: Contains 1 nuclear receptor DNA-binding domain. ,subunit: Interacts with SLC30A9 (By similarity). Binds DNA as a homodimer. Can form a heterodimer with ESR2. Interacts with NCOA3, NCOA5 and NCOA6 coactivators, leading to a strong increase of transcription of target genes. Interacts with NCOA7 in a ligand-inducible manner. Interacts with PHB2, PELP1 and UBE1C. Interacts with AKAP13. Interacts with CUEDC2. Interacts with KDM5A. Interacts with SMARD1. Interacts with HEXIM1 and MAP1S. Interacts with PBXIP1. Interaction with MUC1 is stimulated by 17 beta-estradiol (E2) and enhances ESR1-mediated transcription. Interacts with DNTTIP2, FAM120B and UIMC1. Interacts with isoform 4 of TXNRD1. Interacts with MLL2. Interacts with ATAD2 and this interaction is enhanced by estradiol. ,

## Validation Data



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using Estrogen Receptor-alpha (Phospho-Ser102) Antibody. The picture on the right is blocked with the phospho peptide.



Western Blot analysis of various cell lysis. Primary Antibody was diluted at 1:1000. Secondary antibody (catalog#:RS23920) was diluted at 1:10000

## Contact information

Orders: order.cn@immunoway.com  
Support: support.cn@immunoway.com  
Telephone: 400-8787-807(China)  
Website: <http://www.immunoway.com.cn>  
Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information:  
**ER $\alpha$  (Phospho Ser102) Rabbit pAb**

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