Datasheet for ABIN6256090

# anti-Estrogen Receptor alpha antibody (pSer104)

3 Images

Go to Product page

## Overview

| | |
|---|---|
| Quantity: | 100 µL |
| Target: | Estrogen Receptor alpha (ESR1) |
| Binding Specificity: | pSer104 |
| Reactivity: | Human, Mouse, Rat |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This Estrogen Receptor alpha antibody is un-conjugated |
| Application: | Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Immunofluorescence (IF), Immunocytochemistry (ICC) |

## Product Details

| | |
|---|---|
| Immunogen: | A synthesized peptide derived from human Estrogen Receptor- alpha around the phosphorylation site of Ser104. |
| Isotype: | IgG |
| Specificity: | Phospho-Estrogen Receptor alpha (Ser104) Antibody detects endogenous levels of Estrogen Receptor alpha only when phosphorylated at Serine 104. |
| Predicted Reactivity: | Pig,Bovine,Horse,Rabbit,Dog |
| Purification: | The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns. |

## Target Details

| | |
|---|---|
| Target: | Estrogen Receptor alpha (ESR1) |
| Alternative Name: | ESR1 (ESR1 Products) |
| Background: | Description: 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. Essential for MTA1-mediated transcriptional regulation of BRCA1 and BCAS3. Isoform 3 can bind to ERE and inhibit isoform 1.<br>Gene: ESR1 |
| Molecular Weight: | 66kDa |
| Gene ID: | 2099 |
| 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, Ribosome Assembly |

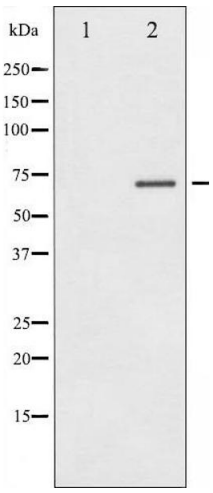
## Application Details

| | |
|---|---|
| Application Notes: | WB 1:500-1:2000, IHC 1:50-1:200, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000 |
| Restrictions: | For Research Use only |

## Handling

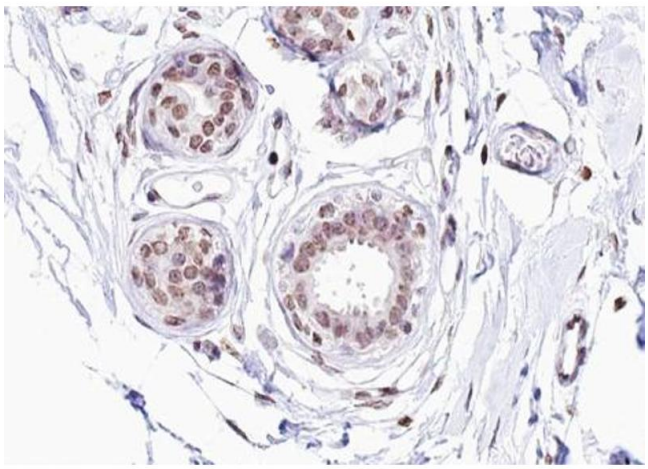
| | |
|---|---|
| Format: | Liquid |
| Concentration: | 1 mg/mL |
| Buffer: | Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol. |
| Preservative: | Sodium azide |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage: | -20 °C |
| Storage Comment: | Store at -20 °C. Stable for 12 months from date of receipt. |
| Expiry Date: | 12 months |

## Images



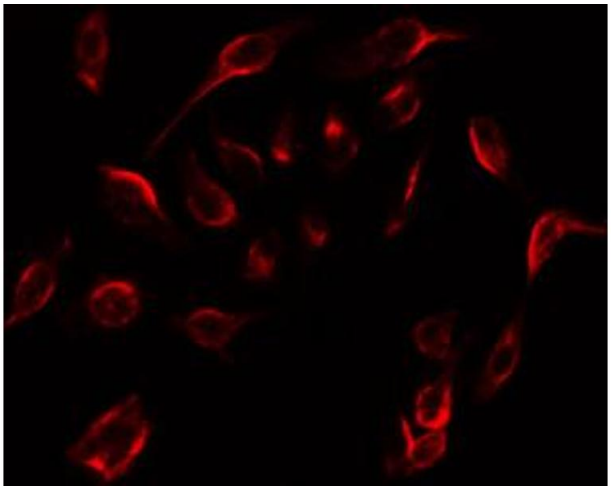

**Western Blotting**

**Image 1.** Western blot analysis of Estrogen Receptor alpha phosphorylation expression in 293 whole cell lysates,The lane on the left is treated with the antigen-specific peptide.



## Immunohistochemistry

**Image 2.** ABIN6267276 at 1/100 staining human Breast carcinoma tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



## Immunofluorescence (fixed cells)

**Image 3.** ABIN6267276 staining 293 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.