**Product Name:** **ERβ (phospho Ser105) Rabbit Polyclonal Antibody**
**Catalog #:** **APRab04644**
For research use only.

## Summary

| | |
|---|---|
| **Description** | Rabbit polyclonal Antibody |
| **Host** | Rabbit |
| **Application** | WB,ICC/IF,ELISA |
| **Reactivity** | Human,Mouse,Rat |
| **Conjugation** | Unconjugated |
| **Modification** | Phosphorylated |
| **Isotype** | IgG |
| **Clonality** | Polyclonal |
| **Form** | Liquid |
| **Concentration** | 1mg/ml |
| **Storage** | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| **Shipping** | Ice bags |
| **Buffer** | Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N. |
| **Purification** | Affinity purification |

## Application

| | |
|---|---|
| **Dilution Ratio** | WB 1:500-1:2000,ICC/IF 1:200-1:1000,ELISA 1:5000-1:10000 |
| **Molecular Weight** | 59kDa |

## Antigen Information

| | |
|---|---|
| **Gene Name** | ESR2 |
| **Alternative Names** | ESR2; ESTRB; NR3A2; Estrogen receptor beta; ER-beta; Nuclear receptor subfamily 3 group A member 2 |
| **Gene ID** | 2100.0 |
| **SwissProt ID** | Q92731 |
| **Immunogen** | The antiserum was produced against synthesized peptide derived from human Estrogen Receptor-beta around the phosphorylation site of Ser105. AA range:71-120 |

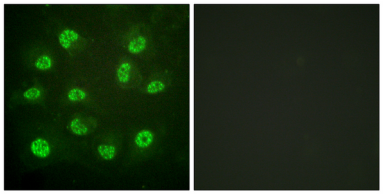
## Background

This gene encodes a member of the family of estrogen receptors and superfamily of nuclear receptor transcription factors. The gene product contains an N-terminal DNA binding domain and C-terminal ligand binding domain and is localized to the nucleus, cytoplasm, and mitochondria. Upon binding to 17beta-estradiol or related ligands, the encoded protein forms homo- or hetero-dimers that interact with specific DNA sequences to activate transcription. Some isoforms dominantly inhibit the activity of other estrogen receptor family members. Several alternatively spliced transcript variants of this gene have been described, but the full-length nature of some of these variants has not been fully characterized. [provided by RefSeq, Jul 2008],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. Binds estrogens with an affinity similar to that of ESR1, and activates expression of reporter genes containing estrogen response elements (ERE) in an estrogen-dependent manner. Isoform beta-cx lacks ligand binding ability and has no or only very low ere binding activity resulting in the loss of ligand-dependent transactivation ability. DNA-binding by ESR1 and ESR2 is rapidly lost at 37 degrees Celsius in the absence of ligand while in the presence of 17 beta-estradiol and 4-hydroxy-tamoxifen loss in DNA-binding at elevated temperature is more gradual.,online information:Estrogen receptor entry,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:Binds DNA as a homodimer. Can form a heterodimer with ESR1. Interacts with NCOA3, NCOA5 and NCOA6 coactivators, leading to a strong increase of transcription of target genes. Interacts with PELP1 and UBE1C. Isoform beta-2/cx preferentially forms a hetereodimer with ESR1 rather than ESR2 and inhibits DNA-binding by ESR1. Interacts with AKAP13. Interacts with DNTTIP2. Interacts with isoform 4 of TXNRD1.,tissue specificity:Isoform beta-1 is expressed in testis and ovary, and at a lower level in heart, brain, placenta, liver, skeletal muscle, spleen, thymus, prostate, colon, bone marrow, mammary gland and uterus. Also found in uterine bone, breast, and ovarian tumor cell lines, but not in colon and liver tumors. Isoform beta-2 is expressed in spleen, thymus, testis and ovary and at a lower level in skeletal muscle, prostate, colon, small intestine, leukocytes, bone marrow, mammary gland and uterus. Isoform beta-3 is found in testis. Isoform beta-4 is expressed in testis, and at a lower level in spleen, thymus, ovary, mammary gland and uterus. Isoform beta-5 is expressed in testis, placenta, skeletal muscle, spleen and leukocytes, and at a lower level in heart, lung, liver, kidney, pancreas, thymus, prostate, colon, small intestine, bone marrow, mammary gland and uterus. Not expressed in brain.,

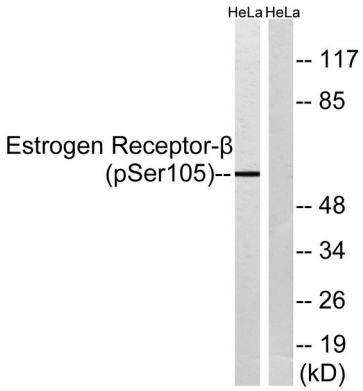
## Research Area

Epigenetics and Nuclear Signaling

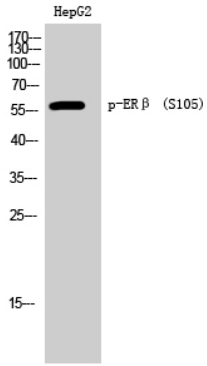
## Image Data



Immunofluorescence analysis of HUVEC cells, using Estrogen Receptor-beta (Phospho-Ser105) Antibody. The picture on the right is blocked with the phospho peptide.




Western blot analysis of lysates from HeLa cells, using Estrogen Receptor-beta （Phospho-Ser105） Antibody. The lane on the right is blocked with the phospho peptide.




Western Blot analysis of HepG2 cells using Phospho-ERβ （S105） Polyclonal Antibody