

Rabbit Estrogen Receptor-beta Polyclonal Antibody | anti-ESR2 antibody

Phospho-Estrogen Receptor-beta (Ser87) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329780	Rabbit	Human Predicted Reactivity: Pig (82%), Bovine (82%), Sheep (82%), Rabbit (82%), Dog (82%)	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

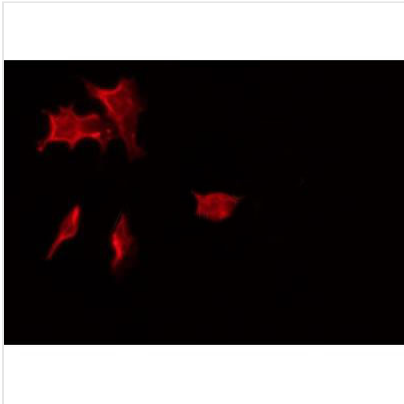
Estrogen Receptor-beta; Polyclonal Antibody; Phospho-Estrogen Receptor-beta (Ser87) Antibody; ER BETA; ER-beta; Erb; ESR B; ESR BETA; ESR2; ESR2_HUMAN; ESRB; ESTRB; estrogen nuclear receptor beta variant a; estrogen nuclear receptor beta variant b; estrogen receptor 2 (ER beta); Estrogen receptor 2; estrogen receptor beta 4; Estrogen receptor beta; NR3A2; Nuclear receptor subfamily 3 group A member 2; anti-ESR2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human Predicted Reactivity: Pig (82%), Bovine (82%), Sheep (82%), Rabbit (82%), Dog (82%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-Estrogen Receptor-beta (Ser87) Antibody detects endogenous levels of Estrogen Receptor-beta only when phosphorylated at Ser87. Tissue Specificity: Isoform 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 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 4 is found in testis. Isoform 5 is expressed in testis, and at a lower level in spleen, thymus, ovary, mammary gland and uterus. Isoform 6 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.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-ESR2 antibody	ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Estrogen Receptor-beta around the phosphorylation site of Ser87.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Phosphorylation at Ser-87 and Ser-105 recruits NCOA1.
Subunit Structure	Binds DNA as a homodimer. Can form a heterodimer with ESR1. Interacts with NCOA1, NCOA3, NCOA5 and NCOA6 coactivators, leading to a strong increase of transcription of target genes. Interacts with PELP1 and UBE1C. Isoform 2 preferentially forms a heterodimer with ESR1 rather than ESR2 and inhibits DNA-binding by ESR1. Interacts with AKAP13. Interacts with DNTTIP2. Interacts with isoform 4 of TXNRD1. Interacts with CCDC62 in the presence of estradiol/E2; this interaction seems to enhance the transcription of target genes, including cyclin-D1/CCND1 AP-1 promoter. Interacts with DNAAF4 (By similarity). Interacts with PRMT2. Interacts with CCAR2 (via N-terminus) in a ligand-independent manner. Interacts with RBM39, in the presence of estradiol (E2) (By similarity).

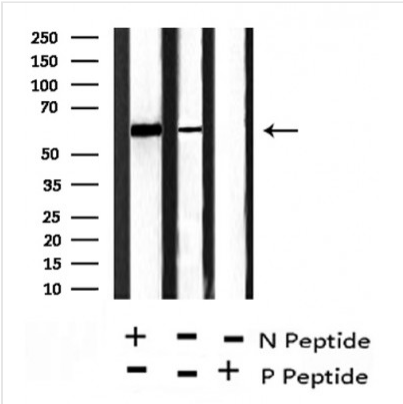
Similarity	Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal ligand-binding domain.Belongs to the nuclear hormone receptor family. NR3 subfamily.
Subcellular Location	Nucleus.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

Staining HepG2 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 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of Estrogen Receptor-β (Phospho-Ser87) using forskolin treated HeLa whole cell lysates. -/+ means absence or presence of N peptide (non-phospho peptide) and P peptide (phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-ESR2 antibody	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.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	94538325
NCBI GeneID	2100
NCBI Accession #	NP_001035365.1
NCBI GenBank Nucleotide #	NM_001040275.1
UniProt Accession #	Q92731; O60608; O60685; O60702; O60703; O75583; O75584; Q0MWT5; Q0MWT6; Q86Z31; Q9UEV6; A8K8K5
Molecular Weight	59,216 Da
NCBI Official Full Name	estrogen receptor beta isoform 2
NCBI Official Synonym Full Names	estrogen receptor 2 (ER beta)
NCBI Official Symbol	ESR2
NCBI Official Synonym Symbols	Erb; ESRB; ESTRB; NR3A2; ER-BETA; ESR-BETA
NCBI Protein Information	estrogen receptor beta; estrogen receptor beta 4; estrogen nuclear receptor beta variant a; estrogen nuclear receptor beta variant b; nuclear receptor subfamily 3 group A member 2
UniProt Protein Name	Estrogen receptor beta

UniProt Gene Name	ESR2
UniProt Synonym Gene Names	ESTRB; NR3A2; ER-beta
UniProt Entry Name	ESR2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/estrogen-receptor-beta-antibody-peptide-elisa-immunocytochemistry-immunofluorescence-western-blot-elisa/329780>