SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-phospho-Estrogen Receptor beta (Ser87)/APC Conjugated antibody

SL6959R-APC

Product Name	Anti-phospho-Estrogen Receptor beta (Ser87)/APC
Chinese Name	APC 标记的磷酸化雌激素受体 β 抗体
Alias	Estrogen Receptor beta (phospho S87); Estrogen Receptor beta (phospho Ser87); p-ER beta(S87); p-ER beta(Ser87); phospho-ER-beta(Ser87); phospho-ER-beta(S87); Estrogen receptor-beta; ER BETA; ER-BETA; ER-beta; Erb; ESR 2; ESR 2; ESR B; ESR-B; ESR BETA; ESR-BETA; ESR2; 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-2; estrogen receptor beta 4; Estrogen receptor beta; NR3A2; Nuclear receptor subfamily 3 group A member 2.
Product Type	Phosphorylated anti
Research Area	Tumour Cell biology immunology Chromatin and nuclear signals Signal transduction transcriptional regulatory factor
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Mouse(predicted:Rat,Rabbit,Sheep)
Applications	ICC/IF=1:50-200,Flow-Cyt=1μg/Test not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	66kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthesised phosphopeptide derived from human Estrogen Receptor beta around the phosphorylation site of Ser87 [HL(p-S)PL]
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The

lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Product Detail

background:
Estrogen receptors (ER) are members of the steroid/thyroid hormone receptor superfamily of ligand-activated transcription factors. Estrogen receptors, including ER alpha and ER beta, contain DNA binding and ligand binding domains and are critically involved in regulating the normal function of reproductive tissues. ER alpha and ER beta A have been shown to be differentially activated by various ligands. Receptor-ligand interactions trigger a cascade of events, including dissociation from heat shock proteins, receptor dimerization, phosphorylation and the association of the hormone activated receptor with specific regulatory elements in target genes. Evidence suggests that ER alpha and ER beta may be regulated by distinct mechanisms even though they share many functional characteristics.

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.

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 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 DYX1C1. Interacts with PRMT2.

Subcellular Location:
Nucleus.

Tissue Specificity:
Tissue specificityIsoform 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.

Similarity:
Belongs to the nuclear hormone receptor family. NR3 subfamily.
Contains 1 nuclear receptor DNA-binding domain.

Database links:

Entrez Gene: 2100 Human

Entrez Gene: 13983 Mouse

Entrez Gene: 25149 Rat

Omim: 601663 Human

SwissProt: Q92731 Human

SwissProt: O08537 Mouse

SwissProt: Q62986 Rat

Unigene: 660607 Human

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.