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ERβ Rabbit pAb

CatalogNo: YT1637 Orthogonal Validated 💽

Key Features

Host Species • Rabbit	Reactivity Human,Mouse,Rat 	Applications WB,IHC,IF,ELISA
MW • 59kD (Observed)	Isotype • IgG	

Recommended Dilution Ratios

WB 1:500-2000 IF 1:50-300 IHC 1:50-300

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.

Basic Information

Clonality Polyclonal

Immunogen Information

Immunogen	The antiserum was produced against synthesized peptide derived from human Estrogen Receptor-beta. AA range:71-120
Specificity	ERβ Polyclonal Antibody detects endogenous levels of ERβ protein.

Target Information

Gene name ESR2 ESTRB NR3A2

Protein Name Estrogen receptor beta

Organism	Gene ID	UniProt ID
Human	<u>2100;</u>	<u>Q92731;</u>
Mouse	<u>13983;</u>	<u>008537;</u>
Rat	<u>25149;</u>	<u>Q62986;</u>

Cellular Nucleus .

Localization

- **Tissue specificity** [Isoform 1]: 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]: 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]: Expressed in the testis. ; [Isoform 5]: Expressed in testis, and at a lower level in spleen, thymus, ovary, mammary gland and uterus. ; [Isoform 6]: 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.
- 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. 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.,

Validation Data



Immunofluorescence analysis of mouse-kidney tissue. 1,ERβ Polyclonal Antibody(red) was diluted at 1:200(4° overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded Human-lung-cancer tissue. 1,ER β Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Human-stomach-cancer tissue. 1,ER β Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Rat-liver tissue. 1,ERβ Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Western Blot analysis of various cells using $\text{ER}\beta$ Polyclonal Antibody diluted at 1:1000



Immunohistochemical analysis of paraffin-embedded Human lung cancer. 1, Antibody was diluted at 1:100(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunofluorescence analysis of HeLa cells, using Estrogen Receptor-beta Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 1)3T3 , 2) VEC , 3) HeLa cells, (Green) primary antibody was diluted at 1:1000, 4°over night, secondary antibody(cat:RS23920)was diluted at 1:10000, 37° 1hour. (Red) Actin β Monoclonal Antibody(5B7) (cat:YM3028) antibody was diluted at 1:5000 as loading control, 4° over night, secondary antibody(cat:RS23710)was diluted at 1:10000, 37° 1hour.

Contact information

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Please scan the QR code to access additional product information: ERβ Rabbit pAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Antibody | ELISA Kits | Protein | Reagents