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# ESR2 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1702c

## Product Information

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| **Application** | FC, WB, E |
| **Primary Accession** | Q92731 |
| **Other Accession** | Q62986, Q9XSW2, Q9PTU5, Q9XSB5 |
| **Reactivity** | Human |
| **Predicted** | Bovine, Chicken, Pig, Rat, Mouse, Canine, Rabbit |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Calculated MW** | 59216 |
| **Antigen Region** | 369-397 |

## Additional Information

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| **Gene ID** | 2100 |
| **Other Names** | Estrogen receptor beta, ER-beta, Nuclear receptor subfamily 3 group A member 2, ESR2, ESTRB, NR3A2 |
| **Target/Specificity** | This ESR2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 369-397 amino acids from the Central region of human ESR2. |
| **Dilution** | FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | ESR2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | ESR2 |
| **Synonyms** | ESTRB, NR3A2 |
| **Function** | Nuclear hormone receptor. Binds estrogens with an affinity similar to that |

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| | of ESR1/ER-alpha, and activates expression of reporter genes containing estrogen response elements (ERE) in an estrogen- dependent manner (PubMed:20074560). |
| **Cellular Location** | Nucleus {ECO:0000255\|PROSITE-ProRule:PRU00407, ECO:0000269\|PubMed:19126643, ECO:0000269\|PubMed:20074560} |
| **Tissue Location** | [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 4]: Expressed in the testis. [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. |

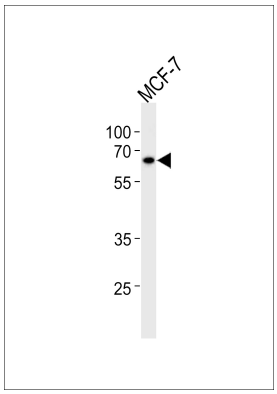
## Background

ESR2 is a nuclear hormone receptor. The protein 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.

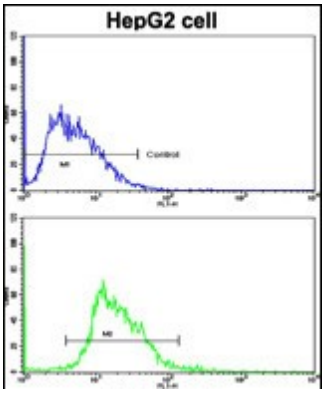
## References

Chen H., Lin R.J.Cell 90:569-580(1997)
Caira F., Antonson P.J. Biol. Chem. 275:5308-5317(2000)
Bu H., Kashireddy P.Biochem. Biophys. Res. Commun. 317:54-59(2004)

## Images




ESR2 Antibody (Center) (Cat. #AP1702c) western blot analysis in MCF-7 cell line lysates (35ug/lane).This demonstrates the ESR2 antibody detected the ESR2 protein (arrow).




Flow cytometric analysis of HepG2 cells using ESR2 Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## Citations

- Pregnancy serum facilitates hepatitis E virus replication in vitro.
- β-Estradiol antagonizes the inhibitory effects of caffeine in BMMSCs via the ERβ-mediated cAMP-dependent PKA pathway.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.