

Mouse ESR2 Monoclonal Antibody | anti-ESR2 antibody

ESR2 Antibody

CATALOG # AAA283551	HOST Mouse	REACTIVITY Human (Predicted Reactivity: Bovine, Chicken, Pig, Rat, Sheep)	APPLICATIONS ELISA, Western Blot
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PRODUCT SYNONYMS

ESR2; Monoclonal Antibody; ESR2 Antibody; Estrogen receptor beta; ER-beta; Nuclear receptor subfamily 3 group A member 2; ESRB; NR3A2; anti-ESR2 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human (Predicted Reactivity: Bovine, Chicken, Pig, Rat, Sheep)
Clonality	Monoclonal
Isotype	IgG1
Clone Number	555CT18.5.5
Specificity	This ESR2 antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 369-397 amino acids from human ESR2.
Form/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.
Sequence Positions	369-397
Sequence Length	495
Applicable Applications for anti-ESR2 antibody	ELISA, WB (Western Blot)
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 (PubMed:). 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.
Cellular Location	Nucleus {ECO:0000255 PROSITE-ProRule:PRU00407,ECO:0000269 PubMed:19126643,ECO:0000269 PubMed:20074560}
Tissue Location	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 ovaryand 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.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



WB (Western Blot)
ESR2 Antibody western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the ESR2 antibody detected the ESR2 protein (arrow).

ADDITIONAL INFORMATION

Related Product Information for anti-ESR2 antibody	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.
Product Categories/Family for anti-ESR2 antibody	Cancer; Metabolism; Neuroscience; Signal transduction
References	Fang, Y.J., et al. Tumour Biol. 31(6):651-658(2010) Hayes, D.F., et al. Clin. Pharmacol. Ther. 88(5):626-629(2010) Romero, R., et al. Am. J. Obstet. Gynecol. 203 (4), 361 (2010) : Wurster, M., et al. Oncol. Rep. 24(3):653-659(2010) Paulus, J.K., et al. Lung Cancer (2010) In press :

NCBI AND UNIPROT INFORMATION

NCBI GI #	94538325
NCBI GeneID	2100
NCBI Accession #	NP_001035365.1; NP_001201831.1; NP_001201832.1; NP_001258805.1; NP_001258806.1; NP_001428.1
NCBI GenBank Nucleotide #	NM_001040275.1
UniProt Accession #	Q92731; O60608; O60685; O60702; O60703; O75583; O75584; Q0MWT5; Q0MWT6; Q86Z31; A8K8K5; G3V5M5
Molecular Weight	59216
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
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/monoclonal/esr2-antibody-clone-555ct18-5-5-western-blot-elisa/283551>