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ER-beta1 (Estrogen Receptor beta-1) Antibody
Mouse Monoclonal Antibody [Clone ERb455]
Catalog # AH11196

Specification

ER-beta1 (Estrogen Receptor beta-1) Antibody - Product Information

Application	**,3,4,**
Primary Accession	Q92731
Other Accession	2100, 660607
Reactivity	**Human, Mouse, Rat, Monkey, Pig, Sheep, Horse**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse / IgG2a**
Calculated MW	**53-59kDa KDa**

ER-beta1 (Estrogen Receptor beta-1) Antibody - Additional Information

Gene ID 2100

Other Names
Estrogen receptor beta, ER-beta, Nuclear receptor subfamily 3 group A member 2, ESR2, ESTRB, NR3A2

Storage
Store at 2 to 8°C.Antibody is stable for 24 months.

Precautions
ER-beta1 (Estrogen Receptor beta-1) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ER-beta1 (Estrogen Receptor beta-1) Antibody - Protein Information

Name ESR2

Synonyms ESTRB, NR3A2

Function
Nuclear hormone receptor. Binds estrogens with an affinity similar to that 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

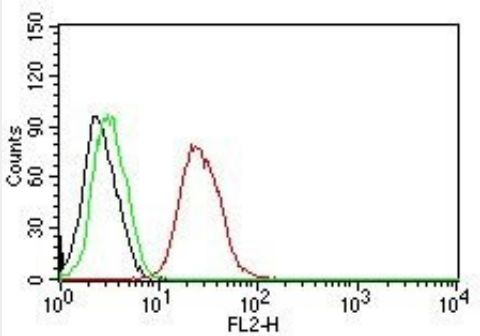
[Isoform 1]: Expressed in testis and ovary, and at a lower level in heart, brain, placenta, liver, skeletal muscle, spleen, thymus, prostate, colon, bone marrow, mammary gland and uterus Also found in uterine bone, breast, and ovarian tumor cell lines, but not in colon and liver tumors. [Isoform 4]: 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.

ER-beta1 (Estrogen Receptor beta-1) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ER-beta1 (Estrogen Receptor beta-1) Antibody - Images



Flow Cytometry for human ER-beta on MCF-7 Cells. Black: Cells alone; Green: Isotype Control; Red: PE-labeled ER-beta1 Monoclonal Antibody (ERb455).

ER-beta1 (Estrogen Receptor beta-1) Antibody - 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. They are located in the nucleus, though some estrogen receptors associate with the cell surface membrane and can be rapidly activated by exposure of cells to estrogen. ER-alpha and ER-beta are 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.

ER-beta1 (Estrogen Receptor beta-1) Antibody - References

Skliris GP et. al. J Pathol 2002;197:155-62