

DATASHEET
Estrogen Receptor alpha Mouse Monoclonal Antibody(C2693)
CAT. NO. AMA02305
KEY FEATURES

Target	Estrogen Receptor alpha	Source / Host	Mouse
Reactivity	Human, Rat	Clonality	Monoclonal
Applications	WB, IHC, IF/ICC, FC	Conjugation	Unconjugated
Form / Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

BACKGROUND

Nuclear hormone receptor. The steroid hormones and their receptors are involved in the regulation of eukaryotic gene expression and affect cellular proliferation and differentiation in target tissues. Ligand-dependent nuclear transactivation involves either direct homodimer binding to a palindromic estrogen response element (ERE) sequence or association with other DNA-binding transcription factors, such as AP-1/c-Jun, c-Fos, ATF-2, Sp1 and Sp3, to mediate ERE-independent signaling. Ligand binding induces a conformational change allowing subsequent or combinatorial association with multiprotein coactivator complexes through LXXLL motifs of their respective components. Mutual transrepression occurs between the estrogen receptor (ER) and NF-kappa-B in a cell-type specific manner.

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:500
IF/ICC	1:100 - 1:500
FC	1:100 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Mouse monoclonal to Estrogen Receptor alpha
Specificity	Recognizes endogenous levels of Estrogen Receptor alpha protein
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human Estrogen Receptor alpha expressed in E. Coli
Purification	This antibody is purified through a protein G column.
Molecular Weight	Predicted: 66 kD; Observed: 66 kD
Form/Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	ESR; NR3A1; Estrogen receptor; ER; ER-alpha; Estradiol receptor; Nuclear receptor subfamily 3 group A member 1
Gene Symbol	ESR1
Entrez Gene	2099(Human); 24890(Rat)
SwissProt	P03372(Human); P06211(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

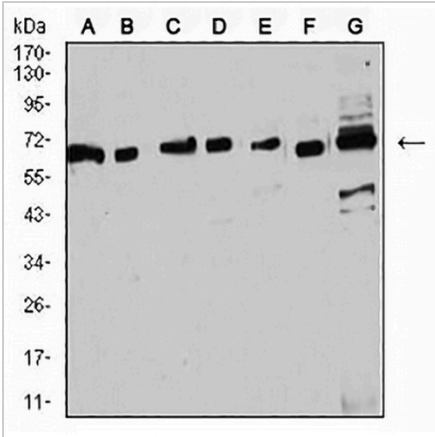
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

DATASHEET

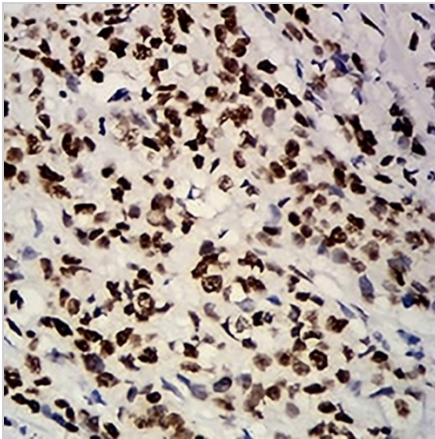
Estrogen Receptor alpha Mouse Monoclonal Antibody(C2693)

CAT. NO. AMA02305

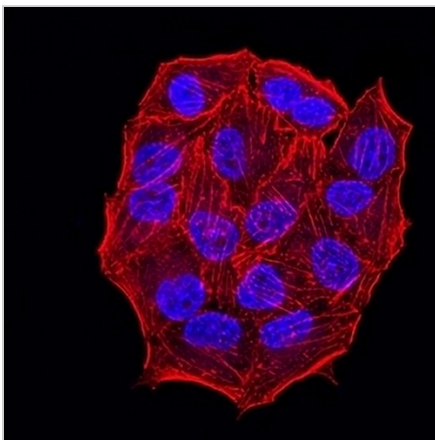
DATA



Western blot analysis of Estrogen Receptor alpha expression in MOLT4 (A), Raji (B), MCF7 (C), T47D (D), SKBr3 (E), Hela (F), C6 (G) whole cell lysates. (Predicted band size: 66 kD; Observed band size: 66 kD kD)



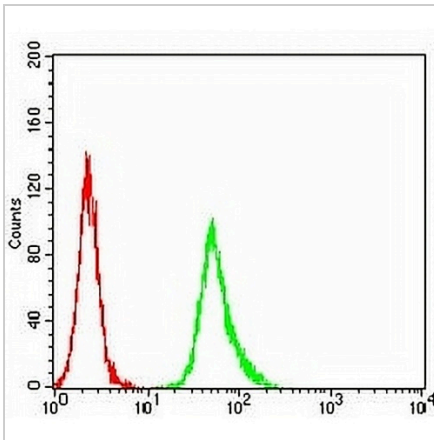
Immunohistochemical analysis of Estrogen Receptor alpha staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Estrogen Receptor alpha staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AREX® Fluor 488 - conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

DATASHEET**Estrogen Receptor alpha Mouse Monoclonal Antibody(C2693)**

CAT. NO. AMA02305

DATA (CONTINUED)

Flow cytometric analysis of HeLa cells using Anti-Estrogen Receptor alpha Antibody (green) and negative control (red).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.