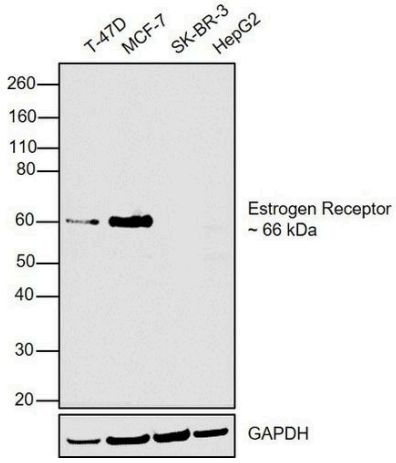
Estrogen Receptor alpha Monoclonal Antibody (AER311)

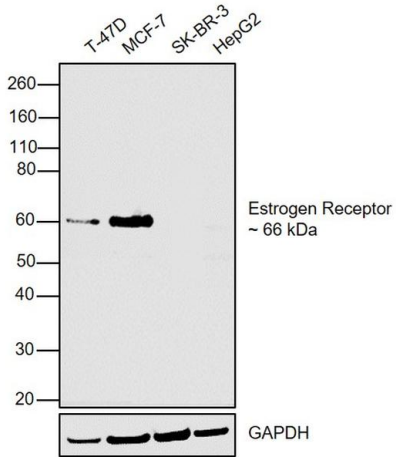
Product Details	
Size	100 µg
Species Reactivity	Bovine, Human, Mouse
Published Species	Bovine, Human, Mouse
Host/Isotype	Mouse / IgG2a
Class	Monoclonal
Type	Antibody
Clone	AER311
Conjugate	Unconjugated
Immunogen	Estrogen receptors from calf uterus.
Form	Liquid
Concentration	1 mg/mL
Purification	Ammonium sulfate precipitation
Storage buffer	PBS
Contains	0.08% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_1074280

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	7 Publications
Immunohistochemistry (IHC)	Assay-dependent	5 Publications
Immunocytochemistry (ICC/IF)	1:100	1 Publication
ELISA (ELISA)	Assay-dependent	-
Immunoprecipitation (IP)	Assay-dependent	-
ChIP assay (ChIP)	2.5 µg/10^6 cells	-
Gel Shift (GS)	-	1 Publication

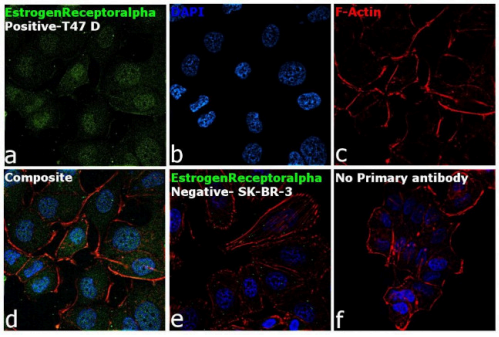
Product Images For Estrogen Receptor alpha Monoclonal Antibody (AER311)



Estrogen Receptor alpha Antibody (MA1-12600)
Antibody specificity was demonstrated by detection of differential basal expression of the target across cell lines and tissues owing to their inherent genetic constitution. Relative expression of Estrogen Receptor alpha was observed in T-47D and MCF-7 but not in SK-BR-3 and HepG2 which are reported to be negative using Estrogen Receptor alpha Monoclonal Antibody (AER311) (Product # MA1-12600) in Western Blot. {RE}



Estrogen Receptor alpha Antibody (MA1-12600) in WB
Western blot was performed using Estrogen Receptor alpha Monoclonal Antibody (AER311) (Product # PA1-12600) and a 66kDa band corresponding to Estrogen Receptor alpha was observed across all the cell lines tested. Whole cell extracts (30 µg lysate) of T-47D (Lane 1), MCF-7 (Lane 2), SK-BR-3 (Lane 3), HepG2 (Lane 4) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0321BOX). Resolved proteins were then transferred onto a Nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:1000 dilution) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L), Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177, 1: 4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).



Estrogen Receptor alpha Antibody (MA1-12600) in ICC/IF
Immunofluorescence analysis of Estrogen Receptor alpha was performed using 70% confluent log phase T-47D cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 45 minutes at room temperature. The cells were labeled with beta Estrogen Receptor alpha Monoclonal Antibody (AER311) (Product # MA1-12600) at 1:200 dilution in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Goat anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32723), (1:2000 dilution), for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b: Blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing nuclear localization. Panel e represents merged image for SK-BR-3 cells showing no staining for Estrogen Receptor alpha. Panel f represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.

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14 References

Western Blot (7)

Frontiers in oncology

Guggulsterone-mediated enhancement of radiosensitivity in human tumor cell lines.

"MA1-12600 was used in western blot to study the effects of guggulsterone on the radiosensitivity of human tumor cell lines"

Authors: Choudhuri R,Degraff W,Gamson J,Mitchell JB,Cook JA

Year
2012

Species
Human

Dilution
1:100

Journal of the National Cancer Institute

Estrogen-dependent signaling in a molecularly distinct subclass of aggressive prostate cancer.

"MA1-12600 was used in western blot to investigate the molecular signature of TMPRSS2-ERG gene fusions in prostate cancers"

Authors: Setlur SR,Mertz KD,Hoshida Y,Demichelis F,Lupien M,Perner S,Sboner A,Pawitan Y,Andrén O,Johnson LA,Tang J,Adami HO,Calza S,Chinnaiyan AM,Rhodes D,Tomlins S,Fall K,Mucci LA,Kantoff PW,Stampfer MJ,Andersson SO,Varenhorst E,Johansson JE,Brown M,Golub TR,Rubin MA

Year
2008

Species
Human

Dilution
1:100

View more WB references on thermofisher.com

Immunohistochemistry (5)

Theriogenology

Endometrial expression of progesterone, estrogen, and oxytocin receptors and of 20-hydroxysteroid dehydrogenase and cyclooxygenase II 2 and 5 days after ovulation in induced short and normal estrous cycles in dairy cows.

"MA1-12600 was used in immunohistochemistry to study potential mechanisms to explain the short estrous cycles often observed in dairy cows following synchronization of estrus"

Authors: Rantala MH,Mutikainen M,Schuler G,Katila T,Taponen J

Year
2014

Species
Bovine

Dilution
1:200

Journal of obstetrics and gynaecology : the journal of the Institute of Obstetrics and Gynaecology

A comparison of oestrogen receptor and progesterone receptor expression in endometrial polyps and endometrium of premenopausal women.

"MA1-12600 was used in immunohistochemistry to study the expression of sex hormone receptors in endometrial polyps and surrounding endometrial tissue"

Authors: Peng X,Li T,Xia E,Xia C,Liu Y,Yu D

Year
2009

Species
Human

View more IHC references on thermofisher.com

More applications with references on thermofisher.com

ICC/IF (1) **GS (1)**

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