

# Estrogen Receptor alpha Monoclonal Antibody (33)

Product Details	
Size	100 µg
Species Reactivity	Bovine, Human, Mouse, Non-human primate, Rat
Published Species	Avian, Rat, Non-human primate, Bovine, Fish, Human, Mouse
Host/Isotope	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	33
Conjugate	Unconjugated
Immunogen	Synthetic peptide corresponding to the residues E(247) V G M M K G G I R K D R R G(261) of the ER alpha DNA binding domain.
Form	Liquid
Concentration	1 mg/mL
Purification	Protein G
Storage buffer	Dulbecco's PBS with 30% glycerol, 1mg/mL BSA
Contains	0.05% sodium azide
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_325422

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC)	10 µg/mL	5 Publications
Immunofluorescence (IF)	10 µg/mL	1 Publication
Immunohistochemistry (IHC)	1:20 - 1:100	8 Publications
Western Blot (WB)	4 µg/mL	14 Publications
Flow Cytometry (Flow)	-	2 Publications
Gel Shift (GS)	-	3 Publications
Immunoprecipitation (IP)	-	2 Publications

## Product Specific Information

MA1-310 detects both the steroid occupied and unoccupied forms of the estrogen receptor (ER) alpha from human samples. MA1-310 detects ER alpha and does not cross react with ER beta.

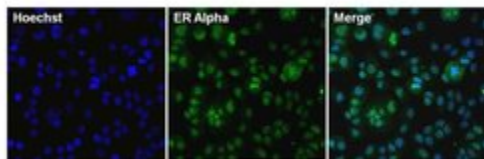
MA1-310 has been successfully used in Western blot, immunohistochemistry, immunoprecipitation, gel shift, flow cytometry, and immunocytochemical experiments. By Western blot, this antibody detects an ~66 kDa protein representing ER alpha from MCF-7 cell extract.

MA1-310 can be used with blocking peptide PEP-013.

## Product Images For Estrogen Receptor alpha Monoclonal Antibody (33)

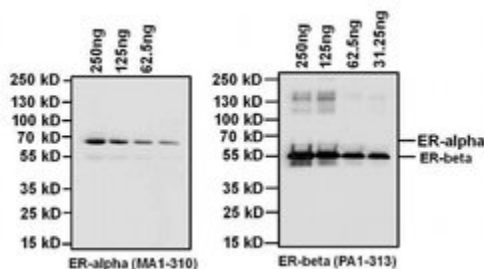
### Estrogen Receptor alpha Antibody (MA1-310) in IF

Immunofluorescent analysis of Estrogen Receptor Alpha (green) in T47D cells. The cells were fixed with formalin for 15 minutes, permeabilized with 0.1% Triton X-100 in TBS for 10 minutes, and blocked with 3% BSA (Product # 37525) for 30 minutes at room temperature. Cells were stained with or without Estrogen Receptor Alpha monoclonal antibody (Product # MA1-310), at a concentration of 10  $\mu\text{g}/\text{mL}$  overnight at 4C, and then incubated with a Superclonal goat anti-mouse IgG Alexa Fluor 488 secondary antibody (Product # A28175) at a dilution of 1:1000 for 30 minutes at room temperature (both panels, green). Nuclei (both panels, blue) were stained with Hoechst 33342 dye (Product # 62249). Images were taken on a Thermo Scientific ToxInsight at 20X magnification.



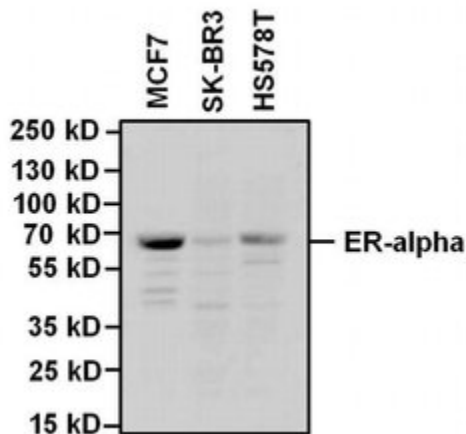
### Estrogen Receptor alpha Antibody (MA1-310) in WB

Western blot analysis of Estrogen Receptor (ER) Alpha was performed by loading the indicated amounts of recombinant full-length human ER alpha (Product # A15674) and ER beta (Product # A15664) proteins, and 10  $\mu\text{L}$  of PageRuler Plus Prestained Protein Ladder (Product # 26619) per well onto a 4-20% Tris-Glycine polyacrylamide gel. Proteins were transferred to a nitrocellulose membrane using the G2 Fast Blotter (Product # 62288), and blocked with 5% Milk in TBST for at least 1 hour at room temperature. ER Alpha was detected at 66 kD (left panel) using an ER Alpha mouse monoclonal antibody (Product # MA1-310) at a concentration of 4  $\mu\text{g}/\text{mL}$  in blocking buffer overnight at 4°C on a rocking platform, followed by a Superclonal goat anti-mouse IgG-HRP secondary antibody (Product # A28177) at a dilution of 1:2,000. Chemiluminescent detection was performed using SuperSignal West Dura (Product # 34076). Directly alongside the above blot, a second blot containing the same recombinant ER alpha and ER beta protein samples was probed with an ER-beta specific polyclonal antibody (Product # PA1-313, right panel) at a dilution of 1:2000 overnight at 4C, followed by an HRP-conjugated Superclonal goat anti-rabbit IgG secondary antibody (Product # A27034) at a dilution of 1:5000. Chemiluminescent detection was also performed using SuperSignal West Dura (Product # 34076) and the myECL Imager (Product # 62236).



### Estrogen Receptor alpha Antibody (MA1-310) in WB

Western blot analysis of Estrogen Receptor Alpha was performed by loading 25  $\mu\text{g}$  of the indicated whole cell lysates and 10  $\mu\text{L}$  PageRuler Plus Prestained Protein Ladder (Product # 26619) per well onto a 4-20% Tris-Glycine polyacrylamide gel. Proteins were transferred to a nitrocellulose membrane using the G2 Fast Blotter (Product # 62288) and blocked with 5% Milk/TBST for at least 1 hour at room temperature. Estrogen Receptor Alpha was detected at 66 kD using a Estrogen Receptor Alpha mouse monoclonal antibody (Product # MA1-310) at a concentration of 4  $\mu\text{g}/\text{mL}$  in blocking buffer overnight at 4°C on a rocking platform, followed by a Superclonal goat anti-mouse IgG-HRP secondary antibody (Product # A28177) at a dilution of 1:2,000 for at least 1 hour at room temperature. Chemiluminescent detection was performed using SuperSignal West Dura (Product # 34076) and the myECL Imager (Product # 62236).



[View more figures on thermofisher.com](#)

## 35 References

### Western Blot (14)

#### Molecular and cellular endocrinology

### Estrogen receptor beta signaling inhibits PDGF induced human airway smooth muscle proliferation.

"Published figure using Estrogen Receptor alpha monoclonal antibody (Product # MA1-310) in Western Blot"

Authors: Ambhore NS, Katragadda R, Raju Kalidhindi RS, Thompson MA, Pabelick CM, Prakash YS, Sathish V

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2018

#### The Journal of biological chemistry

### Estrogen Enhances Linkage in the Vascular Endothelial Calmodulin Network via a Feedforward Mechanism at the G Protein-coupled Estrogen Receptor 1.

"MA1-310 was used in western blot to characterize a feedforward mechanism at the G protein-coupled estrogen receptor 1 that controls estrogen enhanced linkage in the vascular endothelial calmodulin network"

Authors: Tran QK, Firkins R, Giles J, Francis S, Matnishian V, Tran P, VerMeer M, Jasurda J, Burgard MA, Gebert-Oberle B

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2016

[View more WB references on thermofisher.com](#)

## Immunocytochemistry (5)

#### Molecular and cellular endocrinology

### Tibolone protects astrocytic cells from glucose deprivation through a mechanism involving estrogen receptor beta and the upregulation of neuroglobin expression.

"MA1-310 was used in immunocytochemistry to characterize protection of astrocytic cells from glucose deprivation through a mechanism involving estrogen receptor beta and the upregulation of neuroglobin expression by tibolone"

Authors: Avila-Rodriguez M, Garcia-Segura LM, Hidalgo-Lanussa O, Baez E, Gonzalez J, Barreto GE

**Species**  
Not Applicable

**Dilution**  
1:50

**Year**  
2016

#### Nature medicine

### Increased gene copy number of VAMP7 disrupts human male urogenital development through altered estrogen action.

"Published figure using Estrogen Receptor alpha monoclonal antibody (Product # MA1-310) in Immunoprecipitation"

Authors: Tannour-Louet M, Han S, Louet JF, Zhang B, Romero K, Addai J, Sahin A, Cheung SW, Lamb DJ

**Species**  
Human  
Mouse  
Not Applicable

**Dilution**  
Not Cited  
Not Cited  
1:200

**Year**  
2014

[View more ICC references on thermofisher.com](#)

## More applications with references on thermofisher.com

**IP (2)** **Flow (2)** **GS (3)** **IHC (8)** **IF (1)**

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.