

Estrogen Receptor alpha Monoclonal Antibody (SP1)

Product Details

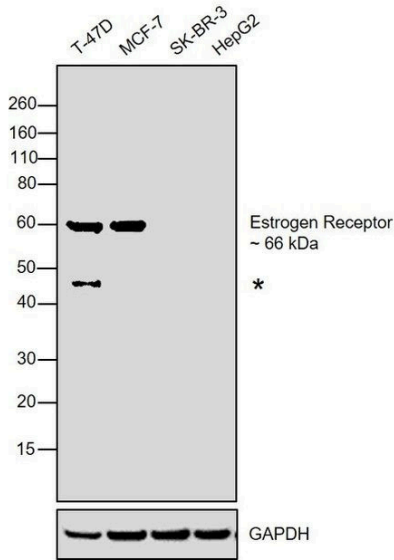
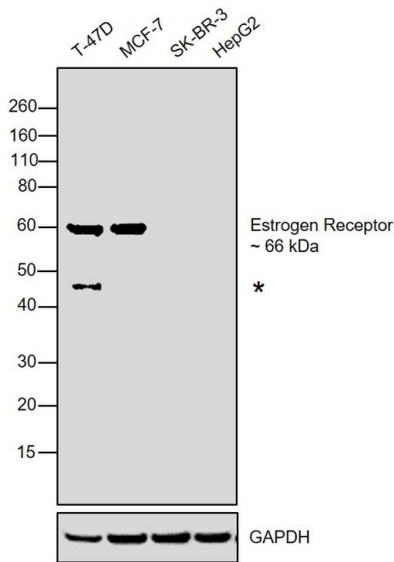
Size	500 µL
Species Reactivity	Human
Published Species	Rat, Virus, Sheep, Human, Mouse
Host/Isotype	Rabbit / IgG
Class	Monoclonal
Type	Antibody
Clone	SP1
Conjugate	Unconjugated
Immunogen	Synthetic peptide derived from C-terminal of human estrogen receptor
Form	Liquid
Concentration	0.014 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.2, with 1% BSA
Contains	0.1% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_10981779

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	30 Publications
Immunohistochemistry (IHC)	-	211 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:200	26 Publications
Immunocytochemistry (ICC/IF)	1:25-1:250	9 Publications
Flow Cytometry (Flow)	1:200	1 Publication
Dot blot (DB)	-	1 Publication
Miscellaneous PubMed (Misc)	-	3 Publications

Product Specific Information

This antibody strongly stains the nucleus of epithelial cells in breast carcinomas. It reacts with ER alpha, 67 kDa. No special pretreatment is required for IHC staining.

Product Images For Estrogen Receptor alpha Monoclonal Antibody (SP1)



Estrogen Receptor alpha Antibody (MA5-14501) in WB

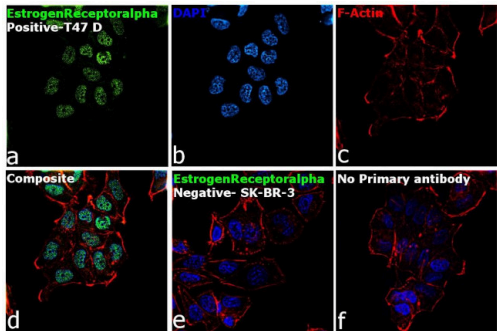
Western blot was performed using Estrogen Receptor alpha Monoclonal Antibody (Product # MA5-14501) and a 66kDa band corresponding to Estrogen Receptor alpha was observed across all the cell lines tested with uncharacterized band (*). Whole cell extracts (30 µg lysate) of T-47D (Lane 1), MCF-7 (Lane 2), 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-Rabbit IgG (Heavy Chain), Superclonal™ Recombinant Secondary Antibody, HRP (Product # A27036, 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 (MA5-14501)

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 Monoclonal Antibody (AER311) 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 (SP1) (Product # MA5-14501) in Western Blot. {RE}

Estrogen Receptor alpha Antibody (MA5-14501) 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 (Product # MA5-14501) at 1:200 dilution in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034), (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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Western Blot (30)

Frontiers in oncology	Year 2022
Differential Expression of Steroid Hormone Receptors and Ten Eleven Translocation Proteins in Endometrial Cancer Cells.	
"Published figure using Estrogen Receptor alpha monoclonal antibody (Product # MA5-14501) in Western Blot"	
Authors: Mahajan V,Gujral P,Jain L,Ponnampalam AP	
Molecular cancer therapeutics	Year 2021
SAR439859, a Novel Selective Estrogen Receptor Degradar (SERD), Demonstrates Effective and Broad Antitumor Activity in Wild-Type and Mutant ER-Positive Breast Cancer Models.	Species Human
"MA5-14501 was used in Western Blot to describe the discovery of SAR439859, a novel, orally bioavailable selective estrogen receptor degrader with potent antagonist and degradation activities against both wild-type and mutant Y537S ER."	
Authors: Shomali M,Cheng J,Sun F,Koundinya M,Guo Z,Hebert AT,McManus J,Levit MN,Hoffmann D,Courjaud A,Arrebola R,Cao H,Pollard J,Lee JS,Besret L,Caron A,Bangari DS,Abecassis PY,Schio L,El-Ahmad Y,Halley F,Tabart M,Certal V,Thompson F,McCort G,Filoché-Rommé B,Cheng H,Garcia-Echeverria C,Debussche L,Bouaboula M	

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Immunohistochemistry (211)

American journal of physiology. Heart and circulatory physiology	Year 2023
17-Estradiol promotes sex-specific dysfunction in isolated human arterioles.	
"Published figure using Estrogen Receptor alpha monoclonal antibody (Product # MA5-14501) in Immunohistochemistry"	
Authors: SenthilKumar G,Katunaric B,Bordas-Murphy H,Young M,Doren EL,Schulz ME,Widlansky ME,Freed JK	
International journal of molecular sciences	Year 2021
Ovarian Folliculogenesis and Uterine Endometrial Receptivity after Intermittent Vaginal Injection of Recombinant Human Follicle-Stimulating Hormone in Infertile Women Receiving In Vitro Fertilization and in Immature Female Rats.	
"Published figure using Estrogen Receptor alpha monoclonal antibody (Product # MA5-14501) in Immunohistochemistry"	
Authors: Hsu CC,Hsu L,Hsueh YS,Lin CY,Chang HH,Hsu CT	

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More applications with references on thermofisher.com

- IHC (P) (26)
- ICC/IF (9)
- Flow (1)
- DB (1)
- Misc (3)

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