

Estrogen Receptor beta Polyclonal Antibody

Product Details	
Size	50 µg
Species Reactivity	Human, Mouse, Rat
Published Species	Rat, Pig, Non-human primate, Hamster, Human
Host/Isotope	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Synthetic peptide corresponding to residues C(459) S P A E D S K S K E G S Q N P Q S Q(477) of human ER beta.
Form	Liquid
Concentration	1 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS with 1mg/mL BSA
Contains	0.05% sodium azide
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2102375

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC)	1:100	-
Immunofluorescence (IF)	1:100	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	2-5 µg/mL	-
Immunohistochemistry (Paraffin) (IHC (P))	2-5 µg/mL	2 Publications
Western Blot (WB)	1 µg/mL	10 Publications
Gel Shift (GS)	-	2 Publications
Immunohistochemistry (IHC)	-	13 Publications
Miscellaneous PubMed (Misc)	-	2 Publications

Product Specific Information

PA1-313 has been successfully used in Western blot and immunohistochemistry procedures. By Western blot, this antibody detects an ~55 kDa protein representing ER beta from rat brain homogenate. Immunohistochemical staining of ER beta in rat prostate with PA1-313 results in nuclear staining, whereas nuclear staining may not be observed in human tissue.

The PA1-313 immunogen is a synthetic peptide corresponding to residues C(459) S P A E D S K S K E G S Q N P Q S Q(477) of human ER beta. PA1-313 immunizing peptide (Cat. # PEP-029) is available for use in neutralization and control experiments.

Recombinant ER beta expressed in baculovirus system (Cat. # RP-311 and RP-312) can be purchased for control experiments in Western blot and gel shift assays.

Product Images For Estrogen Receptor beta Polyclonal Antibody

Estrogen Receptor beta Antibody (PA1-313) in IF

Immunofluorescence analysis of Estrogen Receptor beta 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 1% BSA for 1 hour at room temperature. The cells were labeled with Estrogen Receptor beta Polyclonal Antibody (Product # PA1-313) at 1:100 dilution in 0.1% BSA, incubated at 4 degree Celsius overnight and then labeled with Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing predominant nuclear localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.

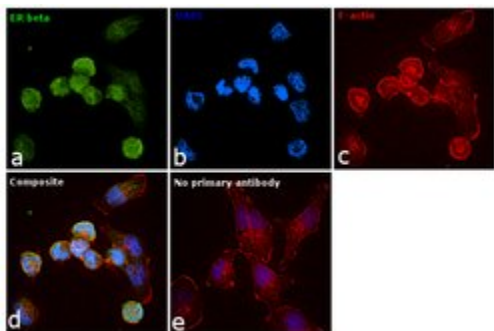
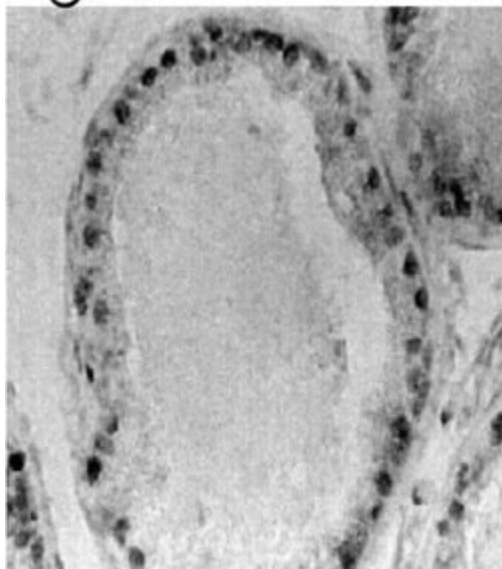


Fig. 1

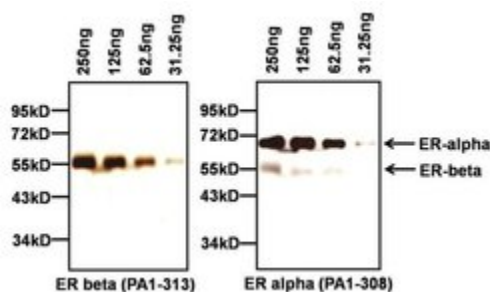


Estrogen Receptor beta Antibody (PA1-313) in IHC

Immunolocalization of ER beta in rat prostate using Product # PA1-313.

Estrogen Receptor beta Antibody (PA1-313) in WB

Western blot analysis of ER beta was performed by loading the indicated amounts of recombinant full-length human ER alpha (Product # A15674) and ER beta (Product # A15664) proteins, and 10 µL of PageRuler Prestained Protein Ladder (Product # 26616) per well onto a Novex® 4-20% Tris-Glycine polyacrylamide gel. Proteins were transferred to a PVDF membrane (Product # 88518) using the G2 Blotter (Product # 62288), and blocked with 5% milk in TBST for at least 1 hour at room temp. ER beta was detected at ~54 kD (left panel) using an ER beta polyclonal antibody (Product # PA1-313) at a dilution of 1:1000 in blocking buffer overnight at 4C on a rocking platform, followed by an HRP-conjugated goat anti-rabbit IgG secondary antibody (Product # 31460) at a dilution of 1:40,000. Chemiluminescent detection was performed using SuperSignal West Pico (Product # 34080). The blot was then stripped with Restore Plus Western blot stripping buffer (Product # 46430) for at least 15 min at room temp, re-blocked with 5% milk in TBST for at least 1 hour at room temp, and re-probed with an ER alpha polyclonal antibody (Product # PA1-308, right panel) at a dilution of 1:2000 overnight at 4C, followed by an HRP-conjugated goat anti-rabbit IgG secondary antibody (Product # 31460) at a dilution of 1:40,000. Chemiluminescent detection was performed using SuperSignal West Pico (Product # 34080). The presence of faint ER-beta bands on the blot probed with PA1-308 is due to incomplete stripping of PA1-313.



30 References

Immunofluorescence (1)

Journal of cellular and molecular medicine

Absence of estrogen receptor beta leads to abnormal adipogenesis during early tendon healing by an up-regulation of PPAR signalling.

"Published figure using Estrogen Receptor beta polyclonal antibody (Product # PA1-313) in Immunofluorescence"

Authors: Bian X,Liu T,Zhou M,He G,Ma Y,Shi Y,Wang Y,Tang H,Kang X,Yang M,Gustafsson JÅ,Fan X,Tang K

Species

Not Applicable

Dilution

Not Cited

Year

2019

Immunohistochemistry (13)

Journal of cellular and molecular medicine

Absence of estrogen receptor beta leads to abnormal adipogenesis during early tendon healing by an up-regulation of PPAR signalling.

"Published figure using Estrogen Receptor beta polyclonal antibody (Product # PA1-313) in Immunofluorescence"

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Species

Not Applicable

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Not Cited

Year

2019

Clinical breast cancer

Targeting Estrogen Receptor Beta in a Phase 2 Study of High-Dose Estradiol in Metastatic Triple-Negative Breast Cancer: A Wisconsin Oncology Network Study.

"PA1-313 was used in immunohistochemistry - paraffin section to analyze a Wisconsin oncology network study of metastatic triple-negative breast cancer where targeting estrogen receptor beta in a phase 2 study of high-dose estradiol"

Authors: Wisinski KB,Xu W,Tevaarwerk AJ,Saha S,Kim K,Traynor A,Dietrich L,Hegeman R,Patel D,Blank J,Harter J, Burkard ME

Species

Not Applicable

Dilution

Not Cited

Year

2016

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Immunohistochemistry (Paraffin) (2)

Clinical breast cancer

Targeting Estrogen Receptor Beta in a Phase 2 Study of High-Dose Estradiol in Metastatic Triple-Negative Breast Cancer: A Wisconsin Oncology Network Study.

"PA1-313 was used in immunohistochemistry - paraffin section to analyze a Wisconsin oncology network study of metastatic triple-negative breast cancer where targeting estrogen receptor beta in a phase 2 study of high-dose estradiol"

Authors: Wisinski KB,Xu W,Tevaarwerk AJ,Saha S,Kim K,Traynor A,Dietrich L,Hegeman R,Patel D,Blank J,Harter J, Burkard ME

Species

Not Applicable

Dilution

Not Cited

Year

2016

More applications with references on thermofisher.com

WB (10)

Misc (2)

GS (2)

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