

# ESR1 isoform4 Antibody(Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19656C

#### Specification

# ESR1 isoform4 Antibody(Center) - Product Information

Application	WB, IF,E
Primary Accession	<u>P03372-4</u>
Other Accession	<u>NP_000116.2</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	35.5K KDa
Antigen Region	271-300

# ESR1 isoform4 Antibody(Center) - Additional Information

Other Names

ESR1; ESR; NR3A1; Estrogen receptor; ER-alpha; Estradiol receptor; Nuclear receptor subfamily 3 group A member 1

Target/Specificity

This ESR1 isoform4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 271-300 amino acids from the C-term region of human ESR1 isoform4.

Dilution WB~~1:1000 IF~~1:10~50 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** 

ESR1 isoform4 Antibody(Center) is for research use only and not for use in diagnostic or therapeutic procedures.

#### ESR1 isoform4 Antibody(Center) - Protein Information

#### ESR1 isoform4 Antibody(Center) - Protocols



Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# ESR1 isoform4 Antibody(Center) - Images



Fluorescent confocal image of MCF-7 cell stained with ESR1 isoform4 Antibody (Center)(Cat#AP19656c). MCF-7 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with ESR1 isoform4 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C). Nuclei were counterstained with DAPI (blue) (10  $\mu$ g/ml, 10 min).ESR1 isoform4 immunoreactivity is localized to cytoplasm significantly.



ESR1 isoform4 Antibody (Center) (Cat. #AP19656c) western blot analysis in MCF-7 cell line lysates (35ug/lane). This demonstrates the ESR1 isoform4 antibody detected the ESR1 isoform4



#### protein (arrow).

# ESR1 isoform4 Antibody(Center) - Background

This gene encodes an estrogen receptor, a ligand-activated transcription factor composed of several domains important for hormone binding, DNA binding, and activation of transcription. The protein localizes to the nucleus where it may form a homodimer or a heterodimer with estrogen receptor 2. Estrogen and its receptors are essential for sexual development and reproductive function, but also play a role in other tissues such as bone. Estrogen receptors are also involved in pathological processes including breast cancer, endometrial cancer, and osteoporosis. Alternative splicing results in several transcript variants, which differ in their 5' UTRs and use different promoters.

#### ESR1 isoform4 Antibody(Center) - References

Geradts, J., et al. Cancer Invest. 28(9):969-977(2010) Hayes, D.F., et al. Clin. Pharmacol. Ther. 88(5):626-629(2010) Lupien, M., et al. Genes Dev. 24(19):2219-2227(2010) Corbo, R.M., et al. J. Gerontol. A Biol. Sci. Med. Sci. (2010) In press : Kim, S., et al. Fertil. Steril. (2010) In press :