

### ESRRA Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8635c

### Specification

# ESRRA Antibody (Center) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Isotype Antigen Region IF, WB, IHC-P, FC,E <u>P11474</u> <u>P62510</u>, <u>P62509</u>, <u>P62508</u>, <u>P11475</u>, <u>O61539</u>, <u>O95718</u>, <u>O5OJV7</u>, <u>O08580</u> Human Mouse, Rat Rabbit Polyclonal Rabbit IgG 131-159

### **ESRRA Antibody (Center) - Additional Information**

Gene ID 2101

**Other Names** 

Steroid hormone receptor ERR1, Estrogen receptor-like 1, Estrogen-related receptor alpha, ERR-alpha, Nuclear receptor subfamily 3 group B member 1, ESRRA, ERR1, ESRL1, NR3B1

#### Target/Specificity

This ESRRA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 131-159 amino acids from the Central region of human ESRRA.

Dilution IF~~1:10~50 WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

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

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

# ESRRA Antibody (Center) - Protein Information



## Name ESRRA

Synonyms ERR1, ESRL1, NR3B1

**Function** Binds to an ERR-alpha response element (ERRE) containing a single consensus half-site, 5'-TNAAGGTCA-3'. Can bind to the medium- chain acyl coenzyme A dehydrogenase (MCAD) response element NRRE-1 and may act as an important regulator of MCAD promoter. Binds to the C1 region of the lactoferrin gene promoter. Requires dimerization and the coactivator, PGC-1A, for full activity. The ERRalpha/PGC1alpha complex is a regulator of energy metabolism. Induces the expression of PERM1 in the skeletal muscle.

#### **Cellular Location**

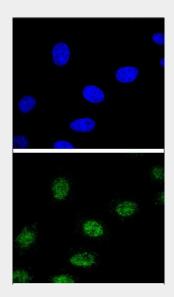
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00407, ECO:0000269|PubMed:18063693, ECO:0000269|PubMed:21190936}. Cytoplasm. Note=Co-localizes to the cytoplasm only in presence of MAPK15.

## **ESRRA Antibody (Center) - Protocols**

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

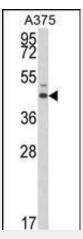
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# ESRRA Antibody (Center) - Images

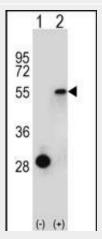


Confocal immunofluorescent analysis of ESRRA Antibody (Center) (Cat. #AP8635c) with 293 cell followed by Alexa Fluor® 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).

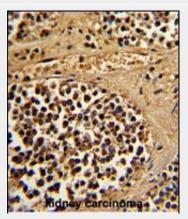




Western blot analysis of ESRRA Antibody (Center) (Cat. #AP8635c) in A375 cell line lysates (35ug/lane). ESRRA (arrow) was detected using the purified Pab.

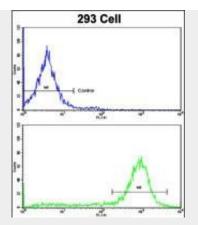


Western blot analysis of ESRRA (arrow) using rabbit polyclonal ESRRA Antibody (Center) (Cat. #AP8635c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the ESRRA gene.



Formalin-fixed and paraffin-embedded human kidney carcinoma reacted with ESRRA Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





Flow cytometric analysis of 293 cells using ESRRA Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# ESRRA Antibody (Center) - Background

ESRRA is a nuclear receptor that is closely related to the estrogen receptor. This protein acts as a site-specific transcription regulator and has been also shown to interact with estrogen and the transcripton factor TFIIB by direct protein-protein contact. The binding and regulatory activities of this protein have been demonstrated in the regulation of a variety of genes including lactoferrin, osteopontin, medium-chain acyl coenzyme A dehydrogenase (MCAD) and thyroid hormone receptor genes.

## ESRRA Antibody (Center) - References

Yang,N., et.al., J. Biol. Chem. 271 (10), 5795-5804 (1996) Wiley,S.R., et.al., Genes Dev. 7 (11), 2206-2219 (1993)