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ESRRA Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8635c

Product Information

Application	WB, IHC-P, IF, FC, E
Primary Accession	P11474
Other Accession	P62510, P62509, P62508, P11475, Q61539, O95718, Q5QJV7, O08580
Reactivity	Human, Mouse
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22490
Calculated MW	45510
Antigen Region	131-159

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	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 FC~~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	ESRRA Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

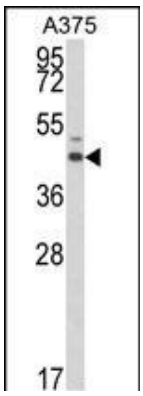
Background

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.

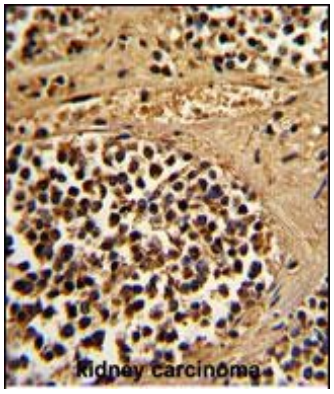
References

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

Images

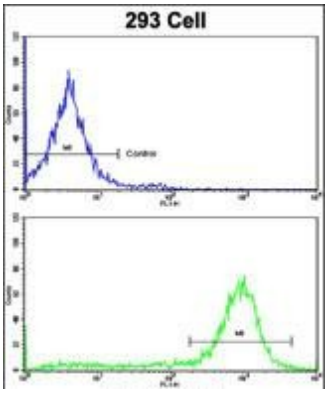


Western blot analysis of ESRRA Antibody (Center) (Cat. #AP8635c) in A375 cell line lysates (35ug/lane). ESRRA (arrow) was detected using the purified Pab.

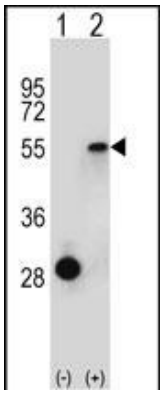


Formalin-fixed and paraffin-embedded human kidney carcinoma reacted with ESRRA Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

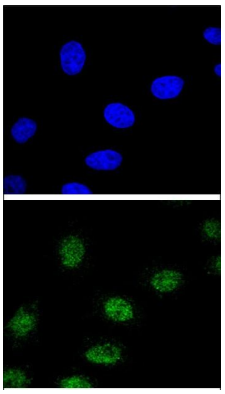
Flow cytometric analysis of 293 cells using ESRRA Antibody (Center)(bottom histogram) compared to a



negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



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.



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.