

ARG57416 anti-Estrogen related Receptor alpha antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Estrogen related Receptor alpha
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Estrogen related Receptor alpha
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 1-423 of Human Estrogen related Receptor alpha (NP_004442.3).
Conjugation	Un-conjugated
Alternate Names	ERRalpha; ERRa; NR3B1; ESRL1; Nuclear receptor subfamily 3 group B member 1; Estrogen-related receptor alpha; ERR-alpha; Steroid hormone receptor ERR1; Estrogen receptor-like 1; ERR1

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	293T	
Observed Size	~ 52 kDa	

Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

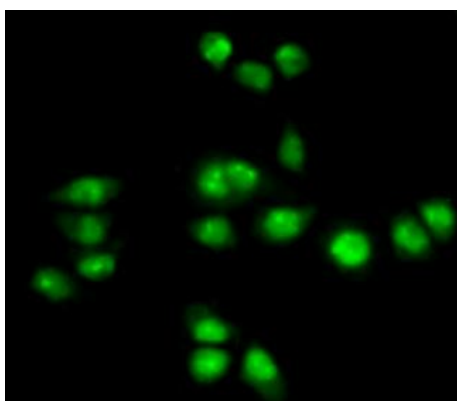
Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

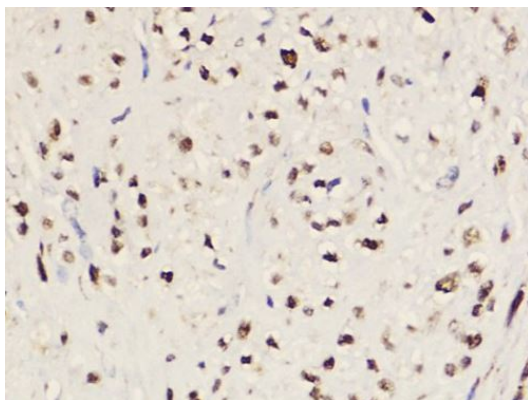
Gene Symbol	ESRRA
Gene Full Name	estrogen-related receptor alpha
Background	The protein encoded by this gene is a nuclear receptor that is closely related to the estrogen receptor. This protein acts as a site-specific transcription regulator and has been also shown to interact with estrogen and the transcription 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. A processed pseudogene of ESRRA is located on chromosome 13q12.1. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Sep 2013]
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. [UniProt]
Calculated Mw	46 kDa
PTM	Phosphorylation on Ser-19 enhances sumoylation on Lys-14 increasing repression of transcriptional activity. Sumoylated with SUMO2. Main site is Lys-14 which is enhanced by phosphorylation on Ser-19, cofactor activation, and by interaction with PIAS4. Sumoylation enhances repression of transcriptional activity, but has no effect on subcellular location nor on DNA binding. Reversibly acetylated. Acetylation by PCAF/KAT2 at Lys-129, Lys-138, Lys-160 and Lys-162 and PCAF/KAT2 decreases transcriptional activity probably by inhibiting DNA-binding activity; deacetylation involves SIRT1 and HDAC8 and increases DNA-binding.

Images



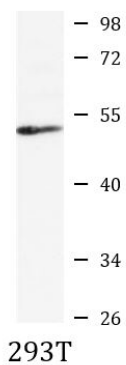
ARG57416 anti-Estrogen related Receptor alpha antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG57416 anti-Estrogen related Receptor alpha antibody at 1:100 dilution.



ARG57416 anti-Estrogen related Receptor alpha antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human uterus tissue stained with ARG57416 anti-Estrogen related Receptor alpha antibody at 1:200 dilution.



ARG57416 anti-Estrogen related Receptor alpha antibody WB image

Western blot: 25 µg of 293T cell lysate stained with ARG57416 anti-Estrogen related Receptor alpha antibody at 1:1000 dilution.