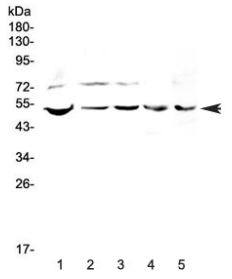
ESRRG Antibody (RQ4304)

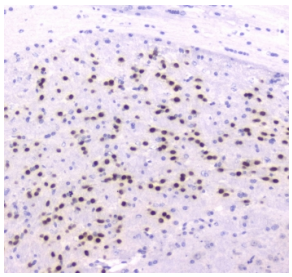
Catalog No.	Formulation	Size
RQ4304	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

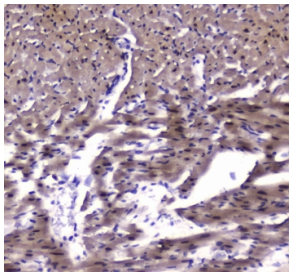
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P62508
Localization	Nucleus, possibly cytoplasm
Applications	Western blot: 0.5-1ug/ml IHC (FFPE): 1-2ug/ml IF/ICC: 2-4ug/ml FACS: 1-3ug/10^6 cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This ESRRG antibody is available for research use only.



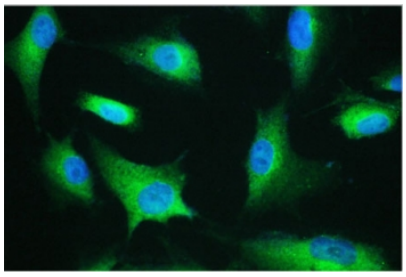
Western blot testing of human 1) PANC-1, 2) 22RV1, 3) COLO-320, 4) SW620 and 5) mouse SP20 lysate with ESRRG antibody at 0.5ug/ml. Predicted molecular weight ~51 kDa.



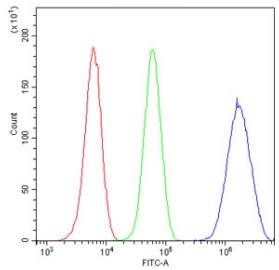
IHC testing of FFPE mouse brain tissue with ESRRG antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



IHC testing of FFPE rat heart tissue with ESRRG antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



IF/ICC staining of FFPE human A549 cells with ESRRG antibody (green) at 2ug/ml and DAPI nuclear stain (blue). Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Flow cytometry testing of human U-2 OS cells with ESRRG antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ESRRG antibody.

Description

Estrogen-related receptor gamma (ERR-gamma), also known as NR3B3, is a nuclear receptor that in humans is encoded by the ESRRG gene. This gene encodes a member of the estrogen receptor-related receptor (ESRR) family, which belongs to the nuclear hormone receptor superfamily. All members of the ESRR family share an almost identical DNA binding domain, which is composed of two C4-type zinc finger motifs. The ESRR members are orphan nuclear receptors; they bind to the estrogen response element and steroidogenic factor 1 response element, and activate genes controlled by both response elements in the absence of any ligands. The ESRR family is closely related to the estrogen receptor (ER) family. They share target genes, co-regulators and promoters, and by targeting the same set of genes, the ESRRs seem to interfere with the ER-mediated estrogen response in various ways. It has been reported that the family member encoded by this gene functions as a transcriptional activator of DNA cytosine-5-methyltransferases 1 (Dnmt1) expression by direct binding to its response elements in the DNMT1 promoters, modulates cell proliferation and estrogen signaling in breast cancer, and negatively regulates bone morphogenetic protein 2-induced osteoblast differentiation and bone formation. Multiple alternatively spliced transcript variants have been identified, which mainly differ at the 5' end and some of which encode protein isoforms differing in the N-terminal region.

Application Notes

Optimal dilution of the ESRRG antibody should be determined by the researcher.

Immunogen

A recombinant human protein corresponding to amino acids Q302-V458 was used as the immunogen for the ESRRG antibody.

Storage

After reconstitution, the ESRRG antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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