

## RARB Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18153C

### Specification

## **RARB Antibody (Center) - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region IF, WB,E <u>P10826</u> <u>P22605</u>, <u>P22448</u>, <u>NP\_000956.2</u> Human Chicken, Mouse Rabbit Polyclonal Rabbit IgG 50489 168-195

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

Gene ID 5915

**Other Names** Retinoic acid receptor beta, RAR-beta, HBV-activated protein, Nuclear receptor subfamily 1 group B member 2, RAR-epsilon, RARB, HAP, NR1B2

#### Target/Specificity

This RARB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 168-195 amino acids from the Central region of human RARB.

**Dilution** IF~~1:10~50 WB~~1:1000 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**

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

## **RARB Antibody (Center) - Protein Information**



Name RARB

Synonyms HAP, NR1B2

**Function** Receptor for retinoic acid. Retinoic acid receptors bind as heterodimers to their target response elements in response to their ligands, all-trans or 9-cis retinoic acid, and regulate gene expression in various biological processes. The RXR/RAR heterodimers bind to the retinoic acid response elements (RARE) composed of tandem 5'-AGGTCA-3' sites known as DR1-DR5. In the absence or presence of hormone ligand, acts mainly as an activator of gene expression due to weak binding to corepressors (PubMed:<u>12554770</u>). The RXRA/RARB heterodimer can act as a repressor on the DR1 element and as an activator on the DR5 element (PubMed:<u>29021580</u>). In concert with RARG, required for skeletal growth, matrix homeostasis and growth plate function (By similarity).

Cellular Location Nucleus. Cytoplasm [Isoform Beta-2]: Nucleus.

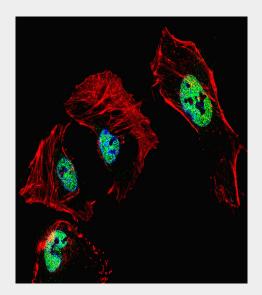
**Tissue Location** Expressed in aortic endothelial cells (at protein level).

# **RARB 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>
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

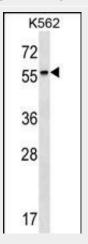
## RARB Antibody (Center) - Images



Fluorescent confocal image of Hela cell stained with RARB Antibody (Center)(Cat#AP18153c). Hela cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then



incubated with RARB 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). RARB immunoreactivity is localized to nucleus significantly.



RARB Antibody (Center) (Cat. #AP18153c) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the RARB antibody detected the RARB protein (arrow).

# **RARB Antibody (Center) - Background**

This gene encodes retinoic acid receptor beta, a member of the thyroid-steroid hormone receptor superfamily of nuclear transcriptional regulators. This receptor localizes to the cytoplasm and to subnuclear compartments. It binds retinoic acid, the biologically active form of vitamin A which mediates cellular signalling in embryonic morphogenesis, cell growth and differentiation. It is thought that this protein limits growth of many cell types by regulating gene expression. The gene was first identified in a hepatocellular carcinoma where it flanks a hepatitis B virus integration site. The gene expresses at least two transcript variants; one additional transcript has been described, but its full length nature has not been determined. [provided by RefSeq].

## **RARB Antibody (Center) - References**

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Miladi-Abdennadher, I., et al. Tumour Biol. 31(5):503-511(2010) Ruano, G., et al. Pharmacogenomics 11(7):959-971(2010) Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) : Ding, Y., et al. Mol. Vis. 16, 855-861 (2010) :