

Anti-Retinoic Acid Receptor alpha RARA Rabbit Monoclonal Antibody
Catalog # ABO14321

Specification

Anti-Retinoic Acid Receptor alpha RARA Rabbit Monoclonal Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | WB, FC |
| Primary Accession | P10276 |
| Host | Rabbit |
| Isotype | Rabbit IgG |
| Reactivity | Human, Mouse |
| Clonality | Monoclonal |
| Format | Liquid |

Description

Anti-Retinoic Acid Receptor alpha RARA Rabbit Monoclonal Antibody . Tested in WB, Flow Cytometry applications. This antibody reacts with Human, Mouse.

Anti-Retinoic Acid Receptor alpha RARA Rabbit Monoclonal Antibody - Additional Information

Gene ID 5914

Other Names

Retinoic acid receptor alpha, RAR-alpha, Nuclear receptor subfamily 1 group B member 1, RARA, NR1B1

Calculated MW

50771 MW KDa

Application Details

WB 1:500-1:1000
FC 1:50

Subcellular Localization

Nucleus. Cytoplasm. Nuclear localization depends on ligand binding, phosphorylation and sumoylation. Translocation to the nucleus in the absence of ligand is dependent on activation of PKC and the downstream MAPK phosphorylation.

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human Retinoic Acid Receptor alpha

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for

up to one month. Avoid repeated
freeze-thaw cycles.

Anti-Retinoic Acid Receptor alpha RARA Rabbit Monoclonal Antibody - Protein Information

Name RARA

Synonyms NR1B1

Function

Receptor for retinoic acid (PubMed:16417524, PubMed:19850744, PubMed:20215566, PubMed:21152046, PubMed:37478846). 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 (PubMed:28167758, PubMed:37478846, PubMed:21152046). The RXR/RAR heterodimers bind to the retinoic acid response elements (RARE) composed of tandem 5'-AGGTCA-3' sites known as DR1-DR5 (PubMed:19398580, PubMed:28167758). In the absence of ligand, the RXR- RAR heterodimers associate with a multiprotein complex containing transcription corepressors that induce histone deacetylation, chromatin condensation and transcriptional suppression (PubMed:16417524). On ligand binding, the corepressors dissociate from the receptors and associate with the coactivators leading to transcriptional activation (PubMed:19850744, PubMed:20215566, PubMed:9267036, PubMed:37478846). Formation of a complex with histone deacetylases might lead to inhibition of RARE DNA element binding and to transcriptional repression (PubMed:28167758). Transcriptional activation and RARE DNA element binding might be supported by the transcription factor KLF2 (PubMed:28167758). RARA plays an essential role in the regulation of retinoic acid-induced germ cell development during spermatogenesis (By similarity). Has a role in the survival of early spermatocytes at the beginning prophase of meiosis (By similarity). In Sertoli cells, may promote the survival and development of early meiotic prophase spermatocytes (By similarity). In concert with RARG, required for skeletal growth, matrix homeostasis and growth plate function (By similarity). Together with RXRA, positively regulates microRNA-10a expression, thereby inhibiting the GATA6/VCAM1 signaling response to pulsatile shear stress in vascular endothelial cells (PubMed:28167758). In association with HDAC3, HDAC5 and HDAC7 corepressors, plays a role in the repression of microRNA-10a and thereby promotes the inflammatory response (PubMed:28167758).

Cellular Location

Nucleus. Cytoplasm. Note=Nuclear localization depends on ligand binding, phosphorylation and sumoylation (PubMed:19850744) Translocation to the nucleus in the absence of ligand is dependent on activation of PKC and the downstream MAPK phosphorylation (By similarity).

Increased nuclear localization upon pulsatile shear stress (PubMed:28167758).
{ECO:0000250|UniProtKB:P11416, ECO:0000269|PubMed:19850744,
ECO:0000269|PubMed:28167758}

Tissue Location

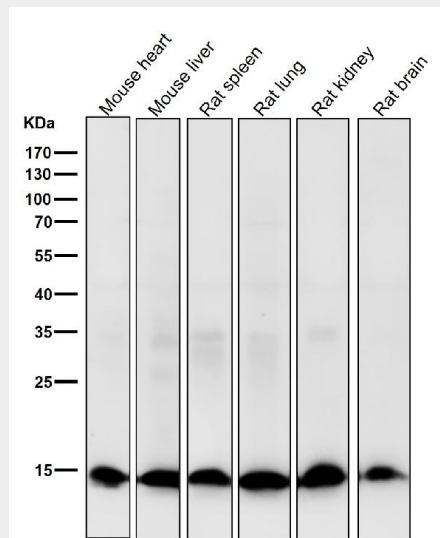
Expressed in monocytes.

Anti-Retinoic Acid Receptor alpha RARA Rabbit Monoclonal Antibody - Protocols

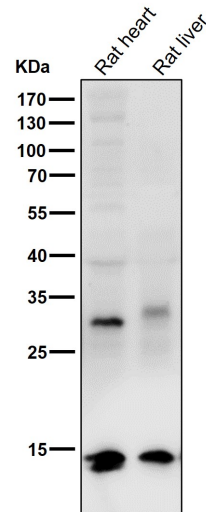
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

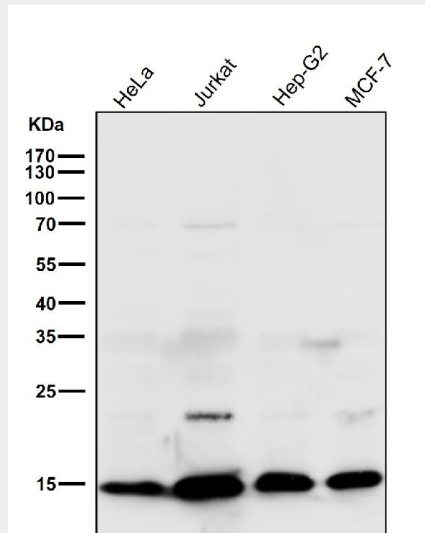
Anti-Retinoic Acid Receptor alpha RARA Rabbit Monoclonal Antibody - Images



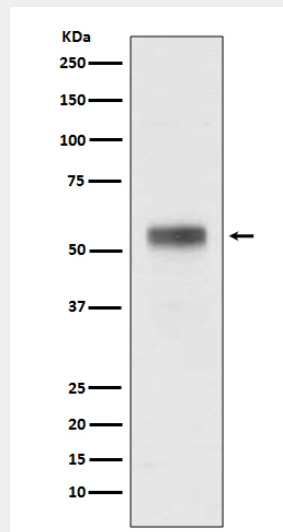
All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



Western blot analysis of Retinoic Acid Receptor alpha expression in MCF-7 cell lysate.