abcam

Product datasheet

Anti-Retinoic Acid Receptor beta antibody [EPR2017] ab124701



2 Abreviews 4 References 7 Images

Overview

Product name Anti-Retinoic Acid Receptor beta antibody [EPR2017]

Description Rabbit monoclonal [EPR2017] to Retinoic Acid Receptor beta

Host species Rabbit

Tested applications Suitable for: WB, IHC-P, ICC/IF

Unsuitable for: Flow Cyt or IP

Species reactivity Reacts with: Human

Does not react with: Mouse, Rat

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Daudi, MCF7, MDA-MB-435, and U-87 MG lysates. IHC-P: human bladder carcinoma and

kidney tissues. ICC/IF: HCT 116 cells.

General notesThis product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

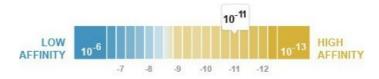
Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Stable for 12 months at -20°C.

Dissociation constant (K_D) $K_D = 1.13 \times 10^{-11} M$



Learn more about K_D

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clone number Monoclonal EPR2017

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab124701 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Detects a band of approximately 55 kDa (predicted molecular weight: 50 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC/IF		1/100 - 1/250.

Application notes Is unsuitable for Flow Cyt or IP.

Target

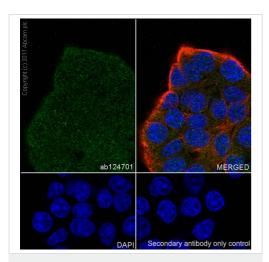
Function	Receptor for retinoic acid. Retinoic acid receptors bind as heterodimers to their target response elements in response to their ligands, all-trans or 9-cis retinoic acid, and regulate gene expression in various biological processes. The RXR/RAR heterodimers bind to the retinoic acid response 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. In concert with RARG, required for skeletal growth, matrix homeostasis and growth plate function.	
Involvement in disease	Microphthalmia, syndromic, 12	
Sequence similarities	Belongs to the nuclear hormone receptor family. NR1 subfamily.	

DomainComposed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal ligand-binding domain.

Contains 1 nuclear receptor DNA-binding domain.

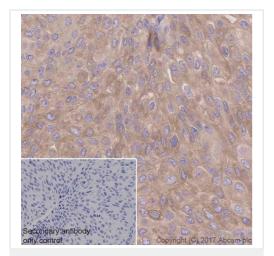
Cellular localization Cytoplasm and Nucleus.

Images



Immunocytochemistry/ Immunofluorescence - Anti-Retinoic Acid Receptor beta antibody [EPR2017] (ab124701)

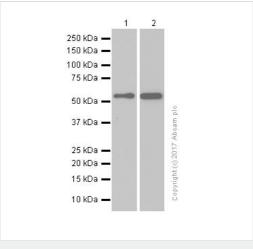
Immunocytochemistry/ Immunofluorescence analysis of HCT 116 (Human colorectal carcinoma epithelial cell) cells labeling Retinoic Acid Receptor beta with Purified ab124701 at 1:100 dilution (10 μ g/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 μ g/ml). Goat anti rabbit lgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2 μ g/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



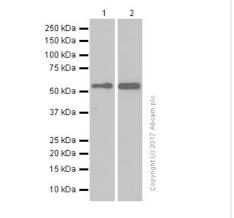
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Retinoic Acid Receptor beta antibody [EPR2017] (ab124701)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human bladder carcinoma tissue sections labeling Retinoic Acid Receptor beta with Purified ab124701 at 1:100 dilution (10.3 µg/ml). Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).

Purified)ImmunoHistoProbe one step HRP Polymer (ready to use) was used for detection. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

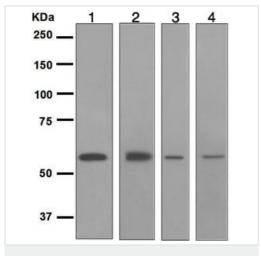


Western blot - Anti-Retinoic Acid Receptor beta antibody [EPR2017] (ab124701)



Predicted band size: 50 kDa Observed band size: 55 kDa

Lysates/proteins at 15 µg per lane.



Western blot - Anti-Retinoic Acid Receptor beta antibody [EPR2017] (ab124701)

All lanes: Anti-Retinoic Acid Receptor beta antibody [EPR2017] (ab124701) at 1/1000 dilution

All lanes: Anti-Retinoic Acid Receptor beta antibody [EPR2017]

Lane 1 : Daudi (Human Burkitt's lymphoma lymphoblast) whole cell

Lane 2: U-87 MG (Human glioblastoma-astrocytoma epithelial

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000

(ab124701) at 1/2000 dilution (Purified)

lysates

Secondary

dilution

cell) whole cell lysates

Lane 1: MCF7 cell lysates

Lane 2: MDA-MB-435 cell lysates

Lane 3: Daudi cell lysates

Lane 4: U-87 MG cell lysates

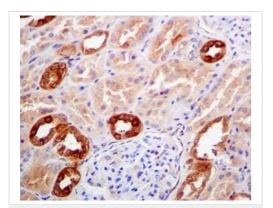
Lysates/proteins at 10 µg per lane.

Secondary

Lane 1: Goat anti-Rabbit HRP at 1/20000 dilution

Lanes 2-4: Goat anti-Rabbit HRP at 1/2000 dilution

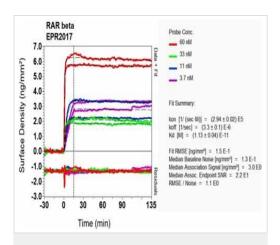
Predicted band size: 50 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Retinoic Acid Receptor beta antibody [EPR2017] (ab124701)

ab124701 at 1/100 dilution staining Retinoic Acid Receptor beta in paraffin-embedded Human kidney tissue by Immunohistochemistry.

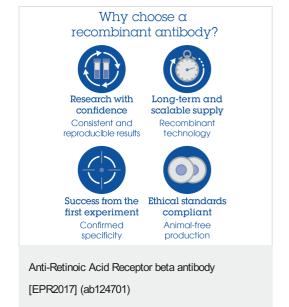
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



OI-RD Scanning - Anti-Retinoic Acid Receptor beta antibody [EPR2017] (ab124701)

Equilibrium disassociation constant (K_D) Learn more about K_D

Click here to learn more about K_D



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