abcam

Product datasheet

Anti-Retinoic Acid Receptor beta antibody ab5792

1 Abreviews 3 Images

Overview

Product name	Anti-Retinoic Acid Receptor beta antibody
Description	Rabbit polyclonal to Retinoic Acid Receptor beta
Host species	Rabbit
Specificity	This antibody shows slight cross-reactivity to RAR alpha but does not detect RAR gamma.
Tested applications	**Suitable for:** ICC/IF, WB
Species reactivity	**Reacts with:** Mouse, Human
Immunogen	Synthetic peptide corresponding to Mouse Retinoic Acid Receptor beta aa 429-448. Sequence: PSUSPSSVENSGVSQSPLLQ (Peptide available as **ab5897**) Run BLAST with Run BLAST with
Positive control	WB: SH-SY5Y cell extract ; HEK-293 ICC/IF: SH-SY5Y
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: 99% PBS
Purity	Whole antiserum
Clonality	Polyclonal

Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab5792 in the following tested applications.

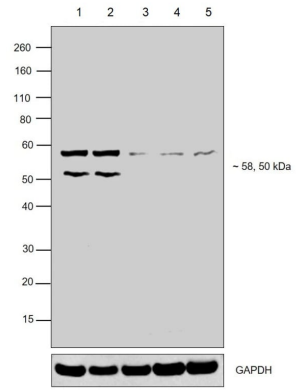
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/100.
WB		1/1000. Detects a band of approximately 52 kDa (predicted molecular weight: 53 kDa).

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. Contains 1 nuclear receptor DNA-binding domain.
Domain	Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal ligand-binding domain.
Cellular localization	Cytoplasm and Nucleus.

Images



Western blot - Anti-Retinoic Acid Receptor beta antibody (ab5792)

All lanes : Anti-Retinoic Acid Receptor beta antibody (ab5792) at 1 µg/ml

Lane 1 : SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate
Lane 2 : HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate
Lane 3 : PANC-1 (Human pancreatic epithelial cancinoma cell line) whole cell lysate
Lane 4 : OVCAR-3 (Human ovary adenocarcinoma cell line) whole cell lysate
Lane 5 : BeWo (human placenta choriocarcinoma cell line) whole cell lysate

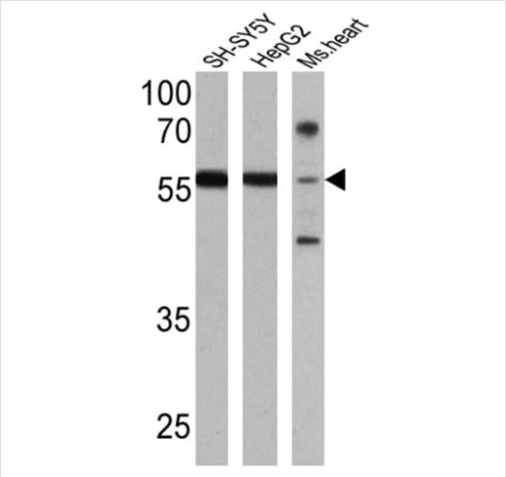
Lysates/proteins at 30 µg per lane.

Secondary
All lanes : Goat anti-Rabbit IgG (H+L), Superclonal™ Recombinant Secondary Antibody, HRP at 1/4000 dilution

Predicted band size: 53 kDa
Additional bands at: ~58.50 kDa. We are unsure as to the identity of these extra bands.

Detection: chemiluminescence

Western blot demonstrating antibody specificity by detection of differential basal expression of the target across cell lines owing to their inherent genetic constitution. The expression was observed in SH-SY5Y and HEK-293 and not seen in PANC-1, OVCAR-3 and BeWo using ab5792.



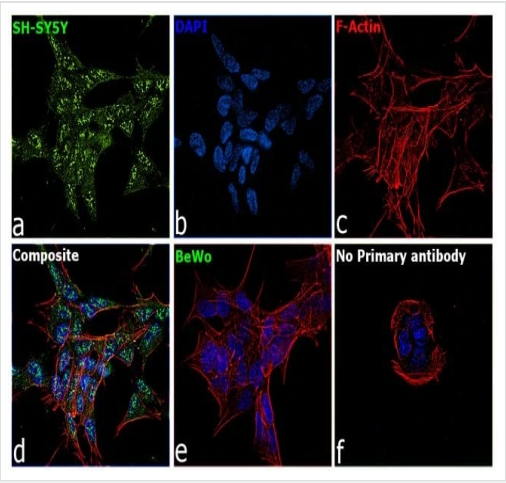
Western blot - Anti-Retinoic Acid Receptor beta antibody (ab5792)

All lanes : Anti-Retinoic Acid Receptor beta antibody (ab5792) at 1/1000 dilution

Lane 1 : SH-SY5Y cell lysate
Lane 2 : HepG2 cell lysate
Lane 3 : Mouse heart cell lysate

Lysates/proteins at 25 µg per lane.

Predicted band size: 53 kDa
Observed band size: 58 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Retinoic Acid Receptor beta antibody (ab5792)

Immunofluorescent analysis of SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate cells on 70% confluent log phase labeling Retinoic Acid Receptor beta. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 2% BSA for 10 minutes at room temperature. The cells were labeled with ab5792 at 1/100 dilution in 0.1% BSA and incubated overnight at 4°C and then labeled with Goat anti-Rabbit IgG (H+L) secondary antibody, Alexa Fluor® 488 conjugate at 1/2000 dilution for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with DAPI. F-actin (Panel c: red) was stained with Alexa Fluor® 555 Rhodamine Phalloidin (1/300 dilution). Panel d is a merged image showing nuclear and cytoplasmic localization. Panel e represents BeWo (human placenta choriocarcinoma cell line) having no expression of Retinoic Acid Receptor beta. The images were captured at 60X magnification.

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