abcam

ab250468

Anti-CRABP2 antibody [EPR14256(B)] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR14256(B)
Purification technique	Affinity purification Protein A
Concentration	1.009 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-

Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information CRABP2

Function	Transports retinoic acid to the nucleus. Regulates the access of retinoic acid to the nuclear retinoic acid receptors.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C

Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab250468 is the carrier-free version of ab181255.

Patented technology

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

What are the advantages of a recombinant monoclonal antibody?

This 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 batch production

For more information, read more on recombinant antibodies.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Cellular Retinoic Acid-Binding Protein 2 (CRABP2) mechanically facilitates cellular retinoic acid (RA) signaling by transporting RA to the nucleus. The protein is also known as CRABP II and is approximately 15 kDa in mass. You can find its expression in various tissues including skin adipose tissue and brain where it exhibits specific roles in RA signaling and cellular differentiation processes.
Biological function summary	CRABP2 participates in modulating the availability of RA which influences gene expression by binding to nuclear receptors. Although CRABP2 functions independently rather than as part of a larger protein complex it holds a significant role in gene transcription regulation. This active role in regulating RA levels impacts cellular differentiation and proliferation processes essential for tissue development and homeostasis.

Pathways	CRABP2 is an important participant in the retinoic acid signaling pathway. This pathway impacts important biological processes such as embryonic development and cell growth. CRABP2 closely interacts with the retinoic acid receptor (RAR) guiding RA to RARs and contributing to the regulation of gene expression. Moreover it is linked to the transforming growth factor-beta (TGF-beta) pathway playing a role in managing cellular apoptosis and differentiation.
Associated diseases and disorders	Researchers associate CRABP2 with several cancers notably skin cancer due to its influence on cell proliferation. Altered expression or function of CRABP2 can also affect neurodegenerative diseases impacting pathways involving neuronal survival. CRABP2's interactions with proteins like RAR and in cancer contexts with overexpressed RA receptors highlight its relevance in modulating RA-dependent processes that can lead to pathological states.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

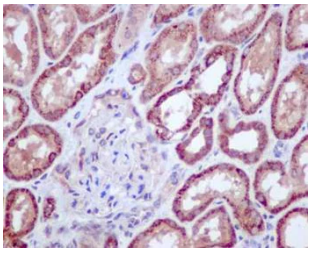
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

6 product images

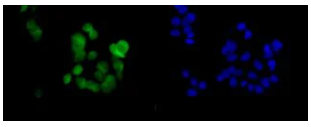


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRABP2 antibody [EPR14256(B)] - BSA and Azide free (ab250468)

CRABP2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CRABP2 antibody

This data was developed using ab181255, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded, Human kidney tissue labeling CRABP2 with ab181255 at a 1/100 dilution. Counter stained with hematoxylin.

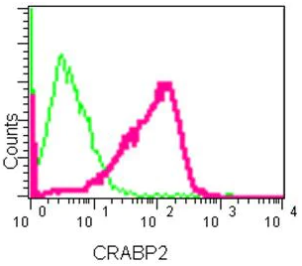
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-CRABP2 antibody [EPR14256(B)] - BSA and Azide free (ab250468)

CRABP2 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CRABP2 antibody

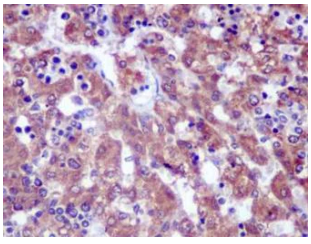
This data was developed using ab181255, the same antibody clone in a different buffer formulation.
Immunofluorescence analysis of, paraformaldehyde-fixed, MCF7 cells labeling CRABP2 with ab181255 at a 1/250 dilution. As secondary antibody Goat anti rabbit IgG (Alexa Fluor®488) (green) was used at a 1/200 dilution. DAPI staining in blue.



Flow Cytometry (Intracellular) - Anti-CRABP2 antibody [EPR14256(B)] - BSA and Azide free (ab250468)

CRABP2 Flow Cytometry (Intracellular) staining using rabbit Anti-CRABP2 antibody

This data was developed using ab181255, the same antibody clone in a different buffer formulation.
Intracellular Flow Cytometry analysis of, paraformaldehyde-fixed, MCF7 cells labeling CRABP2 (red) with ab181255 at a 1/80 dilution, or negative control rabbit monoclonal IgG (green). As secondary antibody goat anti rabbit IgG (FITC) was used at a 1/150 dilution.

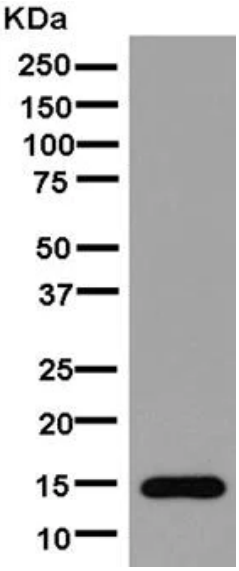


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRABP2 antibody [EPR14256(B)] - BSA and Azide free (ab250468)

CRABP2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CRABP2 antibody

This data was developed using ab181255, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded, Human liver tissue labeling CRABP2 with ab181255 at a 1/100 dilution. Counter stained with hematoxylin.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-CRABP2 antibody [EPR14256(B)] - BSA and Azide free (ab250468)

CRABP2 Western blot staining of MCF7 cell lysate using rabbit Anti-CRABP2 antibody

This data was developed using ab181255, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-CRABP2 antibody [EPR14256(B)] (ab181255) at 1/50000 dilution

All lanes:
MCF7 cell lysate at 20 µg

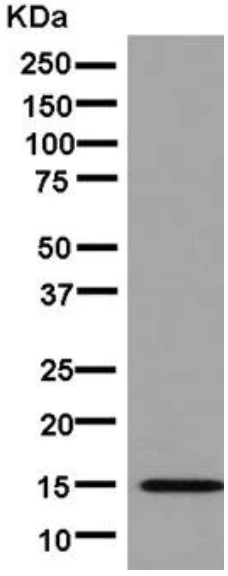
Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Developed using the ECL technique.

Predicted band size: 16 kDa

Observed band size: 16 kDa



Western blot - Anti-CRABP2 antibody [EPR14256(B)] - BSA and Azide free (ab250468)

CRABP2 Western blot staining of Human skin cell lysate using rabbit Anti-CRABP2 antibody

This data was developed using ab181255, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-CRABP2 antibody [EPR14256(B)] (ab181255) at 1/10000 dilution

All lanes:
Human skin cell lysate at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab136636) at 1/500 dilution

Developed using the ECL technique.

Predicted band size: 16 kDa

Observed band size: 16 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.