abcam

ab211927

Anti-CRABP2 antibody [EPR17376]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR17376
Purification technique	Affinity purification Protein A
Concentration	0.629 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat

Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/250
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/600
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Human
Dilution info	1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

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	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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.

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

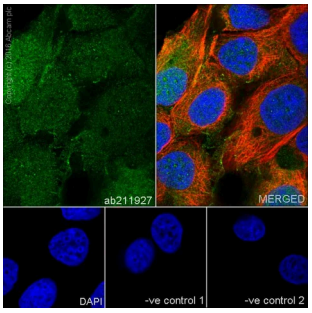
We do not recommend this combination. It is not covered by our product promise.

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.

10 product images

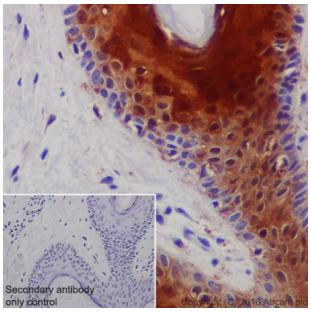


Immunocytochemistry/ Immunofluorescence - Anti-CRABP2 antibody [EPR17376] (ab211927)

CRABP2 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CRABP2 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized MCF7 (Human breast adenocarcinoma cell line) cells labeling CRABP2 with ab211927 at 1/250 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (ab150077) secondary at 1/1000 dilution (green). Confocal image showing nuclear and cytoplasmic staining on MCF7 cell line. The nuclear counter stain is DAPI (blue).
Tubulin is detected with Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution (red).

The negative controls are as follows:
-ve control 1: ab211927 at 1/250 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution.
-ve control 2: Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution followed, by followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (ab150077) secondary at 1/1000 dilution.

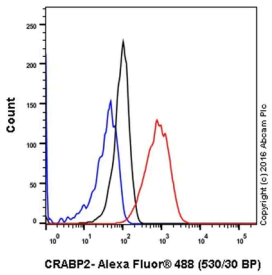


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRABP2 antibody [EPR17376] (ab211927)

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

Immunohistochemical analysis of paraffin-embedded human skin tissue labeling CRABP2 with ab211927 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasmic and nuclear staining on the stratified squamous epithelium and hair follicle cells of the human skin is observed. Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

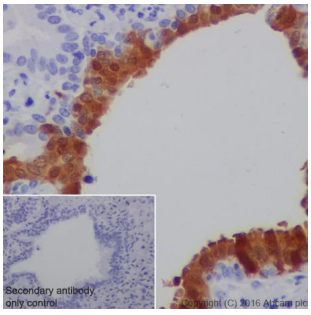
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-CRABP2 antibody [EPR17376] (ab211927)

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

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed MCF7 (Human breast adenocarcinoma cell line) cells labeling CRABP2 with ab211927 at 1/600 dilution (red) compared with a rabbit monoclonal IgG isotype control (ab172730; black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody; blue). Goat Anti-Rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.

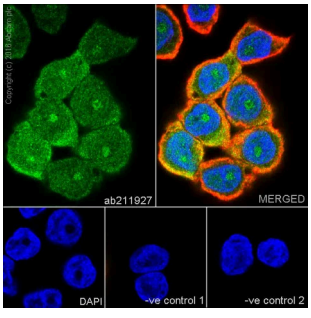


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRABP2 antibody [EPR17376] (ab211927)

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

Immunohistochemical analysis of paraffin-embedded human pancreatic ductal adenocarcinoma tissue labeling CRABP2 with ab211927 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasmic and nuclear staining on the human pancreatic ductal adenocarcinoma is observed. Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



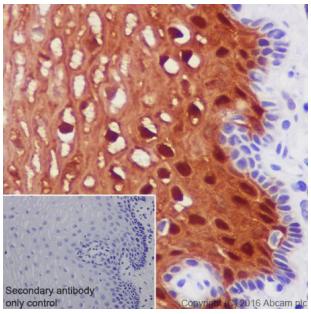
Immunocytochemistry/ Immunofluorescence - Anti-CRABP2 antibody [EPR17376] (ab211927)

CRABP2 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CRABP2 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HT-29 (Human colorectal adenocarcinoma cell line) cells labeling CRABP2 with ab211927 at 1/250 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at

1/1000 dilution (green). Confocal image showing nuclear and cytoplasmic staining on HT-29 cell line. The nuclear counter stain is DAPI (blue).
Tubulin is detected with Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution (red).

The negative controls are as follows:
-ve control 1: ab211927 at 1/250 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution.
-ve control 2: Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.

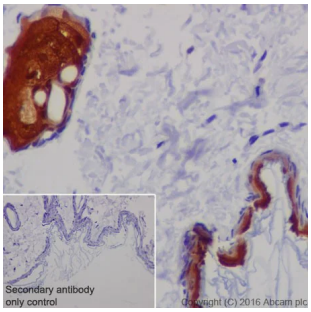


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRABP2 antibody [EPR17376] (ab211927)

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

Immunohistochemical analysis of paraffin-embedded human oesophagus tissue labeling CRABP2 with ab211927 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasmic and nuclear staining on the stratified squamous epithelium of the human oesophagus is observed. Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

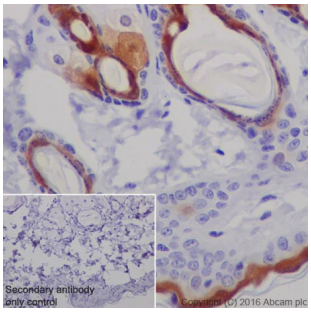


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRABP2 antibody [EPR17376] (ab211927)

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

Immunohistochemical analysis of paraffin-embedded rat skin tissue labeling CRABP2 with ab211927 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasmic and nuclear staining on the stratified squamous epithelium and sweat gland cells of the rat skin is observed. Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



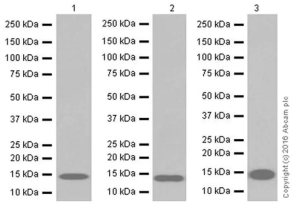
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRABP2 antibody [EPR17376] (ab211927)

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

Immunohistochemical analysis of paraffin-embedded mouse skin tissue labeling CRABP2 with ab211927 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500

dilution. Cytoplasmic and nuclear staining on the stratified squamous epithelium, hair follicle cells and sweat gland cells of the mouse skin is observed. Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-CRABP2 antibody [EPR17376] (ab211927)

CRABP2 Western blot staining using rabbit Anti-CRABP2 antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
Lanes 1 and 3:
Western blot - Anti-CRABP2 antibody [EPR17376] (ab211927) at 1/5000 dilution

Lane 2:
Western blot - Anti-CRABP2 antibody [EPR17376] (ab211927) at 1/1000 dilution

Lane 1:
Human skin lysate at 10 µg

Lane 2:
MCF7 (Human breast adenocarcinoma cell line) whole cell lysate at 10 µg

Lane 3:
HT-29 (Human colorectal adenocarcinoma cell line) whole cell lysate at 10 µg

Secondary

Lane 1:
Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

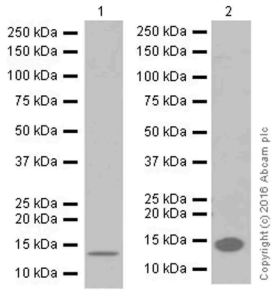
Lane 2:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Lane 3:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution

Predicted band size: 16 kDa

Observed band size: 14 kDa

Exposure time: 30s



Western blot - Anti-CRABP2 antibody [EPR17376] (ab211927)

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-CRABP2 antibody [EPR17376] (ab211927) at 1/1000 dilution

Lane 1:
Mouse skin lysate at 10 µg

Lane 2:
Rat skin lysate at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 16 kDa

Observed band size: 14 kDa

Exposure time: 3min

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