

## Product datasheet

# Anti-CRALBP antibody [EPR23448-119] ab243664

Recombinant RabMAb

[1 References](#) [12 Images](#)

### Overview

<b>Product name</b>	Anti-CRALBP antibody [EPR23448-119]
<b>Description</b>	Rabbit monoclonal [EPR23448-119] to CRALBP
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), IHC-P, IP, WB, IHC-Fr <b>Unsuitable for:</b> ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Human eyeball tissue lysate; Mouse eyeball tissue and P20 retina lysates; Rat eyeball tissue lysate; SK-MEL-2 and SK-MEL-28 whole cell lysates. IHC-P: Rat retina tissue, Mouse retina tissue; Human retina tissue. IHC-Fr: Mouse retina tissue; Rat retina tissue. Flow Cyt (intra): SK-MEL-28 cells. IP: SK-MEL-28 whole cell lysate.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

**Clone number**                      EPR23448-119  
**Isotype**                                IgG

**Applications**

**The Abpromise guarantee**        Our **Abpromise guarantee** covers the use of ab243664 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
<b>Flow Cyt (Intra)</b>		1/700.
<b>IHC-P</b>		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
<b>IP</b>		1/30.
<b>WB</b>		1/1000. Detects a band of approximately 36 kDa (predicted molecular weight: 36 kDa).
<b>IHC-Fr</b>		1/250. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

**Application notes**                      Is unsuitable for ICC/IF.

**Target**

**Function**                               Soluble retinoid carrier essential the proper function of both rod and cone photoreceptors. Participates in the regeneration of active 11-cis-retinol and 11-cis-retinaldehyde, from the inactive 11-trans products of the rhodopsin photocycle and in the de novo synthesis of these retinoids from 11-trans metabolic precursors. The cycling of retinoids between photoreceptor and adjacent pigment epithelium cells is known as the 'visual cycle'.

**Tissue specificity**                    Retina and pineal gland. Not present in photoreceptor cells but is expressed abundantly in the adjacent retinal pigment epithelium (RPE) and in the Mueller glial cells of the retina.

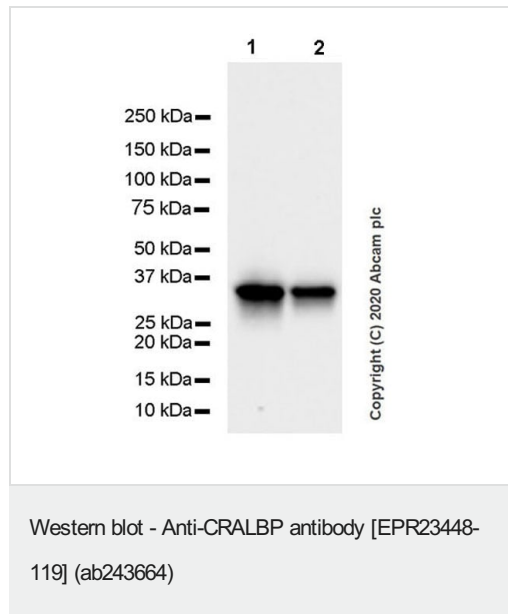
**Involvement in disease**            Defects in RLBP1 are a cause of retinitis pigmentosa autosomal recessive (ARRP) [MIM:268000]. RP leads to degeneration of retinal photoreceptor cells. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well.  
Defects in RLBP1 are the cause of Bothnia retinal dystrophy (BRD) [MIM:607475]; also known as Vasterbotten dystrophy. Affected individuals show night blindness from early childhood with features consistent with retinitis punctata albescens and macular degeneration.  
Defects in RLBP1 are the cause of rod-cone dystrophy Newfoundland (NFRCD) [MIM:607476]. NFRCD is a retinal dystrophy reminiscent of retinitis punctata albescens but with a substantially lower age at onset and more-rapid and distinctive progression. Rod-cone dystrophies results from initial loss of rod photoreceptors, later followed by cone photoreceptors loss.  
Defects in RLBP1 are a cause of fundus albipunctatus (FA) [MIM:136880]. FA is a rare form of stationary night blindness characterized by a delay in the regeneration of cone and rod photopigments.

**Sequence similarities**

Contains 1 CRAL-TRIO domain.

**Cellular localization**

Cytoplasm.

**Images**

**All lanes** : Anti-CRALBP antibody [EPR23448-119] (ab243664) at 1/1000 dilution

**Lane 1** : SK-MEL-2 (human skin malignant melanoma), whole cell lysate

**Lane 2** : SK-MEL-28 (human malignant melanoma), whole cell lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes** : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated ([ab97051](#)) at 1/100000 dilution

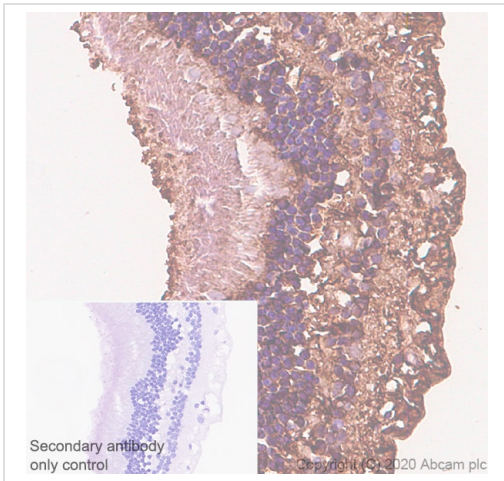
**Predicted band size:** 36 kDa

**Observed band size:** 36 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

The molecular weight observed is consistent with what has been described in the literature (PMID: 29063836).

Exposure time: 15 seconds.

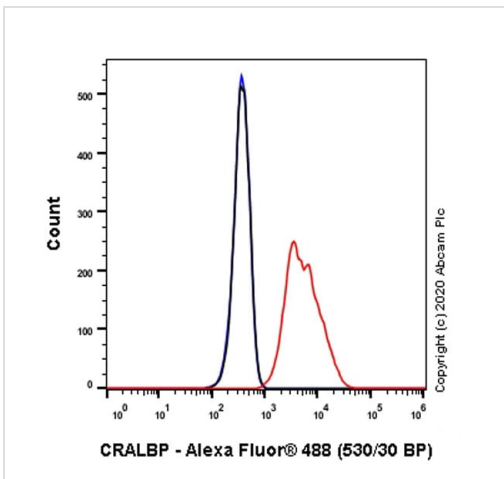


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRALBP antibody [EPR23448-119] (ab243664)

Immunohistochemical analysis of paraffin-embedded Human retina tissue labeling CRALBP with ab243664 at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on human retina. The section was incubated with ab243664 for 10 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument Counterstained with Hematoxylin.

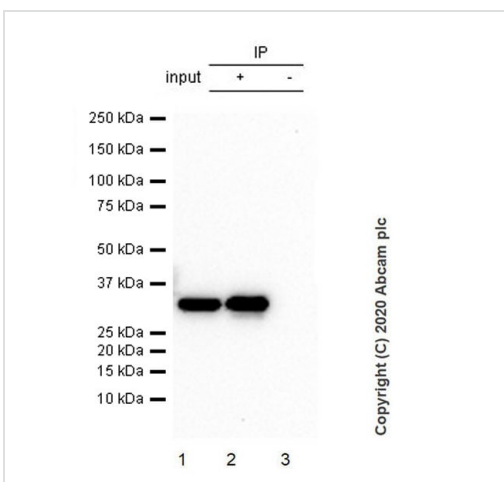
Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Flow Cytometry (Intracellular) - Anti-CRALBP antibody [EPR23448-119] (ab243664)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized SK-MEL-28 (Human malignant melanoma) cells labelling CRALBP with ab243664 at 1/700 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (**ab172730**) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor<sup>®</sup> 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-CRALBP antibody [EPR23448-119] (ab243664)

CRALBP was immunoprecipitated from 0.35 mg SK-MEL-28 (human malignant melanoma), whole cell lysate with ab243664 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab243664 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)(**ab131366**) was used at 1/5000 dilution.

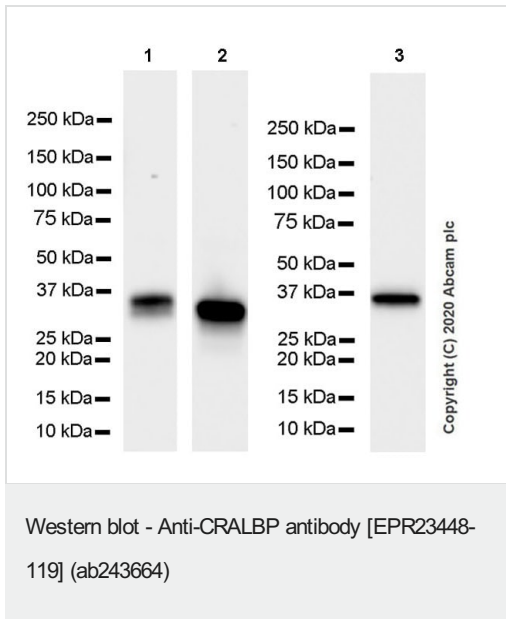
Lane 1: SK-MEL-28 (human malignant melanoma), whole cell lysate 10 ug

Lane 2: ab243664 IP in SK-MEL-28 whole cell lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab243664 in SK-MEL-28 whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 100 seconds



**All lanes** : Anti-CRALBP antibody [EPR23448-119] (ab243664) at 1/1000 dilution

**Lane 1** : Mouse eyeball tissue lysate

**Lane 2** : Rat eyeball tissue lysate

**Lane 3** : Mouse P20 retina tissue lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes** : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) at 1/100000 dilution

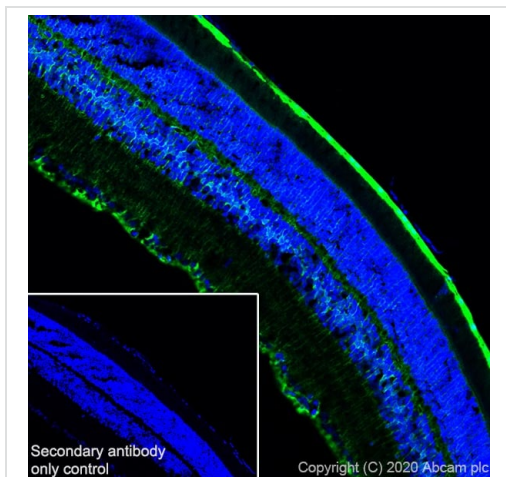
**Predicted band size:** 36 kDa

**Observed band size:** 36 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

The molecular weight observed is consistent with what has been described in the literature (PMID: 26199951)

Exposure time: 15 seconds.

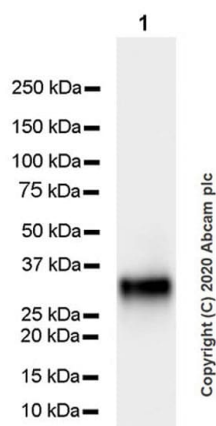


Immunohistochemistry (Frozen sections) - Anti-CRALBP antibody [EPR23448-119] (ab243664)

Immunohistochemical analysis of frozen section of 4% PFA-fixed, 0.2% Triton X-100 permeabilised mouse retina tissue labeling CRALBP with ab243664 at 1/250 dilution followed by **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution (Green). Positive staining on mouse retina especially on retinal pigment epithelial cell (RPE) and Müller cells. The nuclear counter stain is DAPI (Blue).

Secondary antibody control: Secondary antibody is **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary at 1/000 dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).



Western blot - Anti-CRALBP antibody [EPR23448-119] (ab243664)

Anti-CRALBP antibody [EPR23448-119] (ab243664) at 1/1000 dilution + Human eyeball tissue lysate at 20 µg

### Secondary

VeriBlot for IP secondary antibody(HRP)([ab131366](#)) at 1/1000 dilution

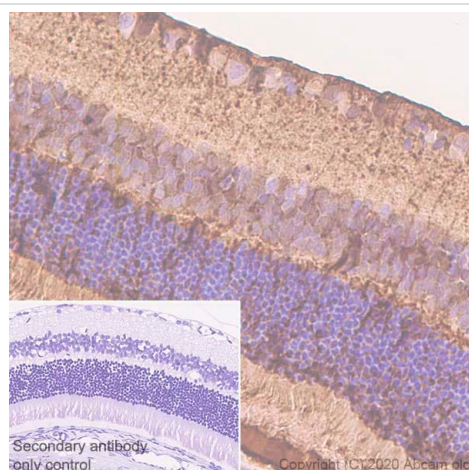
**Predicted band size:** 36 kDa

**Observed band size:** 36 kDa

Blocking and diluting buffer and concentration: 5% NFDm/TBST.

The molecular weight observed is consistent with what has been described in the literature (PMID: 29063836).

Exposure time: 3.25 seconds.

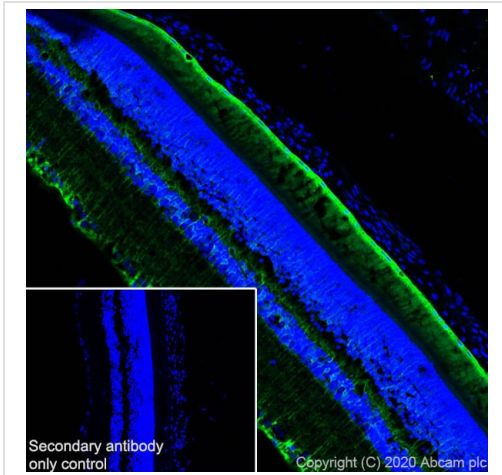


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRALBP antibody [EPR23448-119] (ab243664)

Immunohistochemical analysis of paraffin-embedded Rat retina tissue labeling CRALBP with ab243664 at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). Positive staining on rat retina. The section was incubated with ab243664 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

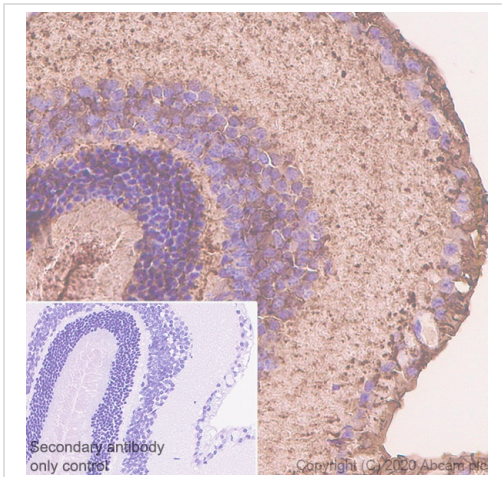


Immunohistochemistry (Frozen sections) - Anti-CRALBP antibody [EPR23448-119] (ab243664)

Immunohistochemical analysis of frozen section of 4% PFA-fixed, 0.2% Triton X-100 permeabilised rat retina tissue labeling CRALBP with ab243664 at 1/250 dilution followed by **ab150077** AlexaFluor<sup>®</sup>488 Goat anti-Rabbit secondary at 1/1000 dilution (Green). Positive staining on rat retina especially on retinal pigment epithelial cell (RPE) and Müller cells. The nuclear counter stain is DAPI (Blue).

Secondary antibody control: Secondary antibody is **ab150077** AlexaFluor<sup>®</sup>488 Goat anti-Rabbit secondary at 1/1000 dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

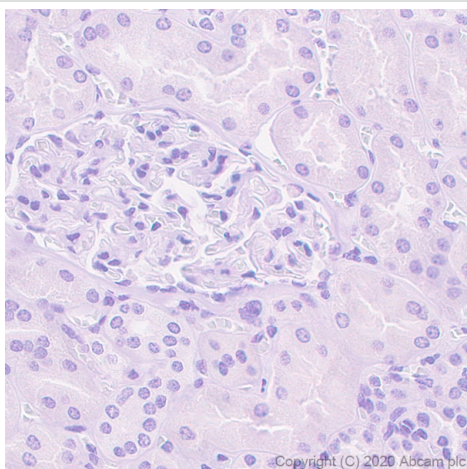


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRALBP antibody [EPR23448-119] (ab243664)

Immunohistochemical analysis of paraffin-embedded Mouse retina tissue labeling CRALBP with ab243664 at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on mouse retina. The section was incubated with ab243664 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRALBP antibody [EPR23448-119] (ab243664)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling CRALBP with ab243664 at 1/2000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). **Negative control:** No staining on human kidney. The section was incubated with ab243664 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-CRALBP antibody [EPR23448-119] (ab243664)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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