abcam

ab88632

Anti-CCRL2 antibody

Key facts

Isotype	IgG
Host species	Mouse
Storage buffer	pH: 7.4 Constituents: PBS
Form	Liquid
Clonality	Polyclonal
Immunogen	Recombinant Full Length Protein corresponding to Human CCRL2. Database link O00421
Carrier free	Yes
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	ab37355 - Mouse polyclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

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

WB

Tested

Species	Mouse
Dilution info	1 µg/mL
Notes	-

Species	Human
Dilution info	1 µg/mL
Notes	-

Target data

See full target information CCRL2

Function	Receptor for CCL19 and chemerin/RARRES2. Does not appear to be a signaling receptor, but may have a role in modulating chemokine-triggered immune responses by capturing and internalizing CCL19 or by presenting RARRES2 ligand to CMKLR1, a functional signaling receptors. Plays a critical role for the development of Th2 responses.

Storage

Shipped at conditions	Blue Ice
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

Supplementary info

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

Activity summary	The CCRL2 protein also known as CC chemokine receptor-like 2 belongs to the seven-transmembrane domain receptor family. This is a smaller GPCR with an approximate mass of 39 kDa. It does not bind ligands like traditional chemokine receptors but acts more like a decoy. Scientists have found its expression primarily on immune cells including monocytes and macrophages as well as on some endothelial and epithelial cells. The expression can vary depending on the activation state of the cells or tissue type.
Biological function summary	CCRL2 influences immune cell homeostasis and response. It does not function in the same way as classical ligand-binding chemokine receptors but serves as a scavenger or "silent" receptor. This characteristic allows it to sequester ligand availability shaping the local chemokine gradient. Researchers see its activity as closely linked to the regulation of immune responses and inflammation although they haven't fully clarified its role in immune signaling complexes.
Pathways	Scientists see CCRL2 as integral to inflammatory responses and chemotactic pathways. It maintains connections to the CXCR3 and CCR5 pathways systems essential for directing immune cell migration. These interactions help moderate the immune system's response intensity. Investigators have found that CCRL2 influences related proteins such as chemerin contributing to chemokine signaling network modulation.
Associated diseases and disorders	Researchers associate CCRL2 with inflammatory conditions and cancer. Its atypical receptor function affects the immune landscape in the tumor microenvironment suggesting a role in regulating immune evasion by tumors. Additionally CCRL2 interacts with chemerin in inflammatory diseases impacting conditions like rheumatoid arthritis by potentially controlling inflammatory cell recruitment. This makes CCRL2 an interesting target for therapies aimed at modulating immune system activities in these diseases.

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

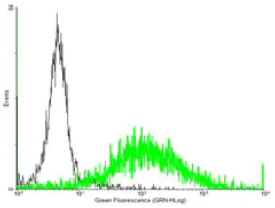
We do not recommend this combination. It is not covered by our product promise.

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.

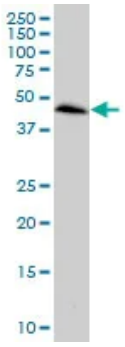
4 product images



Flow Cytometry - Anti-CCRL2 antibody (ab88632)

CCRL2 Flow Cytometry staining using mouse Anti-CCRL2 antibody

FACS analysis of negative control 293 cells (black) and CCRL2-expressing 293 cells (green) using ab88632.



Western blot - Anti-CCRL2 antibody (ab88632)

All lanes:
Western blot - Anti-CCRL2 antibody (ab88632) at 1 µg/mL

All lanes:
Raw 264.7 cell lysate at 50 µg

Predicted band size: 40 kDa



Western blot - Anti-CCRL2 antibody (ab88632)

All lanes:
Western blot - Anti-CCRL2 antibody (ab88632) at 1 µg/mL

All lanes:
NIH/3T3 cell lysate at 50 µg

Predicted band size: 40 kDa

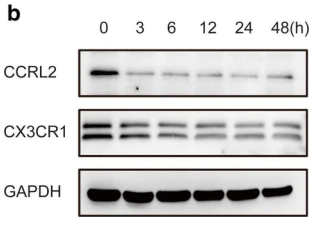


Image collected and cropped by CiteAb under a

Western blot - Anti-CCRL2 antibody (ab88632)

CCRL2 Western blot staining using mouse Anti-CCRL2 antibody

CCRL2 western blot using anti-CCRL2 antibody ab88632. Publication image and figure legend from Zhang, Y., Li, S., et al., 2020, Inflammation, PubMed 31748849.

ab88632 was used in this publication in western blot. This may not be the same as the application(s) guaranteed by Abcam. For a full list of applications guaranteed by Abcam for

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ab88632 please see the product overview.

The silencing of CCRL2/CX3CR1 abrogates the MTB Hsp16.3-induced polarization of macrophages to the M2 phenotype. Bone marrow cells were isolated from the tibias and femurs of BALB/c mice (6–8 weeks old) and incubated with 20 ng/ml GM-CSF for 7 days. Then, BMDMs were transfected with siRNA targeting CCRL2 and CX3CR1. a mRNA expression levels of CCRL2 and CX3CR1 were measured by real-time PCR after transfection. b Western blot analysis of CCRL2 and CX3CR1 in the untreated BMDM group and +Hsp16.3 BMDM group transfected with siRNA targeting mouse CCRL2 and CX3CR1 for 0–48 h. c Real-time PCR analysis of mRNA expression levels of Arg-1, IL-10, TGF-β, and YM-1 in untreated BMDMs and Hsp16.3-treated BMDMs transfected with siRNA targeting mouse CCRL2 and CX3CR1 for 0–72 h. d FCM analysis of the expression levels of NOS2 and CD206 in the untreated BMDM group and +Hsp16.3 BMDM group transfected with siRNA targeting mouse CCRL2 and CX3CR1 for 0–48 h. e ELISA analysis of the secretion levels of IL-10, TGF-β, and TNF-α in the untreated BMDM group and +Hsp16.3 BMDM group transfected with siRNA targeting mouse CCRL2 or CX3CR1 for 48 h. f Western blot analysis of p-ERK, ERK, p-AKT, AKT, p-p-38 MAPK, p-38 MAPK in the +Hsp16.3 BMDM group, and +Hsp16.3 BMDM group transfected with siRNA targeting mouse CCRL2 or CX3CR1 at different time points. Data are presented as the mean ± SEM (n = 3). *p < 0.05, **p < 0.01, ***p < 0.001 compared with the control group (0 h group).

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