abcam

ab124824

Anti-CXCR4/CD184 antibody [UMB2]

Anti-CXCR4/CD184 antibody [UMB2] (ab124824) is a rabbit monoclonal antibody detecting CXCR4/CD184 in **Western Blot, Flow Cytometry (Intra), IHC-P, ICC/IF**. Suitable for **Human, Mouse, Rat**.

- Biophysical QC for unrivalled batch-batch consistency
- Over 230 publications

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	UMB2
Purification technique	Affinity purification Protein A
Specificity	This antibody recognizes only the non-phosphorylated C-terminus of CXCR4 (residues 341-352). Phosphorylation of S346/347 blocks antibody binding. PMID: 24154522, 25451233. We recommend dephosphorylation of samples using lambda phosphatase treatment. Please refer to application notes.
Concentration	2.709 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/500
Notes	We recommend lambda protein phosphatase treatment prior to IHC processing (PMID 24154522). Use 800U for 1 hr at RT then rinse in PBS three times. Perform heat-mediated antigen retrieval before commencing with IHC staining protocol.

Species	Mouse
Dilution info	1/500
Notes	Perform heat-mediated antigen retrieval before commencing with IHC staining protocol.

Not recommended

Species	Rat
Dilution info	-
Notes	Perform heat-mediated antigen retrieval before commencing with IHC staining protocol.

Species	Transfected cell lysate - Mouse
Dilution info	-
Notes	-

Species	Transfected cell line - Human
Dilution info	-
Notes	-

WB

Tested

Species	Transfected cell lysate - Mouse
Dilution info	1/100
Notes	Being CXCR4 a membrane protein, we recommend to not boil the samples after the lysis (before loading the samples on the WB gel).

	We recommend lambda protein phosphatase treatment of the membrane prior to primary antibody incubation (PMID 24154522). Use 800U for 1 hr at RT then rinse in wash buffer three times.

Species	Human
Dilution info	1/100
Notes	Being CXCR4 a membrane protein, we recommend to not boil the samples after the lysis (before loading the samples on the WB gel). We recommend lambda protein phosphatase treatment of the membrane prior to primary antibody incubation (PMID 24154522). Use 800U for 1 hr at RT then rinse in wash buffer three times.

Not recommended

Species	Mouse, Rat, Transfected cell line - Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	5 µg/mL
Notes	-

Expected

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

Not recommended

Species	Transfected cell lysate - Mouse, Transfected cell line - Human
Dilution info	-
Notes	-

IHC-Fr

Not recommended

Species	Mouse, Rat, Human, Transfected cell lysate - Mouse, Transfected cell line - Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human, Transfected cell line - Human
Dilution info	-
Notes	-

Expected

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

Not recommended

Species	Transfected cell lysate - Mouse
Dilution info	-
Notes	-

Target data

See full target information CXCR4/CD184

Function Receptor for the C-X-C chemokine CXCL12/SDF-1 that transduces a signal by increasing intracellular calcium ion levels and enhancing MAPK1/MAPK3 activation (PubMed:10074102, PubMed:10452968, PubMed:10644702, PubMed:10825158, PubMed:18799424, PubMed:20048153, PubMed:20505072, PubMed:24912431, PubMed:28978524, PubMed:8752280, PubMed:8752281). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors, such as

adenylate cyclase (PubMed:16725153, PubMed:17197449, PubMed:18799424, PubMed:39093700). CXCR4 is coupled to G(i) G alpha proteins and mediates inhibition of adenylate cyclase (PubMed:17197449, PubMed:39093700). Involved in the AKT signaling cascade (PubMed:24912431). Plays a role in regulation of cell migration, e.g. during wound healing (PubMed:28978524). Also acts as a receptor for extracellular ubiquitin; leading to enhanced intracellular calcium ions and reduced cellular cAMP levels (PubMed:20228059). Binds bacterial lipopolysaccharide (LPS) et mediates LPS-induced inflammatory response, including TNF secretion by monocytes (PubMed:11276205). Involved in hematopoiesis and in cardiac ventricular septum formation (By similarity). Also plays an essential role in vascularization of the gastrointestinal tract, probably by regulating vascular branching and/or remodeling processes in endothelial cells (By similarity). Involved in cerebellar development; in the CNS, could mediate hippocampal-neuron surviva (By similarity). (Microbial infection) Acts as a coreceptor (CD4 being the primary receptor) for human immunodeficiency virus-1/HIV-1 X4 isolates and as a primary receptor for some HIV-2 isolates. Promotes Env-mediated fusion of the virus (PubMed:10074122, PubMed:10756055, PubMed:8849450, PubMed:8929542, PubMed:9427609).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Storage information	Stable for 12 months at -20°C

Notes

Product Specifications
Anti-CXCR4 antibody [UMB2] (ab124824) was developed by Abcam using patented rabbit monoclonal antibody technology and is validated for use in Flow Cyt (Intra), ICC/IF, IHC-Fr, IHC-P, WB in human, mouse, rat samples. Anti-CXCR4 antibody [UMB2] (ab124824) specifically detects CXCR4 (UniProt ID: P61073; Molecular weight: 40kDa) and is sold in 100 µL and 1 mL selling sizes.

Quality and Validation
Abcam's high quality manufacturing and validation processes ensure Anti-CXCR4 antibody [UMB2] (ab124824) has high sensitivity and specificity alongside high lot-to-lot consistency and reproducibility.
Anti-CXCR4 antibody [UMB2] (ab124824) has been cited over 238 times in peer reviewed journals and is trusted by the scientific community.
Anti-CXCR4 antibody [UMB2] (ab124824) has 12 independent reviews from customers.

Related Products
Conjugation-ready, carrier free format available for antibody clone UMB2 - ab197203.

Antibody clone UMB2 is also available pre-conjugated to a variety of labels for your convenience - Alexa Fluor® 488, Alexa Fluor® 647, Alexa Fluor® 555, Alexa Fluor® 594 (ab208128, ab208129, ab211982, ab211984).

Target Information
CXCR4 (fusin), also known as C-X-C chemokine receptor type 4 or CD184, is a protein encoded by the CXCR4 gene in humans. CXCR4 or CD184 protein is a receptor for the chemokine CXCL12 (SDF-1) and plays a significant role in oncology due to its involvement in tumor growth, metastasis, and the tumor microenvironment. CXCR4 and its ligand CXCL12 are crucial for the metastatic spread of cancer cells to organs where CXCL12 is expressed, such as the bone marrow, liver, and lungs. The CXCR4-CXCL12 axis helps tumor cells find niches that support their survival and growth.

Our internal data indicates that rat is not recommended for IHC.
Abcam recommended secondaries - Goat Anti-Rabbit HRP (ab205718) and Goat Anti-Rabbit Alexa Fluor® 488 (ab150077). Or search our wide range of secondary antibodies for use with your experiment.

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	CXCR4 also known as C-X-C chemokine receptor type 4 is a G protein-coupled receptor that is involved in signal transduction. It has a molecular weight of approximately 41 kDa. CXCR4 is ubiquitously expressed across various tissues including immune cells like T and B lymphocytes as well as in bone marrow brain and heart. It binds specifically with the ligand CXCL12 also known as stromal cell-derived factor 1 (SDF-1) facilitating responses such as cell migration and proliferation.
Biological function summary	CXCR4 plays an important role in the immune system hematopoiesis and angiogenesis. It does not function alone and is often part of a larger protein complex where it recruits and activates other G proteins. The receptor mediates chemotactic responses directing cells to sites of inflammation or injury. Its interaction with CXCL12 is critical for maintaining immune surveillance aiding in the movement and positioning of immune cells.
Pathways	CXCR4 integrates into significant cellular signaling pathways such as the PI3K/AKT pathway and the MAPK pathway. It collaborates closely with signaling proteins like AKT1 and MAPK1 impacting cell survival and growth. These pathways are essential for various cellular functions including cell cycle progression and apoptosis

	regulation. The cross-talk between CXCR4 and these pathways underlines its influence on cell fate decisions.
Associated diseases and disorders	CXCR4 is implicated in cancer metastasis and HIV entry into cells. Overexpression of CXCR4 is observed in several cancers contributing to tumor growth and metastasis. The interaction between CXCR4 and CXCL12 facilitates the infiltration and spread of cancer cells. Additionally in HIV CXCR4 serves as a coreceptor along with CD4 allowing the virus to enter and infect host cells. Both cancer and HIV illustrate CXCR4's central role in disease progression and pathogenesis.

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

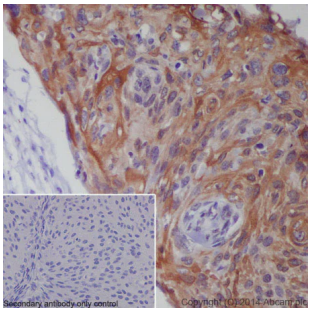
We do not recommend this combination. It is not covered by our product promise.

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.

19 product images

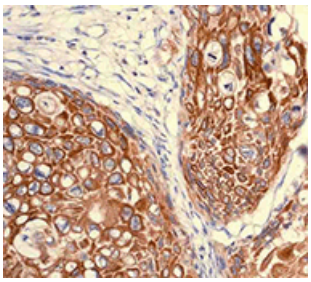


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of human bladder cancer using rabbit Anti-CXCR4/CD184 antibody

Immunohistochemical staining of paraffin embedded human bladder cancer with purified ab124824 at a working dilution of 1/500. The secondary antibody used is ab97051, a HRP-conjugated goat anti-rabbit IgG (H+L), at a dilution of 1/500. The sample is counter-stained with

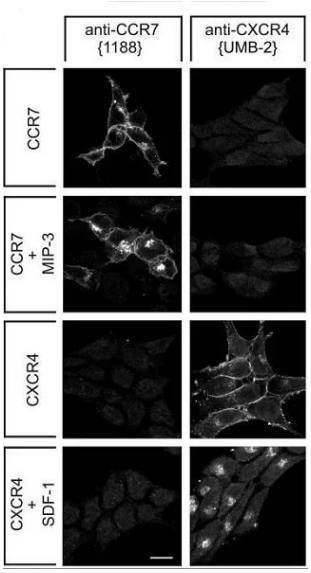
hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CXCR4/CD184 antibody

Unpurified ab124824, at 1/50 dilution, staining CXCR4 in paraffin-embedded Human cervical carcinoma tissue by immunohistochemistry.
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

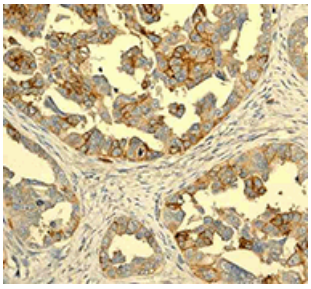


Fischer, T. et al PLoS One. 2008;3(12):e4069. doi: 10.1371/journal.pone.0004069. Epub 2008 Dec 31
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Immunocytochemistry/ Immunofluorescence - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CXCR4/CD184 antibody

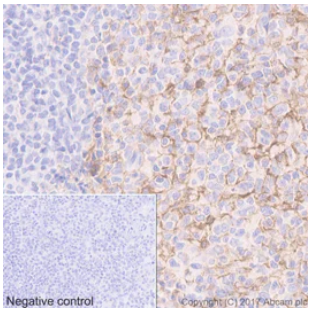
Characterization of UMB-2 (ab124824) by immunofluorescent staining of transfected cells. HEK-293 cells expressing CCR7 or CXCR4 were either not exposed or exposed to 100 ng/ml MIP-3 or 100 ng/ml SDF-1 for 30 min, subsequently fixed and immunofluorescently stained with 1 µg/ml anti-CCR7 {1188} or anti-CXCR4 {UMB-2} at a dilution of 1⊠100. Note that UMB-2 detected prominent immunofluorescence at the level of the plasma membrane only in CXCR4- but not in CCR7-expressing cells, and that SDF-1 exposure induced a rapid translocation of CXCR4 receptor immunostaining from the plasma membrane into the cytosol. Representative results from one of three independent experiments are shown. Scale bar, 20 µm.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CXCR4/CD184 antibody

Unpurified ab124824, at 1/50 dilution, staining CXCR4 in paraffin-embedded Human ovarian adenocarcinoma tissue by immunohistochemistry.
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

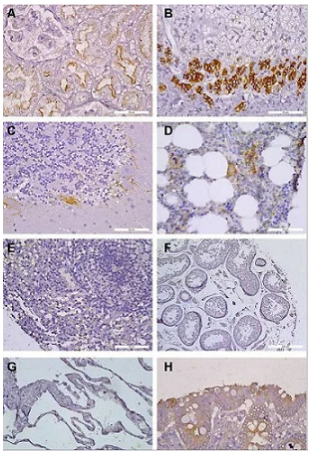


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human tonsil tissue using rabbit Anti-CXCR4/CD184 antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue sections labeling CXCR4 with purified ab197203 at 1/1000 dilution (1.067 µg/ml). Heat mediated antigen retrieval was performed using Tris/EDTA Buffer, PH9 (ab93684). Hematoxylin was used to counter stain. Goat Anti-Rabbit IgG H&L (HRP) secondary antibody was used. Membranous with weak cytoplasmic staining on human tonsil.

This data was developed using the same antibody clone in a different buffer formulation (ab197203).



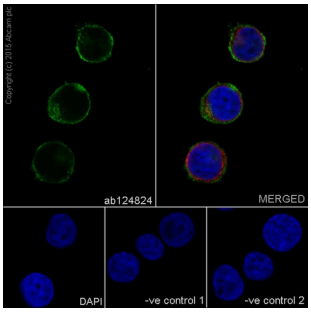
Costa, M.J. et al PLoS One. 2018 Mar 19;13(3):e0194688. doi: 10.1371/journal.pone.0194688. eCollection 2018 Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CXCR4/CD184 antibody

Immunohistochemical detection of CXCR4 expression in human tissue specimens of normal appearance
CXCR4 was detected in the indicated PFA-fixed, paraffin-embedded human tissues using ab124824 at 5 µ/ml overnight at 4°C.

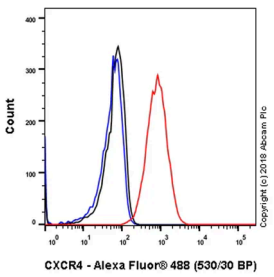
A, kidney. B, adrenal gland. C, cerebellum. D, bone marrow, brown staining: CXCR4, green staining: CD45. E, Spleen. F, testis. G, lung. H, colon.



Immunocytochemistry/ Immunofluorescence - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CXCR4/CD184 antibody

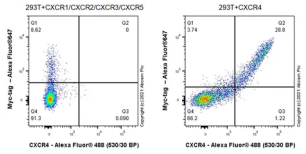
Immunofluorescence staining of Jurkat cells with purified ab124824 at a working dilution of 1 in 250, counter-stained with DAPI. Tubulin was stained with mouse anti-tubulin at a dilution of 1/1000 (ab7291) and Alexa Fluor® 594 goat anti-mouse at a dilution of 1/500 (ab150120) . The secondary antibody was ab150077 Alexa Fluor® 488 goat anti rabbit, used at a dilution of 1 in 500. The cells were fixed in 4% PFA and permeabilized using 0.1% Triton X 100. The negative controls are shown in the bottom middle and right hand panels - for the first negative control, purified ab124824 was used at a dilution of 1/200 followed by an Alexa Fluor® 555 goat anti-mouse antibody at a dilution of 1/500 and for the second negative control mouse primary antibody (ab7291) and anti-rabbit secondary antibody (ab15007) were used.



Flow Cytometry (Intracellular) - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Flow Cytometry (Intracellular) staining using rabbit Anti-CXCR4/CD184 antibody

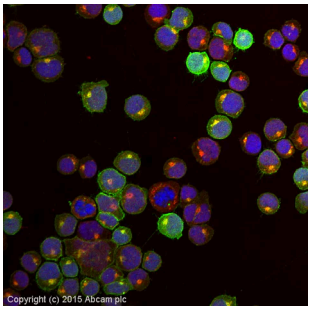
Intracellular Flow Cytometry analysis of Jurkat (human T cell leukemia T lymphocyte) cells labeling CXCR4 with purified ab124824 at 1/260 dilution (10 µg/ml) - Red. Cells were fixed with 4% paraformaldehyde . A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (ab172730) - Black. Unlabeled control - Blue. Untreated cells - Green



Flow Cytometry (Intracellular) - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Flow Cytometry (Intracellular) staining using rabbit Anti-CXCR4/CD184 antibody

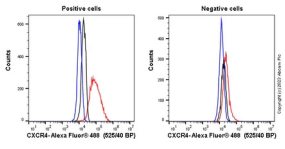
Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HEK-293T (human embryonic kidney) cells transfected with a mix of human CXCR1, CXCR2, CXCR3 and CXCR5 expression vector containing a myc-his tag (Left) / HEK-293T transfected with a human CXCR4 expression vector containing a myc-his tag (Right) labelling CXCR4 with ab124824 at 1/2000 dilution (0.1µg)/ Left and Right. A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/3000 dilution was used as the secondary antibody. No cross-reactivity with CXCR1/CXCR2/CXCR3/CXCR5.



Immunocytochemistry/ Immunofluorescence - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CXCR4/CD184 antibody

ab124824 stained Jurkat cells. The cells were 100% methanol fixed for 5 minutes at -20°C and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1hour at room temperature to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab124824 at 5ug/ml) overnight at +4°C. The secondary antibody (pseudo-colored green) was Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed (ab150081) used at a 1/1000 dilution for 1hour at room temperature. Alexa Fluor® 594 WGA was used to label plasma membranes (pseudo-colored red) at a 1/200 dilution for 1hour at room temperature. DAPI was used to stain the cell nuclei (pseudo-colored blue) at a concentration of 1.43µM for 1hour at room temperature.



Flow Cytometry (Intracellular) - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Flow Cytometry (Intracellular) staining using rabbit Anti-CXCR4/CD184 antibody

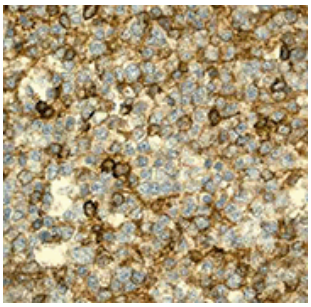
Flow cytometry overlay histogram showing left Jurkat positive cells and right negative HepG2 stained with ab124824 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilised with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab124824) (1x 106 in 100µl at 1.0µg/ml (1/1900)) for 30min at 22°C.

The secondary antibody Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed was incubated at 1/4000 for 30min at 22°C

Isotype control antibody (black line) was Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter.

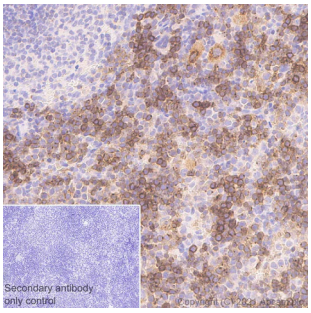
This antibody gave a positive signal in Jurkat Fixed with 4% formaldehyde (10 min) / permeabilised with 0.1% PBS-Triton X-100 for 15 min under the same conditions.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CXCR4/CD184 antibody

Unpurified ab124824, at 1/50 dilution, staining CXCR4 in paraffin-embedded Human tonsil tissue by immunohistochemistry.
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse spleen tissue using rabbit Anti-CXCR4/CD184 antibody

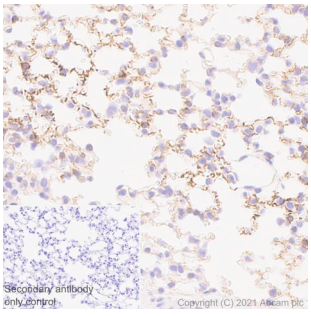
Immunohistochemical analysis of Paraffin-embedded sections Mouse spleen tissue labelling CXCR4 with ab124824 at 1/1000 dilution, followed by LeicaDS9800 (Bond™ Polymer Refine Detection). Cytoplasmic and membranous staining on mouse spleen tissue is observed. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is LeicaDS9800 (Bond™ Polymer Refine Detection).

The section was incubated with ab124824 for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

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

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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

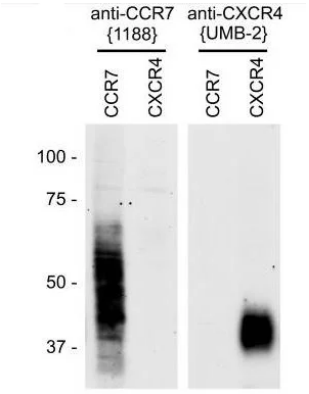
CXCR4/CD184 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse lung tissue using rabbit Anti-CXCR4/CD184 antibody

Immunohistochemical analysis of Paraffin-embedded sections Mouse lung tissue labelling CXCR4 with ab124824 at 1/1000 dilution, followed by LeicaDS9800 (Bond™ Polymer Refine Detection). Cytoplasmic and membranous staining on mouse lung tissue is observed. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is LeicaDS9800 (Bond™ Polymer Refine Detection).

The section was incubated with ab124824 for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

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



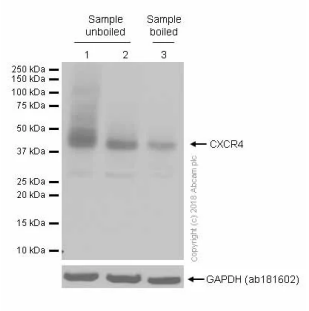
Fischer, T. et al PLoS One. 2008;3(12):e4069. doi: 10.1371/journal.pone.0004069. Epub 2008 Dec 31. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/.

Western blot - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Western blot staining using rabbit Anti-CXCR4/CD184 antibody

Western blot analysis of the specificity of anti-CXCR4 antibodies. Membrane preparations from HEK-293 cells stably transfected to express either CCR7 or CXCR4 were separated on 10% SDS-polyacrylamide gels and blotted onto nitrocellulose membranes. Membranes were then incubated with affinity-purified 1 µg/ml anti-CCR7 {1188} or anti-CXCR4 {UMB-2} hybridoma supernatant at a dilution of 1⁄100. Blots were developed using enhanced chemiluminescence. Note that UMB-2 detected a band of the expected molecular weight only in CXCR4- but not in CCR7-transfected cells. Two additional experiments gave similar results.
All lanes:
Western blot - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

Predicted band size: 39 kDa



Western blot - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Western blot staining using rabbit Anti-CXCR4/CD184 antibody

Blocking and diluting buffer: 5% NFDM/TBST
We suggest to not boil the sample after lysis.

All lanes:
Western blot - Anti-CXCR4/CD184 antibody [UMB2] (ab124824) at 1/1000 dilution

Lane 1:
HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates at 15 µg

Lanes 2 - 3:
Jurkat (Human T cell leukemia T lymphocyte) whole cell lysates at 15 µg

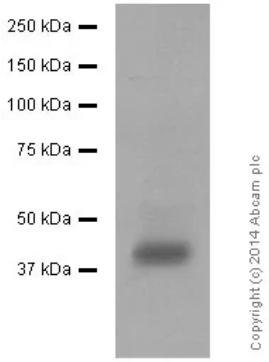
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 39 kDa

Observed band size: 43 kDa

Exposure time: 1s



Western blot - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Western blot staining of WI-38 cell lysate using rabbit Anti-CXCR4/CD184 antibody

Blocking buffer: 5% NFDM/TBST
Dilution buffer: 5% NFDM/TBST

Lane 1:
Western blot - Anti-CXCR4/CD184 antibody [UMB2] (ab124824) at 1/100 dilution

Lane 1:
Western blot - Anti-CXCR4/CD184 antibody [UMB2] - BSA and Azide free (ab197203)

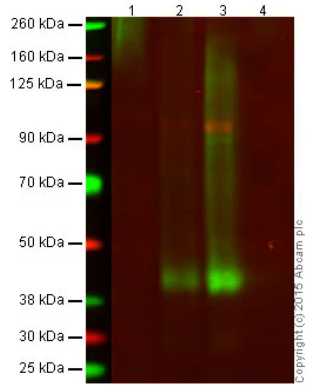
All lanes:
WI-38 cell lysate at 10 µg

Secondary

All lanes:
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 39 kDa

Observed band size: 43 kDa



Western blot - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Western blot staining using rabbit Anti-CXCR4/CD184 antibody

Running buffer: MOPS.
Conditions: denatured/reduced.

This blot was produced using a 4-12% Bis-Tris gel under the MOPS buffer system. The gel was run at 200V for 60 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour before being incubated with ab124824 (anti-CXCR4) and ab7671 (loading ctrl), overnight at 4°C. Before imaging, antibody binding was detected using labelled goat anti-rabbit (H+L; green) and labelled goat anti-mouse (H+L; red) at 1:10,000 dilutions for 1hr at room temperature.

All lanes:
Western blot - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

Lane 1:
CHO (negative control) at 20 µg

Lane 2:
Jurkat whole cell at 20 µg

Lane 3:
Jurkat membrane at 20 µg

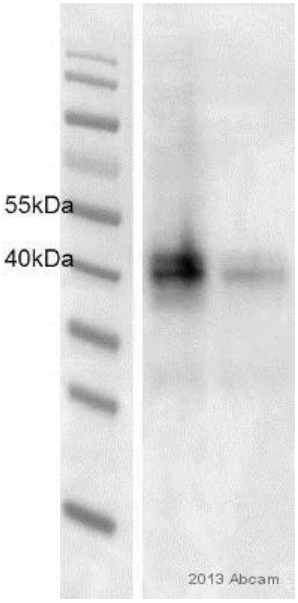
Lane 4:
Jurkat nuclear (negative control) at 20 µg

Secondary

All lanes:
Goat anti-rabbit at 1/10000 dilution

Predicted band size: 39 kDa

Observed band size: 41 kDa



This image is courtesy of an anonymous customer review

Western blot - Anti-CXCR4/CD184 antibody [UMB2] (ab124824)

CXCR4/CD184 Western blot staining using rabbit Anti-CXCR4/CD184 antibody

All lanes:
Western blot - Anti-CXCR4/CD184 antibody [UMB2] (ab124824) at 1/500 dilution

Lane 1:
HEK239 transfected with a CXCR4 (mouse) expression vector cell lysate at 100000 Cells

Lane 2:
HEK239 transfected with an empty expression vector cell lysate at 100000 Cells

Secondary

All lanes:
HRP-conjugated Goat anti-rabbit IgG polyclonal at 1/50000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 39 kDa

Observed band size: 42 kDa, 47 kDa

Exposure time: 10s

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