

# Product Datasheet

## CXCR4 Antibody - BSA Free

### NBP1-77067

Unit Size: 0.1 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

[www.novusbio.com](http://www.novusbio.com)



[technical@novusbio.com](mailto:technical@novusbio.com)

**Publications: 5**

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NBP1-77067](http://www.novusbio.com/NBP1-77067)

Updated 10/23/2025 v.20.1

**Earn rewards for product reviews and publications.**

Submit a publication at [www.novusbio.com/publications](http://www.novusbio.com/publications)

Submit a review at [www.novusbio.com/reviews/destination/NBP1-77067](http://www.novusbio.com/reviews/destination/NBP1-77067)



**NBP1-77067**

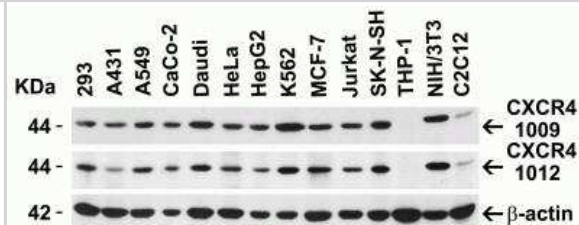
CXCR4 Antibody - BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Peptide affinity purified
Buffer	PBS
Target Molecular Weight	40 kDa
Product Description	
Description	Novus Biologicals Knockout (KO) Validated Rabbit CXCR4 Antibody - BSA Free (NBP1-77067) is a polyclonal antibody validated for use in IHC, WB, ELISA, Flow and ICC/IF. Anti-CXCR4 Antibody: Cited in 4 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	7852
Gene Symbol	CXCR4
Species	Human, Mouse, Rat
Reactivity Notes	Immunogen displays the following percentage of sequence identity for non-tested species: Bovine (86%)
Immunogen	Antibody was raised against a peptide corresponding to 14 amino acids near the amino terminus of human CXCR4 isoform b. The immunogen is located within the first 50 amino acids of CXCR4. Amino Acid Sequence: MEGISYTSNDNYTE
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, ELISA, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Knockdown Validated, Knockout Validated
Recommended Dilutions	Western Blot 1-2 ug/ml, Flow Cytometry 0.1 ug/ml, ELISA 1:100-1:2000, Immunohistochemistry 2.5 ug/ml, Immunocytochemistry/ Immunofluorescence 2-20 ug/mL, Immunohistochemistry-Paraffin 5 ug/mL, Knockout Validated, Knockdown Validated
Application Notes	Knockdown validation reported in scientific literature (PMID: 31239444).

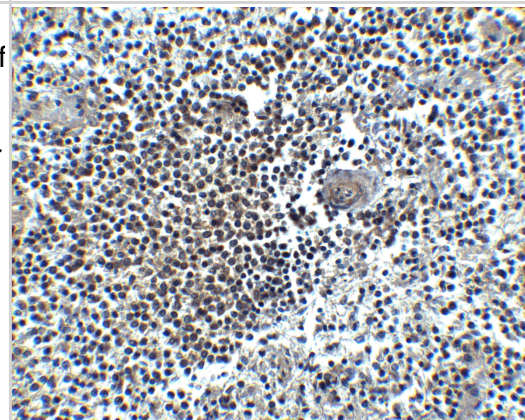


## Images

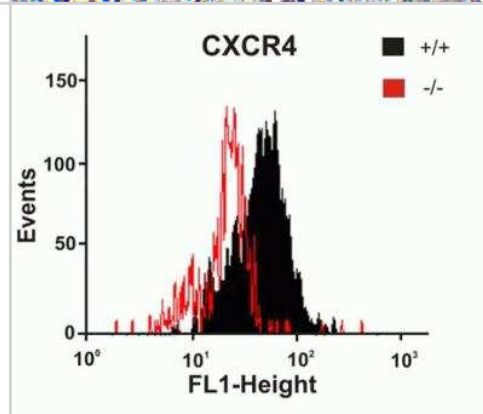
Western Blot: CXCR4 Antibody [NBP1-77067] - Loading: 15 ug of lysates per lane. Antibodies: NBP1-7706 (1 ug/mL), NBP1-76480 (1 ug/mL), and beta-actin (1 ug/mL), 1 h incubation at RT in 5% NFDN/TBST. Secondary: Goat antirabbit IgG HRP



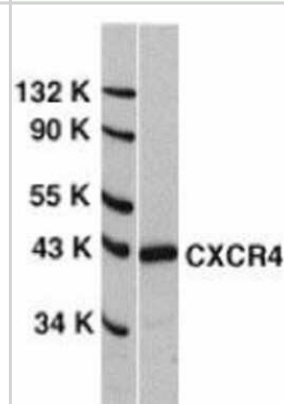
Immunohistochemistry: CXCR4 Antibody - BSA Free [NBP1-77067] - Validation of CXCR4 in Human Spleen. Immunohistochemical analysis of paraffin-embedded human spleen tissue using anti-CXCR4 antibody at 5 u/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4C. A Goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



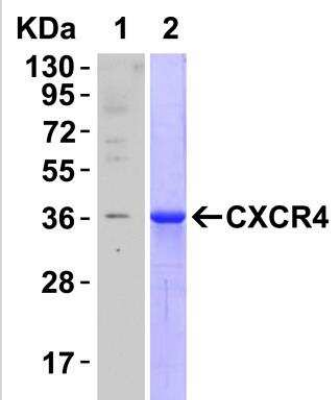
Flow Cytometry: CXCR4 Antibody [NBP1-77067] - Astrocytes from wild-type or CXCR4 knockout mice were stained with primary antibodies against CXCR4 and FITClabeled secondary antibodies, and subsequently subjected to flow cytometry. CXCR4<sup>-/-</sup> astrocytes (red) showed loss of CXCR4 cell-surface expression compared with wild-type cells (black).



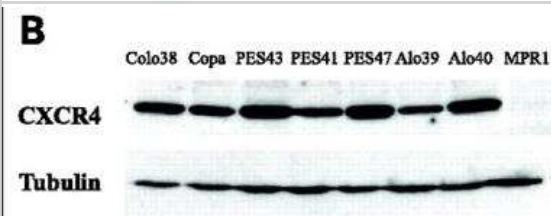
Western Blot: CXCR4 Antibody [NBP1-77067] - HeLa whole cell lysate with CXCR4 antibody at 0.5 ug/ml.



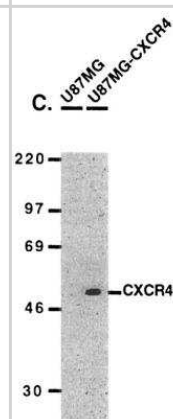
Western Blot: CXCR4 Antibody [NBP1-77067] - Recombinant Protein Test: Loading: CXCR4 partial recombinant protein (H00007852-Q01). Lane 1: Anti-CXCR4 antibody (0.1 ug/mL) 1 h incubation at RT in 5% NFDM/TBST. Lane 2: Coomassie blue staining.



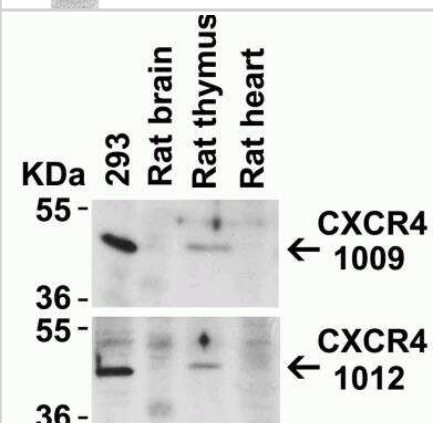
Western Blot: CXCR4 Antibody [NBP1-77067] - CXCR4 protein was detected in the human metastatic melanoma cell lines and human melanoma cell line (colo38), but not in the human primary melanocytes (MPR1) with anti-CXCR4 antibodies.



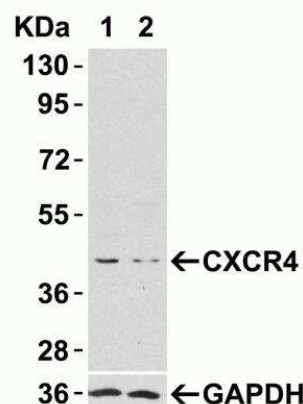
Western Blot: CXCR4 Antibody [NBP1-77067] - U87MG and U87MG-CXCR4 extracts were included as negative and positive controls, respectively, for CXCR4 detection with anti-CXCR4 antibodies.



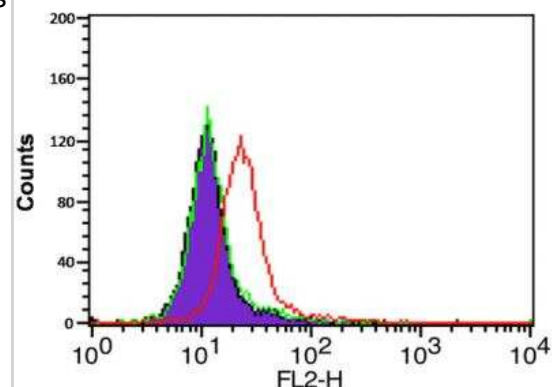
Western Blot: CXCR4 Antibody [NBP1-77067] - Loading: Lysates/proteins at 20 ug per lane. Antibodies: NBP1-7706 (2 ug/mL) or NBP1-76480 (2 ug/mL). 1 h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



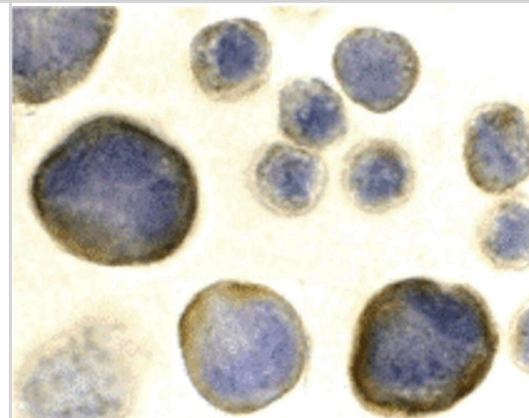
Western Blot: CXCR4 Antibody [NBP1-77067] - HeLa cells were transfected with control siRNAs (lane 1) or CXCR4 siRNAs (lane 2)  
Loading: 10 ug of HeLa whole cell lysates per lane. Antibodies: NBP1-7706 (2 ug/mL), 1 h incubation at RT in 5% NFDm/TBST. Secondary: Goat antirabbit IgG HRP conjugate at 1:10000 dilution.



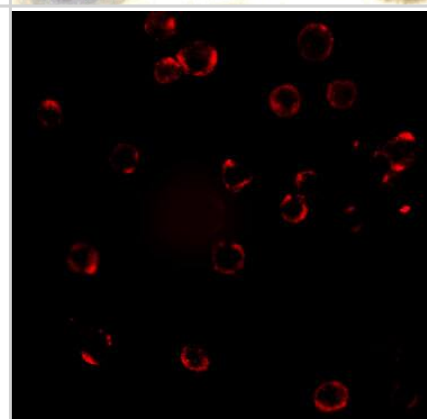
Flow Cytometry: CXCR4 Antibody [NBP1-77067] - Analysis of HeLa cells using CXCR4 antibody at 0.1 ug/ml. Purple: cells without staining, Green: Isotype control. Red : CXCR4 antibody.



Immunocytochemistry/ Immunofluorescence: CXCR4 Antibody - BSA Free [NBP1-77067] - Validation of CXCR4 in HeLa Cells.  
Immunocytochemical analysis of HeLa cells using anti-CXCR4 antibody at 2 u/ml. Cells was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



Immunocytochemistry/ Immunofluorescence: CXCR4 Antibody - BSA Free [NBP1-77067] - Validation of CXCR4 in HeLa Cells.  
Immunofluorescent analysis of 4% paraformaldehyde-fixed HeLa cells labeling CXCR4 with at 20 ug/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (red). Image showing both membrane and cytoplasmic staining on HeLa cells.



## Publications

Liu Z, Deng Y, Song X et al. CXCL12/CXCR4 modulates macrophage efferocytosis to induce glomerular crescent formation and fibrosis via ELMO1/DOCK180/RAC1 signaling in ANCA-associated glomerulonephritis Cellular and molecular life sciences : CMLS 2025-07-19 [PMID: 40682610]

Yang S, Wei J, Cui YH et al. m6A mRNA demethylase FTO regulates melanoma tumorigenicity and response to anti-PD-1 blockade Nat Commun. 2019-06-25 [PMID: 31239444] (WB, Knockdown Validated, Mouse)

Iseki M, Kushida Y, Wakao S et al. Muse Cells, Nontumorigenic Pluripotent-Like Stem Cells, Have Liver Regeneration Capacity Through Specific Homing and Cell Replacement in a Mouse Model of Liver Fibrosis. Cell Transplant 2017-05-09 [PMID: 27938474] (Human)

Hattermann K, Holzenburg E, Hans F et al. Effects of the chemokine CXCL12 and combined internalization of its receptors CXCR4 and CXCR7 in human MCF-7 breast cancer cells. Cell Tissue Res. 2014-04-26 [PMID: 24770893] (ICC/IF, Human)

Details:  
MCF-7, Figs 2,3.

Malvoisin E, Livrozet JM, Makloufi D et al. Soluble chemokine receptor CXCR4 is present in human sera. Anal Biochem. 2011-07-15 [PMID: 21440527]





### **Novus Biologicals USA**

10730 E. Briarwood Avenue  
Centennial, CO 80112  
USA  
Phone: 303.730.1950  
Toll Free: 1.888.506.6887  
Fax: 303.730.1966  
nb-customerservice@bio-techne.com

### **Bio-Techne Canada**

21 Canmotor Ave  
Toronto, ON M8Z 4E6  
Canada  
Phone: 905.827.6400  
Toll Free: 855.668.8722  
Fax: 905.827.6402  
canada.inquires@bio-techne.com

### **Bio-Techne Ltd**

19 Barton Lane  
Abingdon Science Park  
Abingdon, OX14 3NB, United Kingdom  
Phone: (44) (0) 1235 529449  
Free Phone: 0800 37 34 15  
Fax: (44) (0) 1235 533420  
info.EMEA@bio-techne.com

### **General Contact Information**

www.novusbio.com  
Technical Support: nb-technical@bio-techne.com  
Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

### **Products Related to NBP1-77067**

---

NBP1-77067PEP	CXCR4 Antibody Blocking Peptide
NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

---

### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our 100% guarantee, please visit [www.novusbio.com/guarantee](http://www.novusbio.com/guarantee)

Earn gift cards/discounts by submitting a review: [www.novusbio.com/reviews/submit/NBP1-77067](http://www.novusbio.com/reviews/submit/NBP1-77067)

Earn gift cards/discounts by submitting a publication using this product:  
[www.novusbio.com/publications](http://www.novusbio.com/publications)

