

# Product Datasheet

## CXCR4 Antibody - BSA Free

### NB100-56437

Unit Size: 0.1 mg

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

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**NB100-56437**

CXCR4 Antibody - BSA Free

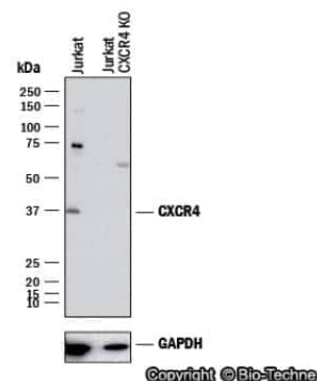
Product Information	
Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Protein G purified
Buffer	PBS

Product Description	
Description	Novus Biologicals Rabbit CXCR4 Antibody - BSA Free (NB100-56437) is a polyclonal antibody validated for use in IHC, WB and ICC/IF. Anti-CXCR4 Antibody: Cited in 21 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	7852
Gene Symbol	CXCR4
Species	Human, Mouse, Rat, Sheep
Immunogen	Rabbit anti-CXCR4 polyclonal antibody was raised against a peptide corresponding to amino acids 328-338 of human CXCR4.

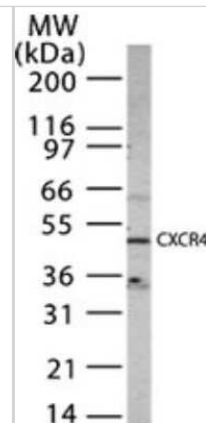
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Knockdown Validated
Recommended Dilutions	Western Blot 1 - 2 ug/mL, Immunohistochemistry 1:10 - 1:500, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin 1:10 - 1:500. Use reported in scientific literature (Zagzag (2005)), Immunohistochemistry-Frozen reported in scientific literature (Nimmagadda et al (2010)), Knockdown Validated
Application Notes	In HeLa, a 45 kDa band is observed.

**Images**

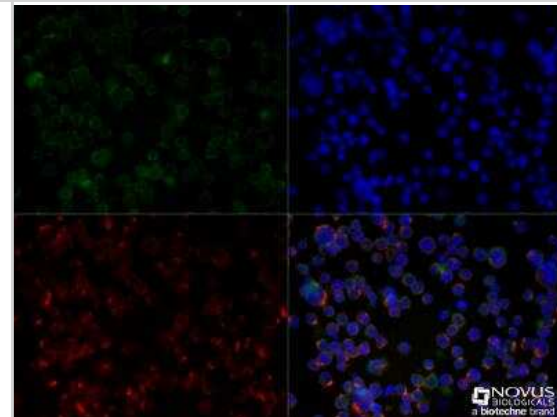
Western Blot: CXCR4 Antibody [NB100-56437] - Western blot shows lysates of Jurkat human T lymphocyte parental cell line and CXCR4 knockout (KO) Jurkat cell line. PVDF membrane was probed with 1 ug/ml of Rabbit Anti-Human CXCR4 Polyclonal Antibody (Catalog # NB100-56437) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog #HAF008). Specific band was detected for CXCR4 at approximately 38 kDa (as indicated) in the parental Jurkat cell line, but is not detectable in the knockout Jurkat cell line. This experiment was conducted under reducing conditions.



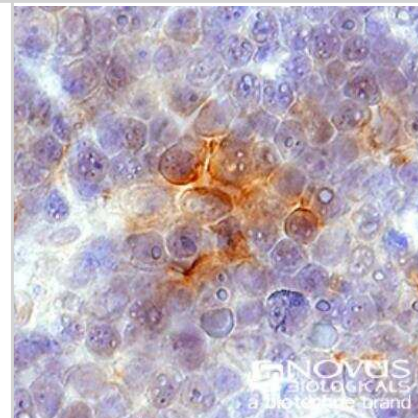
Western Blot: CXCR4 Antibody [NB100-56437] - Detection of 15 ug in HeLa cells with antibody concentration at 1 ug/mL.



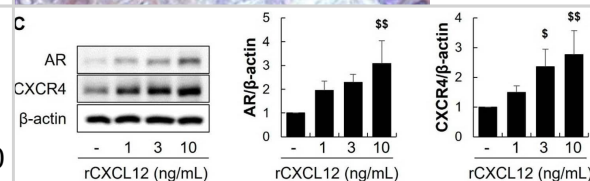
Immunocytochemistry/Immunofluorescence: CXCR4 Antibody [NB100-56437] - Jurkat cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X TBS + 0.5% Triton X-100. The cells were incubated with anti-CXCR4 (NB100-56437) at a 1:25 dilution for 1 hour at room temperature and detected with an anti-rabbit DyLight 488 (Green) at a 1:500 dilution. Alpha tubulin was used as a co-stain at a 1:1000 dilution and detected with and anti-mouse DyLight 550 (Red) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



Immunohistochemistry-Paraffin: CXCR4 Antibody [NB100-56437] - CXCR4 was detected in immersion sections of human tonsil using rabbit anti-human antibody (Catalog # NB100-56437) at 1:300 dilution overnight at 4C. Tissue was stained using the VisuCyte anti-rabbit HRP polymer detection reagent with DAB chromogen (brown) and counterstained with hematoxylin (blue).



CXCL12 secreted from DFs induces AR and CXCR4 in DPCs. The effects of rCXCL12 on the expression of AR and CXCR4 in DPCs were observed using qRT-PCR (A,B) and Western blot analysis (C). rCXCL12 increased the mRNA and protein expression of the AR and CXCR4 in DPCs. \$ p < 0.05, \$\$ p < 0.01 vs. Control. (D) DFs were treated with 100 nM TP or DHT for 48 h and the culture medium (CM) was collected. CM from DFs treated with TP and DHT (DFCMTTP and DFCMDHT) significantly reduced hair length in human hair organ culture. \$ p < 0.05 vs. DFCM, n = 10. The dollar sign (\$) indicates differences in a one-way ANOVA. Image collected and cropped by CiteAb from the following open publication (<https://www.mdpi.com/1422-0067/25/3/1705>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

Baker M, Hampson E, Islam P et al. P-Rex1 limits the agonist-induced internalization of GPCRs independently of its Rac-GEF activity. *Cell reports* 2025-10-14 [PMID: 41100251]

Locri F, Dal Monte M, Aronsson M et al. UPARANT is an effective antiangiogenic agent in a mouse model of rubeosis iridis *Journal of Molecular Medicine* 2019-09-01 [PMID: 31243519]

Queen NJ, Deng H, Huang W et al. Environmental Enrichment Mitigates Age-Related Metabolic Decline and Lewis Lung Carcinoma Growth in Aged Female Mice *Cancer Prevention Research* 2021-12-01 [PMID: 34535449]

Lyu C, Ye Y, Lensing MM et al. Targeting Gi/o protein-coupled receptor signaling blocks HER2-induced breast cancer development and enhances HER2-targeted therapy *JCI Insight* 2021-09-22 [PMID: 34343132]

Hiraide T, Tsuda N, Momoi M et al. CXCL12/CXCR4 pathway as a novel therapeutic target for RNF213 -associated pulmonary arterial hypertension *Scientific Reports* 2024-11-04 [PMID: 39496725]

Yamamoto Y, Kadoya K, Terkawi MA et al. Neutrophils delay repair process in Wallerian degeneration by releasing NETs outside the parenchyma *Life science alliance* 2022-10-01 [PMID: 35961782] (IHC-P, Mouse)

Zheng M, Oh SH, Choi N et al. CXCL12 inhibits hair growth through CXCR4 *Biomedicine & pharmacotherapy = Biomedecine & pharmacotherapie* 2022-04-21 [PMID: 35462338] (IF/IHC, Mouse)

Irie Y, Tsubota M, Ishikura H et al. Macrophage-derived HMGB1 as a Pain Mediator in the Early Stage of Acute Pancreatitis in Mice: Targeting RAGE and CXCL12/CXCR4 Axis *J Neuroimmune Pharmacol* 2017-07-28 [PMID: 28755135] (WB, Mouse)

Pelagalli A, Nardelli A, Lucarelli E et al. Autocrine signals increase Ovine Mesenchymal Stem Cells migration through Aquaporin-1 and CXCR4 overexpression *J. Cell. Physiol.* 2018-01-18 [PMID: 29345324] (WB)

Gagner JP, Sarfraz Y, Ortenzi V et al. Multifaceted C-X-C Chemokine Receptor 4 Inhibition Interferes with Anti-Vascular Endothelial Growth Factor Therapy-Induced Glioma Dissemination. *Am. J. Pathol.* 2017-07-20 [PMID: 28734730] (WB, Mouse)

Hogg K, Etherington SL, Young JM et al. Inhibitor of differentiation (Id) genes are expressed in the steroidogenic cells of the ovine ovary and are differentially regulated by members of the transforming growth factor-beta family. *Endocrinology* [PMID: 20032053]

### Details:

Used the Azide Free form of this antibody.

Dieckow J, Brandt W, Hattermann K et al. CXCR4 and CXCR7 Mediate TFF3-Induced Cell Migration Independently From the ERK1/2 Signaling Pathway. *Invest. Ophthalmol. Vis. Sci.* 2016-01-01 [PMID: 26780310] (ICC/IF, Human)

More publications at <http://www.novusbio.com/NB100-56437>





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### **Products Related to NB100-56437**

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NB800-PC1	HeLa Whole Cell Lysate
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

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### **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.

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