CXCR4 Monoclonal Antibody (12G5)

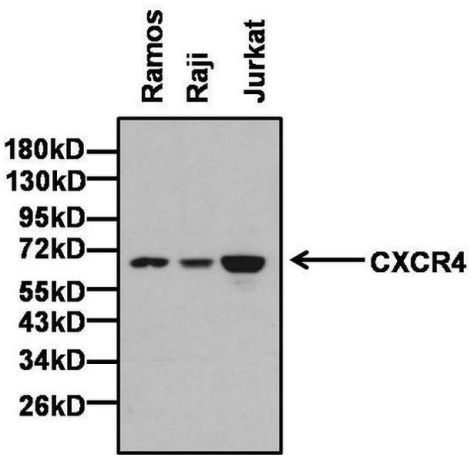
Product Details	
Size	100 µg
Species Reactivity	Human
Published Species	Hamster, Human, Mouse
Host/Isotype	Mouse / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	12G5
Conjugate	Unconjugated
Immunogen	SIV-infected SupT1 cells injected into Balb/c mice.
Form	Liquid
Concentration	0.5 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.4
Contains	0.1% sodium azide
Storage conditions	-20°C
RRID	AB_2533227

Applications	Tested Dilution	Publications
Western Blot (WB)	2 µg/mL	5 Publications
Immunohistochemistry (IHC)	-	5 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	4 Publications
Immunocytochemistry (ICC/IF)	Assay-dependent	4 Publications
Flow Cytometry (Flow)	3-5 µg/mL	5 Publications
Functional Assay (FN)	-	1 Publication
Miscellaneous PubMed (Misc)	-	3 Publications

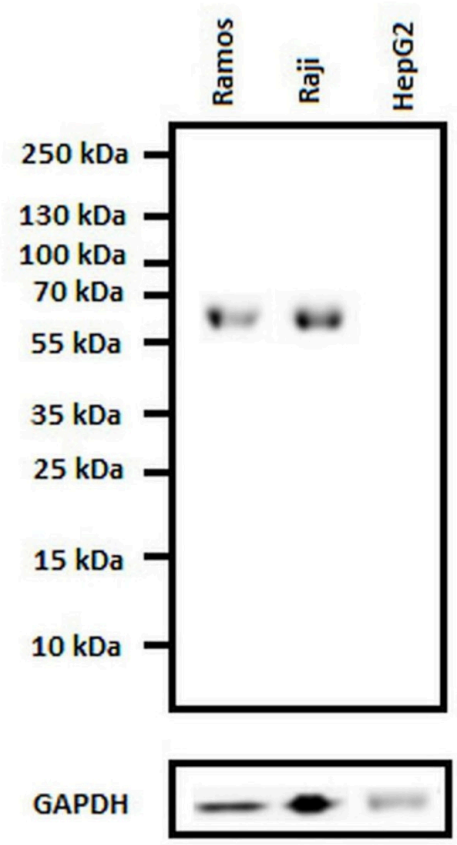
Product Specific Information

By Western blot, 35-8800 detects a band at ~60kD, which likely represents an isoform or post-translationally modified form of CXCR4, many of which have been described in the literature.

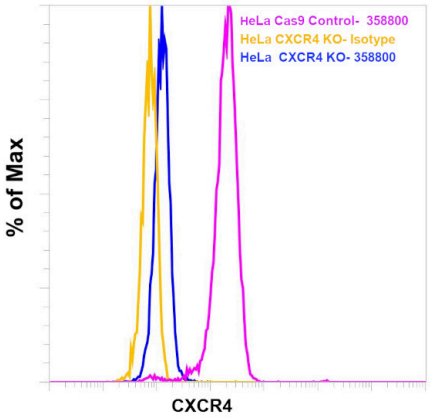
Product Images For CXCR4 Monoclonal Antibody (12G5)



CXCR4 Antibody (35-8800) in WB
Western blot analysis of CXCR4 was performed by loading 25 µg of Ramos, Raji, and Jurkat whole cell lysates, and 10 µL of PageRuler Prestained Protein Ladder (Product # 26616) per well onto a Novex® 4-20% Tris-Glycine polyacrylamide gel. Proteins were transferred to a PVDF membrane using the G2 Blotter (Product # 62288), and blocked with 5% milk in TBST for at least 1 hour at room temperature. CXCR4 was detected at ~60 kD using a CXCR4 monoclonal antibody at a concentration of 2 µg/mL in blocking buffer overnight at 4C on a rocking platform, followed by an HRP-conjugated goat anti-mouse IgG secondary antibody (Product # 31430) at a dilution of 1:40,000 for at least 30 minutes. Chemiluminescent detection was performed using SuperSignal West Dura (Product # 34076). NOTE: The presence of a 60 kD band likely represents an isoform or post-translationally modified form of CXCR4, many of which have been described in the literature.



CXCR4 Antibody (35-8800)
The specificity of anti-CXCR4 antibody (Product # 35-8800) was demonstrated by the western blot detection of specific expression of CXCR2 in Ramos and Raji cells, but not in negative control HepG2 cells. NOTE: The presence of a 60kD band likely represents an isoform or post-translationally modified form of CXCR4, many of which have been described in the literature. {RE}



CXCR4 Antibody (35-8800) in Flow
Knockout of CXCR4 was achieved by CRISPR-Cas9 genome editing using LentiArray™ Lentiviral sgRNA (Product # A32042, Assay ID CRISPR695599_LV) and LentiArray Cas9 Lentivirus (Product # A32064). Flow cytometry analysis of CXCR4 was performed by staining HeLa CXCR4 Knock out cells with4 µg Mouse / IgG2a, kappa (Product # 14-4724-82, yellow histogram) or 4 µg CXCR4 Monoclonal Antibody (12G5) (Product # 358800, blue histogram) followed by Goat anti-Mouse IgG (H+L), Superclonal™ Recombinant Secondary Antibody, Alexa Fluor™ Plus 488 (Product # A55058, 1:1000). HeLa Cas9 control cells were also stained with4 µg CXCR4 Monoclonal Antibody (12G5) (Product # 358800, pink histogram) followed by the secondary antibody. Lossof signal was observed in the CXCR4 KOcells stained with CXCR4 antibody clone 12G5 but not in the control Cas9cells. Viable cells were used for analysis, as determined by Fixable Viability Dye eFluor™ 780 (Product # 65-0865-18).

View more figures on thermofisher.com

27 References

Western Blot (5)

Frontiers in pharmacology

1-Integrin plays a major role in resveratrol-mediated anti-invasion effects in the CRC microenvironment.

"Published figure using CXCR4 monoclonal antibody (Product # 35-8800) in Western Blot"

Authors: Brockmueller A,Mueller AL,Shayan P,Shakibaei M

Year
2022

Cell death & disease

CXCR4 promotes B cell viability by the cooperation of nuclear factor (erythroid-derived 2)-like 2 and hypoxia-inducible factor-1 under hypoxic conditions.

"Published figure using CXCR4 monoclonal antibody (Product # 35-8800) in Western Blot"

Authors: Jang JW,Thuy PX,Lee JW,Moon EY

Year
2021

View more WB references on thermofisher.com

Immunohistochemistry (5)

Cell adhesion & migration

In vitro formation of neuroclusters in microfluidic devices and cell migration as a function of stromal-derived growth factor 1 gradients.

"Published figure using CXCR4 monoclonal antibody (Product # 35-8800) in Immunocytochemistry"

Authors: McCutcheon S,Unachukwu U,Thakur A,Majeska R,Redenti S,Vazquez M

Year
2017

Species
Mouse

Pathology oncology research : POR

Immunohistochemical Predictors of Bone Metastases in Breast Cancer Patients.

"Published figure using CXCR4 monoclonal antibody (Product # 35-8800) in Immunohistochemistry"

Authors: Winczura P,Sosiska-Mielcarek K,Duchnowska R,Badzio A,Lakomy J,Majewska H,Pksa R,Pieczyska B, Radecka B,Dbska-Szmich S,Adamowicz K,Biernat W,Jassem J

Year
2015

Species
Human

Dilution
1:25

View more IHC references on thermofisher.com

More applications with references on thermofisher.com

IHC (P) (4) ICC/IF (4) Flow (5) FN (1) Misc (3)

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