



Anti-human CXCR4

20140401BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	102-PA120AG
Size:	50 µg
Lot. No.:	According to product label
Country of origin:	Germany

Preparation: Produced from sera of rabbits immunized with highly pure recombinant human CXCR4 fusion protein [N-terminal and extracellular loops] produced in E. coli.

Target Background

Synonyms:	C-X-C chemokine receptor type 4, Stromal cell-derived factor 1 receptor
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CXCR4 is a 7-transmembrane G-protein chemokine receptor that allows for migration of hematopoietic cells from the bone marrow to the peripheral lymph nodes. Research has shown CXCR4 to be implicated in the invasion and metastasis of several cancers, including carcinoma of the breast. CXCL12 is the ligand for CXCR4 and is highly expressed in areas common for breast cancer metastasis, including the axillary lymph nodes. Axillary lymph nodes positive for breast carcinoma have been an important component of breast cancer diagnosis, treatment, and subsequent research.

References

1. Hiller D and Chu QD, Int J Breast Cancer 2011, Article ID 420981

Database References Antigen

Protein RefSeq:	NP_001008540.1
Uniprot ID:	P61073
mRNA RefSeq:	NM_001008540.1

Product Specifications

Species reactivity	human
Clone/Ab feature	Rabbit IgG
Cross reactivity	ND
Host	rabbit
Clonality	polyclonal
Purification	Antigen affinity purified
Immunogen	recombinant human CXCR4 fusion protein [N-terminal and loops]
Formulation	lyophilized
Buffer	PBS

Stability: The lyophilized antibody is stable at room temperature for up to 1 month. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.

Reconstitution: Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/ml.



AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

ELISA:	Use at 2-5 µg/ml
Western Blot:	Use at 1-5 µg/ml
IF/IHC	Use at 1-5µg/ml

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!



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Handling/Applications

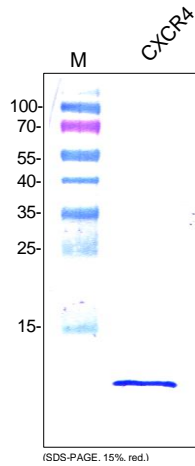


Figure 1: Western analysis with recombinant human CXCR4 fusion protein produced in *E. coli*.

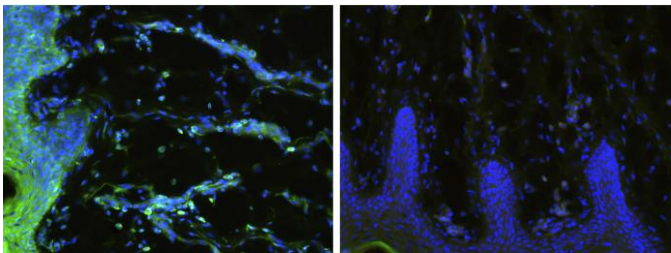


Figure 2: Immunofluorescence staining (green) of cryo-sections of human foreskin (fixed 15 min in 4% PFA) with anti-human CXCR4 (5µg/ml) [Cat# 103-PA120AG] and counter staining of nuclei with Dapi (left). Right: Negative control. Note staining in epidermis and scattered cells in the dermis.

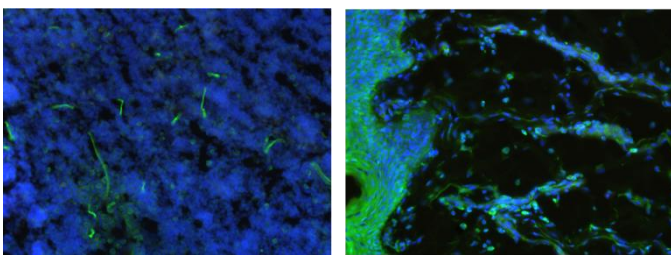


Figure 3: Immunofluorescence staining (green) of cryo-sections of human lung tissue and foreskin (fixed 15 min in 4% PFA) with anti-human CXCR4 (5µg/ml) [Cat# 103-PA120AG] and counter staining of nuclei with Dapi. Specimen provided by Prof. Dr. J. Wilting, Goettingen.

The experiments were performed by the research group of Prof. Dr. J. Wilting and Dr. K. Buttler, University Göttingen, Germany.