

CKR-7 (ELC-Fc): sc-23936

BACKGROUND

C-C or β chemokine family members are characterized by a pair of adjacent cysteine residues and serve as potent chemoattractants and activators of monocytes and T cells. C-C chemokine receptor family members include CKR-1, CKR-2A, CKR-2B, CKR-3, CKR-4, CKR-5, CKR-6, CKR-7, CKR-8, CKR-9, CKR-10 and the Duffy blood group antigen. Each of these receptors are G protein-coupled, seven pass transmembrane domain proteins whose major physiological role is to function in the chemotaxis of T cells and phagocytic cells to areas of inflammation. However, this receptor family has also been shown to facilitate viral infection. CKR-7 (C-C chemokine receptor type 7), also known as CCR7, CMKBR7, EBI1 or EVI1, is a 378 amino acid multi-pass membrane protein that belongs to the CC-chemokine receptor family. Expressed in activated B- and T-lymphocytes, as well as in various lymphoid tissues, CKR-7 functions as a receptor for MIP-3 β and is thought to be involved in mediating normal lymphocyte function.

REFERENCES

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- Deng, H., et al. 1996. Identification of a major co-receptor for primary isolates of HIV-1. *Nature* 381: 661-666.
- Dragic, T., et al. 1996. HIV-1 entry into CD4⁺ cells is mediated by the chemokine receptor CC-CKR-5. *Nature* 381: 667-673.
- Feng, Y., et al. 1996. HIV-1 entry cofactor: functional cDNA cloning of a seven-transmembrane, G protein-coupled receptor. *Science* 272: 872-877.
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- Baba, M., et al. 1997. Identification of CCR6, the specific receptor for a novel lymphocyte-directed CC chemokine LARC. *J. Biol. Chem.* 272: 14893-14898.

CHROMOSOMAL LOCATION

Genetic locus: CCR7 (human) mapping to 17q21.2; Ccr7 (mouse) mapping to 11 D.

SOURCE

CKR-7 (ELC-Fc) is an Fc chimera antibody developed by fusing recombinant ELC (CKR-7 ligand) to human IgG₁ Fc.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CKR-7 (ELC-Fc) is available conjugated to agarose (sc-23936 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-23936 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-23936 PE), fluorescein (sc-23936 FITC), Alexa Fluor[®] 488 (sc-23936 AF488), Alexa Fluor[®] 546 (sc-23936 AF546), Alexa Fluor[®] 594 (sc-23936 AF594) or Alexa Fluor[®] 647 (sc-23936 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-23936 AF680) or Alexa Fluor[®] 790 (sc-23936 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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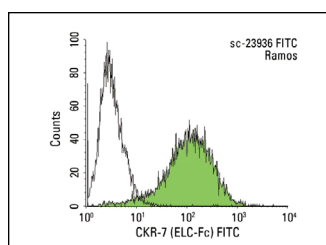
APPLICATIONS

CKR-7 (ELC-Fc) is recommended for detection of CKR-7 of mouse, rat and human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 μ g per 1 x 10⁶ cells); appropriate control for FCM is normal human IgG₁.

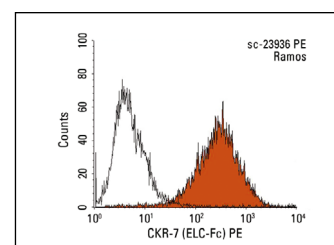
Suitable for use as control antibody for CKR-7 siRNA (h): sc-39888, CKR-7 siRNA (m): sc-39889, CKR-7 shRNA Plasmid (h): sc-39888-SH, CKR-7 shRNA Plasmid (m): sc-39889-SH, CKR-7 shRNA (h) Lentiviral Particles: sc-39888-V and CKR-7 shRNA (m) Lentiviral Particles: sc-39889-V.

Molecular Weight of CKR-7: 43 kDa.

DATA



CKR-7 (ELC-Fc): sc-23936. Indirect FCM analysis of Ramos cells stained with CKR-7 (ELC-Fc), followed by FITC-conjugated goat anti-human IgG: sc-2456. Black line histogram represents the isotype control, normal human IgG.



CKR-7 (ELC-Fc): sc-23936. Indirect FCM analysis of Ramos cells stained with CKR-7 (ELC-Fc), followed by PE-conjugated goat anti-human IgG: sc-3736. Black line histogram represents the isotype control, normal human IgG.

SELECT PRODUCT CITATIONS

- Kou, Y., et al. 2023. Dioscin induces M1 macrophage polarization through Connexin-43 channels in tumor-associated-macrophages-mediated melanoma metastasis. *Phytomedicine* 109: 154559.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.