

ChemR23 (BZ332): sc-33726

BACKGROUND

The C-X3-C chemokine family is characterized by two cysteines separated by three amino acid residues. Fractalkine is a member of this chemokine family that binds CX3CR1, previously named V28, and chemokine β receptor-like 1 (CMKRL1) with high affinity, to induce either leukocyte adhesion and migration or chemotactic functions. CX3CR1 functions with CD4 as a co-receptor for the HIV-1 virus envelope protein, and patients homozygous for a variant haplotype of CX3CR1 progress to AIDS more rapidly than those with other haplotypes. Chemokine receptor-like 1 (also designated G protein-coupled receptor DEZ or ChemR23) belongs to the G protein-coupled receptor 1 family. It is an integral membrane protein functioning as a receptor, possibly a chemotactic peptide receptor. It also acts as a co-receptor for various SIV strains and for a primary HIV-1 strain. ChemR23 is highly expressed in developing osseous and cartilaginous tissue, brain, kidney, gastrointestinal tissues and myeloid tissue, as well as in adult parathyroid glands.

REFERENCES

1. Samson, M., et al. 1998. ChemR23, a putative chemoattractant receptor, is expressed in monocyte-derived dendritic cells and macrophages and is a co-receptor for SIV and some primary HIV-1 strains. *Eur. J. Immunol.* 28: 1689-1700.
2. Meder, W., et al. 2003. Characterization of human circulating TIG2 as a ligand for the orphan receptor ChemR23. *FEBS Lett.* 555: 495-499.
3. Hillman, R.T., et al. 2004. An unappreciated role for RNA surveillance. *Genome Biol.* 5: R8.
4. Vermi, W., et al. 2005. Role of ChemR23 in directing the migration of myeloid and plasmacytoid dendritic cells to lymphoid organs and inflamed skin. *J. Exp. Med.* 201: 509-515.
5. Arita, M., et al. 2005. Stereochemical assignment, anti-inflammatory properties, and receptor for the ω -3 lipid mediator resolvin E1. *J. Exp. Med.* 201: 713-722.
6. Wittamer, V., et al. 2005. Neutrophil-mediated maturation of chemerin: a link between innate and adaptive immunity. *J. Immunol.* 175: 487-493.
7. SWISS-PROT/TrEMBL (Q99788). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.html>

CHROMOSOMAL LOCATION

Genetic locus: CMKRL1 (human) mapping to 12q23.3.

SOURCE

ChemR23 (BZ332) is a rat monoclonal antibody raised against an N-terminal peptide comprised of residues 8-32 of CMKRL1 of human origin.

STORAGE

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

RESEARCH USE

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

PRODUCT

Each vial contains 200 μ g IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ChemR23 (BZ332) is available conjugated to either phycoerythrin (sc-33726 PE), fluorescein (sc-33726 FITC) or Alexa Fluor[®] 488 (sc-33726 AF488) or Alexa Fluor[®] 647 (sc-33726 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM.

Alexa Fluor[®] is a trademark of Molecular Probes, Inc., Oregon, USA

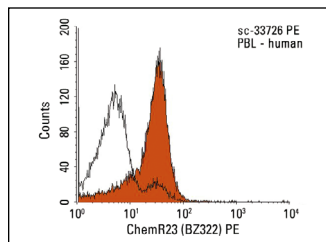
APPLICATIONS

ChemR23 (BZ332) is recommended for detection of ChemR23 of human origin by flow cytometry (1 μ g per 1×10^6 cells).

Suitable for use as control antibody for ChemR23 siRNA (h): sc-44633, ChemR23 shRNA Plasmid (h): sc-44633-SH and ChemR23 shRNA (h) Lentiviral Particles: sc-44633-V.

Molecular Weight: 42 kDa.

DATA



ChemR23 (BZ332) PE: sc-33726 PE. FCM analysis of human peripheral blood leukocytes. Black line histogram represents the isotype control, normal rat IgG_{2a}-PE: sc-2872.

PROTOCOLS

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