

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 (CMKBR1) 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

- 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.
- Meder, W. et al. 2003. Characterization of human circulating TIG2 as a ligand for the orphan receptor ChemR23. *FEBS Lett.* 555: 495-499.
- Hillman, R.T. et al. 2004. An unappreciated role for RNA surveillance. *Genome Biol.* 5: R8.
- 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.
- Arita, M. et al. 2005. Stereochemical assignment, anti-inflammatory properties, and receptor for the omega-3 lipid mediator resolvin E1. *J. Exp. Med.* 201: 713-722.

CHROMOSOMAL LOCATION

Genetic locus: CMKLR1 (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 CMKLR1 of human origin.

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), Alexa Fluor[®] 488 (sc-33726 AF488) or Alexa Fluor[®] 647 (sc-33726 AF647), 200 μ g/ml, for IF, IHC(P) and FCM.

In addition, ChemR23 (BZ332) is available conjugated to PerCP (sc-33726 PerCP), 100 tests in 2 ml, for IF, IHC(P) and FCM.

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

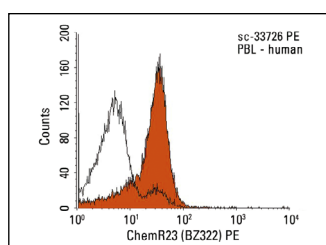
APPLICATIONS

ChemR23 (BZ332) is recommended for detection of ChemR23 of human origin by flow cytometry (1 μ g per 1 x 10⁶ 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.

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.

PROTOCOLS

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