

Anti-CMKLR1 [BZ194] Bulk Size Ab01035-1.32-BT

This antibody has a D265A mutation affecting Fc receptor engagement.

This chimeric mouse antibody was made using the variable domain sequences of the original Rat IgG2a format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Mouse IgG1-D265A, Fc Silenced, Kappa

Clone Number: BZ194

Alternative Name(s) of Target: Chemerin receptor; CHEMERINR; chemokine receptor-like 1; Chemokine-like receptor 1; ChemR23; CMKLR1; DEZ; G-protein coupled receptor ChemR23; G-protein coupled receptor DEZ; orphan G-protein coupled receptor, Dez; Resolvin E1 receptor; RVER1; Gpcr27; MGC126105; MGC126106

UniProt Accession Number of Target Protein: P97468

Published Application(s): Functional Studies, IP, WB, ELISA, FC, IF, IHC

Published Species Reactivity: Mouse

Immunogen: This antibody was raised by immunising Wistar Furth rats with the mCMKLR1 peptide/KLH conjugate. The immunizing amino-terminal mCMKLR1 peptide with the sequence NH₂-DSGIYDDEYSDFGFGYFVDLEEASWC-COOH, corresponding to residues residues 8-32 of mCMKLR1, with a nonnative carboxyl-terminal cysteine to facilitate conjugation to keyhole limpet hemocyanin (KLH).

Specificity: This antibody is specific for murine serpentine receptor mCMKLR1 (aka ChemR23, DEZ). mCMKLR1 is a novel protein possessing high homology with members of the chemoattractant receptor family, and binds the chemoattractant chemerin. Selective mCMKLR1 expression has been demonstrated by mouse macrophages ex vivo, and by dendritic cell precursors cultured in vitro.

Application Notes: The anti-mCMKLR1 BZ194 generates a robust staining signal when used in flow cytometry applications with mCMKLR1+ cells (Zabel et al., 2006). This antibody, together with other mAbs directed against chemokine receptors, could be used to determine the leukocyte expression profile of receptors during homeostasis or inflammation, to elucidate the role of various receptors in coordinating the immune response and in leukocyte development, and to identify other proteins interacting with the chemokine receptor. In particular, this antibody has been used to evaluate the functional responses of mCMKLR1-expressing cells to chemerin (Zabel et al., 2006), to demonstrate the essential role of natural killer cells in resolution of antigen-induced inflammation in mice (Anuforo et al., 2018), to indicate a potential role for chemerin and CMKLR1 in the regulation of inflammatory responses in the tumor microenvironment (Rama et al, 2011), to visualise immediate immune responses to pioneer metastatic cells

in the lung (Headley et al., 2016), and to investigate the regulatory role of chemerin in lung tumorigenesis and cancer-associated inflammation (Unver et al, 2018).

Antibody First Published in: Zabel et al. Chemokine-like receptor 1 expression by macrophages in vivo: regulation by TGF-beta and TLR ligands. Exp Hematol. 2006 Aug;34(8):1106-14. [PMID:16863918](#)

Note on publication: Describe the original generation of this antibody and its subsequent use in FACS to assess mCMKLR1 expression by mouse leukocytes.

Product Form

Size: 500 µg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.