Docket #: S06-328

BZ194 mAb Specific for Mouse CMKLR1

Rat monoclonal antibody BZ194 specifically recognizes mouse 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. Our data demonstrates selective mCMKLR1 expression by mouse macrophages ex vivo, and by dendritic cell precursors cultured in vitro. The anti-mCMKLR1 BZ194 generates a robust staining signal when used in flow cytometry applications with mCMKLR1+ cells.

Applications

- Monoclonal antibodies directed against chemokine receptors have proven to be highly valuable reagents. Scientists have used these mAbs to determine:
- 1. The leukocyte expression profile of receptors during homeostasis or inflammation
- 2. The role of various receptors in coordinating the immune response
- 3. The role of various receptors in leukocyte development
- 4. The identity of other proteins interacting with the chemokine receptor
- The anti-CMKLR1 antibodies can be used in immunoprecipitation, immunoassays (i.e. ELISA), immunocytochemistry, immunofluorescence, and flow cytometry.
- mCMKLR1 may prove to be a relatively specific marker for macrophages, currently identified by flow cytometry as being positive for CD11b and F4/80. Macrophages are important for coordinating many aspects of the immune response.

Advantages

- This antibody is currently a unique entity (there are no other commercially available mCMKLR1 mAbs). It works extremely well in flow cytometry.

Publications

- Experimental Hematology 34 (2006) 1106-1114
- The Journal of Immunology, 2005, 174: 244-251

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