

Licensing Opportunity

Chemokine Receptor 9 (CCR9) mAb

Scientists at the Georg-August-University produced a monoclonal antibody which recognises **murine CD199**, which is commonly known as **chemokine receptor 9 (CCR9)**. The protein CCR9 is a member of the beta chemokine receptor family. It is a seven transmembrane protein similar to **G protein** coupled receptors. Chemokines and their receptors are key regulators of the **thymocytes migration** and **maturation** in normal and **inflammation** conditions. The specific ligand of this receptor is **CCL25**. It has been found that this receptor is differentially expressed by T-lymphocytes of small intestine and colon, suggested a role in the thymocytes recruitment and development that they may permit functional specialization of immune responses in different segment of the gastrointestinal tract, where they are not in other tissues. When tested against 10 different viral strains, CCR9 acted as a **co-receptor** for only one a single primary T-cell-tropic strain, **HIV-1(UG-21)**. This lack of activity is interesting, given that CCR9 expresses a tyrosine rich amino-terminal element, reminiscent of CCR5, that has been postulated to be important for HIV co-receptor function.

Clone: 9B1

Isotype: IgG2a/k (rat)

Concentration: 10µg/ml

Immunogen: Synthetic peptide comprising the 25 N- terminal amino acids (Met1-Phe25) of murine CC chemokine receptor9 (CCR9) coupled to KLH

Animal Species: Lewis rat

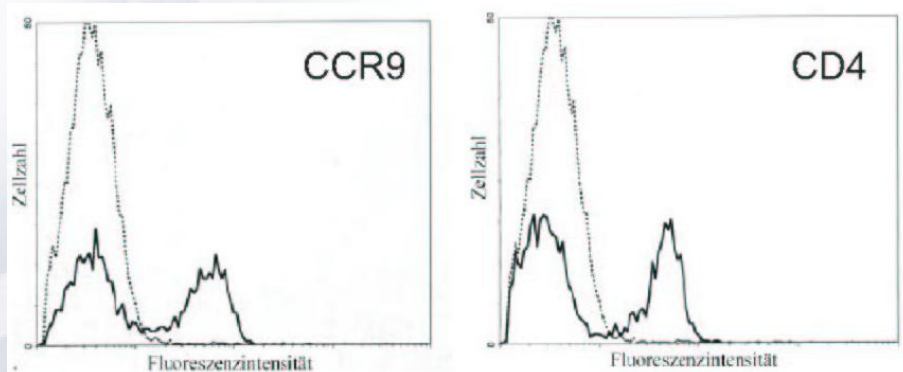
Fusion cell line: X63Ag8.653 myeloma cells

Reactivity: mCCR9 on murine lymphocytes from (neonatal) thymus, spleen, mesenteric lymph nodes and small intestinal lamina propria

Applications: Blocks CCL25-induced Ca release from L1.2-mCCR9 cells; attenuates inflammation in a murine model of chronic ileitis when given in early disease stages

Reference: J. Rivera-Nieves, G. Bamias, N. Ivashkina, M.A. Schwartz, M. Oppermann, K.Ley, F. Cominelli. Antibody blockade of CCL25/CCR9 treats early but not late chronic murine ileitis.

Generated by: Prof. M. Oppermann, University of Göttingen, Germany



FACS analysis of murine neonatal thymocytes incubated with 9B1 anti-CCR9 (left) or anti-CD4 (right) mAb. Antibodies were detected with FITC-labeled secondary anti-rat Ig. Negative control (dotted line): Cells incubated in the absence of primary antibody.

We are looking for companies, who are interested in **licensing** these antibodies for selling them to industrial and scientific institutions or for developing advanced **diagnostic tests** and **therapeutic solutions**.