

Docket #: S02-059

Anti-CCRL2 Monoclonal Antibody

Dr. Brian Zabel and Prof. Eugene Butcher have developed rat monoclonal antibodies (clones BZ2E3 and BZ5B8, rIgG_{2a} κ isotype) to the mouse chemokine (CC motif) receptor-like 2 (CCRL2) protein. CCRL2 (formerly known as L-CCR) is expressed on mast cells, activated macrophages, and endothelial cells. It binds the leukocyte chemoattractant chemerin without triggering classical GPCR signaling, providing a specific mechanism for local enrichment of chemerin at inflammatory sites. CCRL2 presents active chemerin to leukocytes expressing the chemoattractant receptor CMKLR1/Chemr23. These anti-CCRL2 antibodies can be used in wide variety of assays to study leukocytes and immune response. Chemerin can block anti-CCRL2 antibody binding.

Applications

- **Research** - antibodies are fully validated for flow cytometry and immunofluorescence.

Publications

- Pachynski RK, Zabel BA, Kohrt HE, Tejeda NM, Monnier J, Swanson CD, Holzer AK, Gentles AJ, Sperinde GV, Edalati A, Hadeiba HA, Alizadeh AA, Butcher EC. ["The chemoattractant chemerin suppresses melanoma by recruiting natural killer cell antitumor defenses."](#) *J Exp Med*. 2012 Jul 30;209(8):1427-35. doi: 10.1084/jem.20112124. Epub 2012 Jul 2.
- Monnier J, Lewén S, O'Hara E, Huang K, Tu H, Butcher EC, Zabel BA. ["Expression, Regulation, and Function of Atypical Chemerin Receptor CCRL2 on Endothelial Cells."](#) *J Immunol*. 2012 Jul 15;189(2):956-67. Epub 2012 Jun 13.
- Zabel BA, Nakae S, Zúñiga L, Kim JY, Ohya T, Alt C, Pan J, Suto H, Soler D, Allen SJ, Handel TM, Song CH, Galli SJ, Butcher EC. ["Mast cell-expressed orphan receptor CCRL2 binds chemerin and is required for optimal induction of IgE-](#)

[mediated passive cutaneous anaphylaxis." J Exp Med.](#) 2008 Sep 29;205(10):2207-20. Epub 2008 Sep 15.

Innovators

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