

## PE anti-mouse CCL22 Antibody

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|--------------------------|--|
| <b>Catalog# / Size</b>   | 167503 / 25 µg<br>167504 / 100 µg  |
| <b>Clone</b>             | W20219K  |
| <b>Regulatory Status</b> | RUO  |
| <b>Other Names</b>       | Macrophage derived cytokine (MDC), Small inducible cytokine subfamily A, member 22 (Scya22), stimulated T cell chemotactic protein (STCP-1), activated B cell-derived chemokine-1 (ABCD-1) DC, B cell-derived chemokine (DC/B-CK)  |
| <b>Isotype</b>           | Rat IgG2b, κ   |
| <b>Description</b>       | <p>CCL22, also known as macrophage-derived chemokine (MDC), is a conventional CC chemokine that is expressed constitutively under homeostatic conditions and can be induced in several cell types upon activation.</p> <p>Mouse CCL22 is expressed at high levels in dendritic cells and activated B lymphocytes. Low levels of mouse MDC mRNA is also detectable in lung, unstimulated spleen cells, lymph node cells, and in thymocytes. Constitutive expression of CCL22 is mediated by T cell–derived GM-CSF.</p> <p>The only known receptor for CCL22 is CCR4, which is mainly expressed by activated Th2-biased CD4+ T cells and by regulatory T cells. CCL22 displays chemotactic activity for natural killer cells, chronically activated T lymphocytes, monocytes, and dendritic cells, and may play a role in recruiting activated T lymphocytes to inflammatory sites and other aspects of activated T lymphocyte physiology.</p> |

### Product Details

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| <b>Verified Reactivity</b>    | Mouse   |
| <b>Antibody Type</b>          | Monoclonal  |
| <b>Host Species</b>           | Rat   |
| <b>Immunogen</b>              | Recombinant mouse CCL22 (aa25-92)   |
| <b>Formulation</b>            | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide  |
| <b>Preparation</b>            | The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.   |
| <b>Concentration</b>          | 0.2 mg/mL   |
| <b>Storage &amp; Handling</b> | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>   |
| <b>Application</b>            | <a href="#">ICFC - Quality tested</a>   |
| <b>Recommended Usage</b>      | Each lot of this antibody is quality control tested by intracellular flow cytometry using our Cyto-Fast™ Fix/Perm Buffer Set. For flow cytometric staining, the suggested use of this reagent is ≤ 0.125 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance in each application. |
| <b>Excitation Laser</b>       | Blue Laser (488 nm)<br>Green Laser (532 nm)/Yellow-Green Laser (561 nm)   |
| <b>RRID</b>                   | AB_3683197 (BioLegend Cat. No. 167503)<br>AB_3683197 (BioLegend Cat. No. 167504)  |

### Antigen Details

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|-------------------------|---|
| <b>Structure</b>        | Chemokine   |
| <b>Distribution</b>     | Macrophages, NK cells, thymic epithelial cells and intestinal epithelial cells  |
| <b>Function</b>         | CCL22 induces the migration of CCR4 + Th2 cells, Tregs, DC, and NK cells. It is induced by LPS and CD40 antibody in macrophages. It is upregulated by Th2 cytokines (IL-4 and IL-5) and downregulated by Th1 cytokines (IFN $\gamma$ ). |
| <b>Interaction</b>      | Dendritic cells, NK cells, Th2 cells, T regs, CLA+ skin-homing memory/effector T cells  |
| <b>Ligand/Receptor</b>  | CCR4  |
| <b>Biology Area</b>     | Cell Biology, Signal Transduction   |
| <b>Molecular Family</b> | Cytokines/Chemokines  |

**Antigen References**

1. Kanazawa N, *et al.* 1999. *Eur. J. Immunol.* 29: 1925–32
2. Schaniel C, *et al.* 1998. *J. Exp. Med.* 188:451.
3. Andrew DP, *et al.* 1998. *J. Immunol.* 161(9):5027-38.
4. Ghadially H, *et al.* 2005. *J Immunol.* 174(9):5620–29
5. Godiska R, *et al.* 1997. *J. Exp. Med.* 185:1595.
6. Chang, M-S. *et al.* 1997. *J. Biol. Chem.* 272:25229
7. Piseddu I, *et al.* 2020. *J Immunol.* 205(8): 2056–65.

**Gene ID** [20295](#)

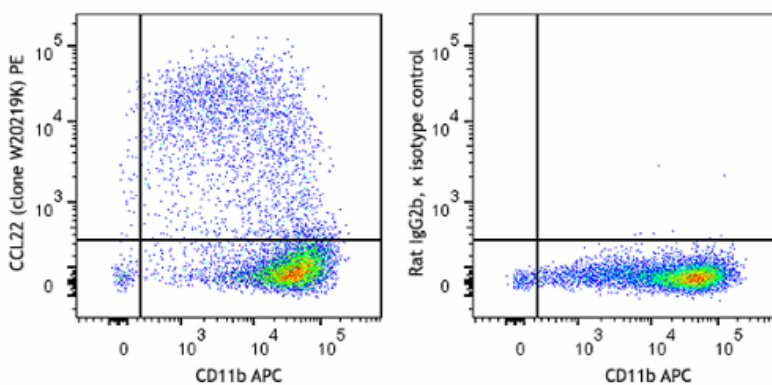
**Related Protocols**

- [Intracellular Flow Cytometry Staining Protocol](#)

**Other Formats**

PE anti-mouse CCL22, Purified anti-mouse CCL22

**Product Data**



GM-CSF generated bone marrow-derived dendritic cells (BMDCs) were treated with 1X Monensin (Cat. No. 420701) for 16-24 hours and surface stained with anti-mouse/human CD11b (clone M1/70) APC. Cells were then fixed and permeabilized with Cyto-Fast™ Fix/Perm Buffer (Cat. No. 426803) and intracellularly stained with anti-mouse CCL22 (MDC) (clone W20219K) PE (left) or rat IgG2b, κ PE isotype control (right).

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