

DESCRIPTION

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| Species Reactivity | Human |
| Specificity | Detects human CCR-2 transfectants but not the parental cell line or CCR-5 transfectants. |
| Source | Monoclonal Mouse IgG _{2B} Clone # 48607 |
| Purification | Protein A or G purified from ascites |
| Immunogen | NS0 mouse myeloma cell line transfected with human CCR2 Met1-Leu360 Accession # NP_001116868 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|-----------------------|----------------------------------|-----------------------------|
| Flow Cytometry | 2.5 µg/10 ⁶ cells | Human whole blood monocytes |

PREPARATION AND STORAGE

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| Reconstitution | Reconstitute at 0.5 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

CCR2 is a G-protein linked seven transmembrane domain spanning chemokine receptor that preferentially binds monocyte chemoattractant proteins-1 and -3 (MCP-1 and MCP-3). Two isoforms of this receptor (CCR2A and CCR2B) are expressed on cell surfaces as a result of alternate splicing from the same gene. These two CCR2 variants differ only at their intracellular carboxyl terminals, with the CCR2A form possessing 14 additional amino acids. This may provide a mechanism by which cells responding to similar extracellular ligands can activate different intracellular second messengers. Cells that respond to the action of MCP-1 and therefore are likely to express CCR2 receptors, include monocytes, T cells, NK cells, basophils, mast cells and dendritic cells. A recent report suggests that B cells may also express CCR2 receptors. The recognition that a variety of chemokine receptors, including CCR2, can serve as HIV fusion co-factors and as facilitators of T cell recruitment during inflammation makes chemokine receptor monitoring an important exercise in elucidating the HIV infection process and the regulation of inflammatory reactions.

References: