

## Recombinant Anti-CCL2 Antibody (V3S-0622-YC1207)

Cat. No.: V3S-0622-YC1207

### Summary

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| <b>Description</b>        | <p>This product is a human monoclonal antibody that reacts with CCL2. The antibody is expressed with mammalian cell transient expression system, serum-free and purified by affinity chromatography. The purity and integrity are tested via SDS-PAGE and SEC-HPLC analysis. Given an antigen, additional QC measures are also desired such as affinity testing and binding validation.</p> <p>Specifically, the antibody is provided in multiple formats for in vivo and in vitro assays. The <i>In vivo</i> version features greater than 95% purity, ultra-low endotoxin levels (&lt;1 EU/mg or 0.1 EU/mg), and is preservative, stabilizer, and carrier protein-free.</p> |
| <b>Clonality</b>          | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Host Species</b>       | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Target Species</b>     | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Isotype</b>            | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Isotype Control</b>    | C34555                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Secondary Antibody</b> | C32400; C75370; C10513; C51635; C45530                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

### Property

|                           |                                                                             |
|---------------------------|-----------------------------------------------------------------------------|
| <b>Expression Species</b> | HEK293F or CHO                                                              |
| <b>Conjugation</b>        | None                                                                        |
| <b>Purity</b>             | >95%, determined by SDS-PAGE and/or SEC-HPLC                                |
| <b>Endotoxin</b>          | <1 EU/mg, determined by LAL method                                          |
| <b>Purification</b>       | Protein A affinity purified                                                 |
| <b>Sterility</b>          | 0.2 µM filtered                                                             |
| <b>Formulation</b>        | PBS, pH 7.4                                                                 |
| <b>Preservation</b>       | No preservatives                                                            |
| <b>Stabilizer</b>         | No stabilizers                                                              |
| <b>Storage</b>            | Store at 4°C within a week. For longer storage, aliquot and store at -20°C. |

### Applications

For lab research use only, not for diagnostic, therapeutic or any *in vivo* human use.

|                          |                                                                   |
|--------------------------|-------------------------------------------------------------------|
| <b>Application</b>       | ELISA                                                             |
| <b>Application Notes</b> | The antibody is recommended for detection of CCL2 by ELISA assay. |

## Target

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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| <b>Target</b>                 | CCL2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Alternative Name</b>       | CCL2; chemokine (C-C motif) ligand 2; HC11; MCAF; MCP1; MCP-1; SCYA2; GDCF-2; SMC-CF; HSMCR30; C-C motif chemokine 2; small-inducible cytokine A2; monocyte secretory protein JE; monocyte chemotactic protein 1; monocyte chemoattractant protein 1; monocyte chemoattractant protein-1; monocyte chemotactic and activating factor; small inducible cytokine subfamily A (Cys-Cys), member 2; small inducible cytokine A2 (monocyte chemotactic protein 1, homologous to mouse Sig-je)                                                                                                                                                                                                                                                                    |
| <b>Gene ID</b>                | <a href="#">6347</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>UniProt</b>                | <a href="#">P13500</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Introduction</b>           | This is one of several cytokine genes clustered on the q-arm of chromosome 17. Chemokines are a superfamily of secreted proteins involved in immunoregulatory and inflammatory processes. The superfamily is divided into four subfamilies based on the arrangement of N-terminal cysteine residues of the mature peptide. This chemokine is a member of the CC subfamily which is characterized by two adjacent cysteine residues. This cytokine displays chemotactic activity for monocytes and basophils but not for neutrophils or eosinophils. It has been implicated in the pathogenesis of diseases characterized by monocytic infiltrates, like psoriasis, rheumatoid arthritis and atherosclerosis. It binds to chemokine receptors CCR2 and CCR4. |
| <b>Research Area</b>          | Immunology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Proceedings of R&amp;D</b> | Diseases associated with CCL2 include Neural Tube Defects and Human Immunodeficiency Virus Type 1. Among its related pathways are Rheumatoid arthritis and A-beta Pathways: Uptake and Degradation. Gene Ontology (GO) annotations related to this gene include protein kinase activity and heparin binding. An important paralog of this gene is CCL7.                                                                                                                                                                                                                                                                                                                                                                                                     |

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