

DESCRIPTION

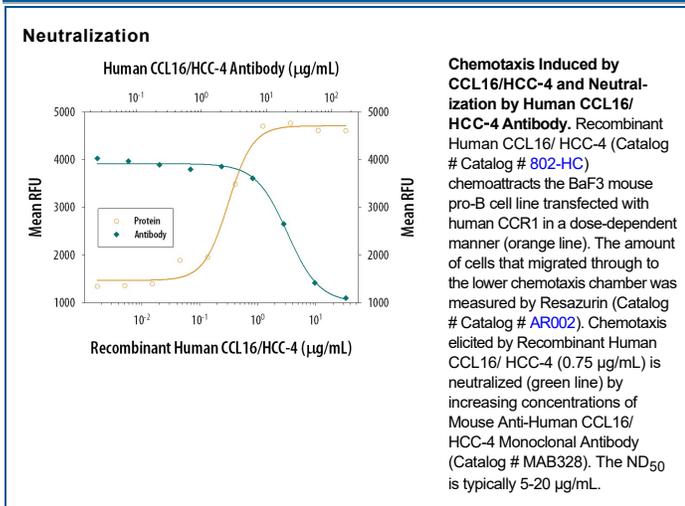
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|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human CCL16/HCC-4 in direct ELISAs and Western blots. |
| Source | Monoclonal Mouse IgG ₁ Clone # 70218 |
| Purification | Protein A or G purified from ascites |
| Immunogen | <i>E. coli</i> -derived recombinant human CCL16/HCC-4 Gln24-Gln120 Accession # O15467 |
| Endotoxin Level | <0.10 EU per 1 µg of the antibody by the LAL method. |
| 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 either lyophilized or 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.

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| Human CCL16/HCC-4 Sandwich Immunoassay | Reagent |
| ELISA Capture | 2-8 µg/mL Human CCL16/HCC-4 Antibody (Catalog # MAB328) |
| ELISA Detection | 0.1-0.4 µg/mL Human CCL16/HCC-4 Biotinylated Antibody (Catalog # BAF802) |
| Standard | Recombinant Human CCL16/HCC-4 (Catalog # 802-HC) |
| Neutralization | Measured by its ability to neutralize CCL16/HCC-4-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CCR1. The Neutralization Dose (ND ₅₀) is typically 5-20 µg/mL in the presence of 0.75 µg/mL Recombinant Human CCL16/HCC-4. |

DATA



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

Human HCC-4, also named NCC-4, liver-expressed chemokine (LEC), and lymphocyte and monocyte chemoattractant (LMC), is a novel CC chemokine identified through bioinformatics. HCC-4 cDNA encodes a 120 amino acid (aa) residue precursor protein with a 23 aa residue predicted signal peptide that is cleaved to generate a 97 aa residue mature protein. HCC-4 is distantly related to other CC chemokines, exhibiting less than 30% aa sequence identity. Among these CC chemokines, HCC-4 has the most similarity to HCC-1. Two potential polyadenylation signals are present on the human HCC-4 gene, and as a result, two transcripts containing approximately 1,500 base pairs and 500 base pairs have been detected. HCC-4 is expressed weakly by some lymphocytes, including NK cells, $\gamma\delta$ T cells, and some T cell clones. The expression of HCC-4 in monocytes is highly upregulated in the presence of IL-10. The HCC-4 gene has been mapped to chromosome 17q where multiple CC chemokines are clustered.

Recombinant HCC-4 has been shown to chemoattract human monocytes and THP-1 cells but not resting lymphocytes or neutrophils. HCC-4 has also been found to suppress proliferation of myeloid progenitor cells. The HCC-4 induced calcium flux in THP-1 cells can be desensitized by prior exposure to RANTES, suggesting that HCC-4 and RANTES share the same receptor in THP-1 cells.

References:

1. Shoudai, K. *et al.* (1998) *Biochim. Biophys. Acta* **1396**:273.
2. Hedrick, J. *et al.* (1998) *Blood* **91**:4242.
3. Youn, B-S. *et al.* (1998) *BBRC* **247**:217.