

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CCL16/HCC-4 in ELISAs. In sandwich immunoassays, less than 0.1% cross-reactivity with recombinant mouse CRG-2, recombinant human (rh) IP-10, rhHGF, rhMCP-3, rhHCC-1, rhMDC, rhMIF, rhIL-3 sR α , rhMIG, rhPARC, and rhMCP-2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human CCL16/HCC-4 Gln24-Gln120 Accession # O15467
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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.

Human CCL16/HCC-4 Sandwich Immunoassay	Reagent
ELISA Capture 2-8 μ g/mL	Human CCL16/HCC-4 Antibody (Catalog # MAB328)
ELISA Detection 0.1-0.4 μ g/mL	Human CCL16/HCC-4 Biotinylated Antibody (Catalog # BAF802)
Standard	Recombinant Human CCL16/HCC-4 (Catalog # 802-HC)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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.