

## DESCRIPTION

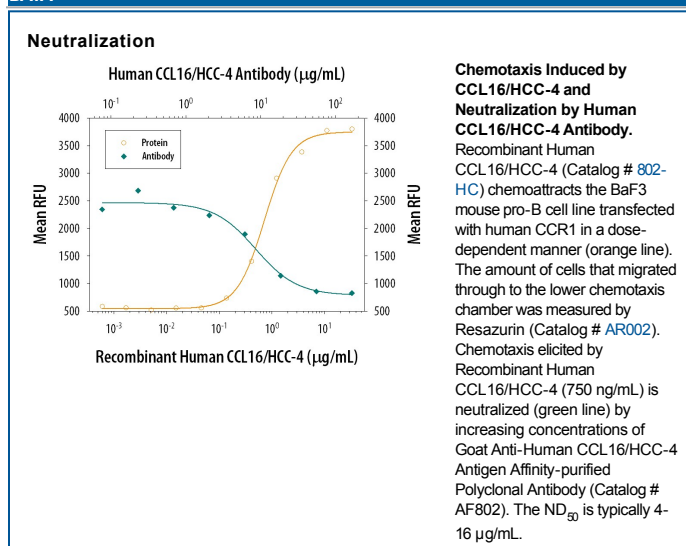
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human CCL16/HCC-4 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human CCL16/HCC-4 Gln24-Gln120 Accession # O15467
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the antibody by the LAL method.
<b>Formulation</b>	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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human CCL16/HCC-4 (Catalog # 802-HC)
<b>Immunohistochemistry</b>	5-15 µg/mL	Immersion fixed paraffin-embedded sections of human tonsil
<b>Neutralization</b>	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 <sub>50</sub> ) is typically 4-16 µg/mL in the presence of 750 ng/mL Recombinant Human CCL16/HCC-4.	

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.