



[Go to Product page](#)

Datasheet for ABIN1706074

## CCL14 ELISA Kit

1 Image

1 Publication

### Overview

Quantity:	96 tests
Target:	CCL14
Binding Specificity:	AA 20-93
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	15.6-1000 pg/mL
Minimum Detection Limit:	15.6 pg/mL
Application:	ELISA

### Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human CCL14/HCC-1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: T20-N93
Specificity:	Expression system for standard: E.coli Immunogen sequence: T20-N93
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

## Product Details

---

Sensitivity: <10pg/mL

Material not included: Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

## Target Details

---

Target: CCL14

Alternative Name: CCL14 ([CCL14 Products](#))

Background: Protein Function: Has weak activities on human monocytes and acts via receptors that also recognize MIP-1 alpha. It induced intracellular Ca(2+) changes and enzyme release, but no chemotaxis, at concentrations of 100-1,000 nM, and was inactive on T-lymphocytes, neutrophils, and eosinophil leukocytes. Enhances the proliferation of CD34 myeloid progenitor cells. The processed form HCC-1(9-74) is a chemotactic factor that attracts monocytes eosinophils, and T-cells and is a ligand for CCR1, CCR3 and CCR5. .

Background: Chemokine(C-C motif) ligand 14(CCL14) is a small cytokine belonging to the CC chemokine family. It is also commonly known as HCC-1. It is produced as a protein precursor that is processed to generate a mature active protein containing 74 amino acids that and is 46 % identical in amino acid composition to CCL3 and CCL4. This chemokine is expressed in various tissues including spleen, bone marrow, liver, muscle, and gut. CCL14 activates monocytes, but does not induce their chemotaxis. In addition, HCC-1 enhanced the proliferation of CD34+ myeloid progenitor cells. It was as effective as MIP-1 alpha, but about 100-fold less potent. Human CCL14 is located on chromosome 17 within a cluster of other chemokines belonging to the CC family.

Synonyms: C-C motif chemokine 14,Chemokine CC-1/CC-3,HCC-1/HCC-3,HCC-1(1-74),NCC-2,Small-inducible cytokine A14,HCC-1(3-74),HCC-1(4-74),HCC-1(9-74),CCL14,NCC2, SCYA14,

Full Gene Name: C-C motif chemokine 14

Cellular Localisation: Secreted.

Gene ID: 6358

UniProt: [Q16627](#)

## Application Details

---

Application Notes: Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well

## Application Details

---

assay was recommended for both standard and sample testing.

**Comment:** Sequence similarities: Belongs to the intercrine beta (chemokine CC) family.  
Tissue Specificity: Expressed constitutively in several normal tissues: spleen, liver, skeletal and heart muscle, gut, and bone marrow, present at high concentrations (1-80 nM) in plasma. .

**Plate:** Pre-coated

**Protocol:** human CCL14 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for CCL14 has been precoated onto 96-well plates. Standards(E.coli, T20-N93) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CCL14 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human CCL14 amount of sample captured in plate.

**Assay Procedure:** Aliquot 0.1 mL per well of the 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.3pg/mL, 15.6pg/mL human CCL14 standard solutions into the pre-coated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. We recommend that each human CCL14 standard solution and each sample is measured in duplicate.

**Assay Precision:**

- Sample 1: n=16, Mean(pg/ml): 34, Standard deviation: 1.33, CV(%): 3.9
- Sample 2: n=16, Mean(pg/ml): 163, Standard deviation: 7.66, CV(%): 4.7
- Sample 3: n=16, Mean(pg/ml): 521, Standard deviation: 33.87, CV(%): 6.5,
- Sample 1: n=24, Mean(pg/ml): 36, Standard deviation: 1.84, CV(%): 5.1
- Sample 2: n=24, Mean(pg/ml): 182, Standard deviation: 12.56, CV(%): 6.9
- Sample 3: n=24, Mean(pg/ml): 534, Standard deviation: 38.45, CV(%): 7.2

**Restrictions:** For Research Use only

## Handling

---

**Handling Advice:** Avoid multiple freeze-thaw cycles.

**Storage:** -20 °C,4 °C

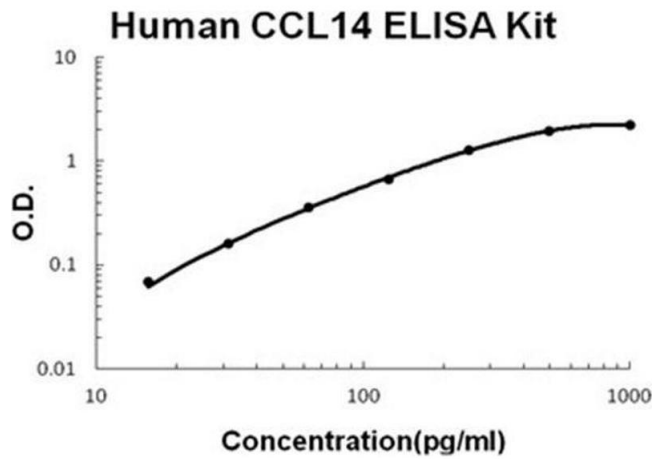
**Storage Comment:** Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

**Expiry Date:** 12 months

## Publications

Product cited in: Guo, Nan, Hu, Meng, Hui, Zhang, Qin, Sui: "Prognostic significance of co-expression of nm23 and p57 protein in hepatocellular carcinoma." in: **Hepatology research : the official journal of the Japan Society of Hepatology**, Vol. 40, Issue 11, pp. 1107-16, (2010) ([PubMed](#)).

## Images



### ELISA

**Image 1.** Human CCL14/HCC-1 PicoKine ELISA Kit standard curve