

## **Product datasheet for TP728167**

#### OriGene Technologies, Inc.

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# Recombinant CCL4 (C-C motif chemokine ligand 4), Human

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant CCL4 (C-C motif chemokine ligand 4), Human

Species: Human
Expression Host: E. coli

**Expression cDNA Clone** 

or AA Sequence:

APMGSDPPTACCFSYTARKLPHNFVVDYYETSSLCSQPAVVFQTKRGKQVCADPSESWVQEYVYDLELN.

Tag: Tag Free

**Predicted MW:** The protein has a calculated MW of 7.75 kDa. The protein migrates as 11 kDa under reducing

condition (SDS-PAGE analysis).

**Purity:** >98% as determined by SDS-PAGE.

Buffer: The protein was lyophilized from a 0.2 μm filtered solution containing 50 mM Tris and 150

mM NaCl, pH 8.5.

**Bioactivity:** Measure by its ability to chemoattract BaF3 cells transfected with human CCR5. The ED₅₀ for

this effect is <10 ng/mL.

**Endotoxin:**  $< 0.1 \text{ EU per 1} \mu \text{g of the protein by the LAL method.}$ 

**Reconstitution Method:** Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the

lyophilized protein in sterile  $H_2O$  to a concentration not less than 100  $\mu g/mL$  and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved.

Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

**Applications:** Cell culture

Storage: Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to

8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -

20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

UniProt ID: P13236

Synonyms: MIP-1b: Macrophage Inflammatory Protein-1β, ACT-2

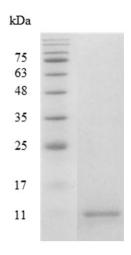




### **Summary:**

C-C Motif Chemokine Ligand 4 (CCL4) is a 7.66 kDa cytokine with 69 amino acid residues. CCL4, also named macrophage inflammatory protein-1 $\beta$  (MIP-1 $\beta$ ), is mainly secreted from neutrophils, monocytes, B cells, T cells, fibroblasts, endothelial cells and epithelial cells. CCL4 recruits various immune cells like natural killer cells, monocytes, and neutrophils when CCL4 binds to CCR5. In addition, CCL4 mediates lymphocyte adhesion by Rac1 /Cdc42 signaling pathway and plays critical roles in different biological functions like maintenance of cell polarity, regulation of calcium ion transport and response to viruses.

# **Product images:**



SDS- PAGE analysis of recombinant human CCL4