

## Product datasheet for **TP728167M**

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

#### Product data:

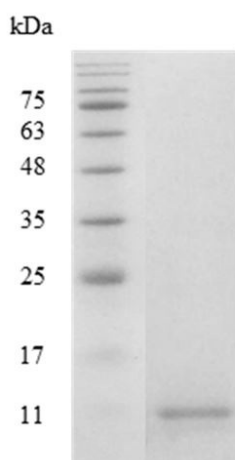
Product Type:	Recombinant Proteins
Description:	Recombinant CCL4 (C-C motif chemokine ligand 4), Human
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	APMGSDPPTACCFSTARKLPHNFVDYYETSSLCSQPAVVFQTKRGKQVCADPSESWWQEYVYDLELN.
Tag:	Tag Free
Predicted MW:	The protein has a calculated 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 ED <sub>50</sub> for this effect is <10 ng/mL.
Endotoxin:	<0.1 EU per 1 µg 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 <sub>2</sub> O to a concentration not less than 100 µg/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:	<a href="#">P13236</a>
Synonyms:	MIP-1b; Macrophage Inflammatory Protein-1β, ACT-2



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**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