

## MCP-1/CCL2 Protein, Rat (HEK293, C-His)

Cat. No.:	HY-P7236
Synonyms:	rRtMCP-1/CCL2; C-C motif chemokine 2; MCAF; MCP-1; SCYA2
Species:	Rat
Source:	HEK293
Accession:	P14844 (Q24-N148)
Gene ID:	24770
Molecular Weight:	10-15 kDa & 27-37 kDa

### PROPERTIES

AA Sequence	<p>Q P D A V N A P L T      C C Y S F T G K M I      P M S R L E N Y K R      I T S S R C P K E A</p> <p>V V F V T K L K R E      I C A D P N K E W V      Q K Y I R K L D Q N      Q V R S E T T V F Y</p> <p>K I A S T L R T S A      P L N V N L T H K S      E A N A S T L F S T      T T S S T S V E V T</p> <p>S M T E N</p>
Biological Activity	The ED <sub>50</sub> is <0.3 µg/mL as measured by CHO-K1/Gα15/rCCR2/THP-1 cells (human Gα15 and rat CCR2 stably expressed in CHO-K1 cells).
Appearance	Lyophilized powder
Formulation	Lyophilized after extensive dialysis against PBS.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

Background	CCL2 is produced by a variety of cell types, either constitutively or after induction by oxidative stress, cytokines, or growth factors. CCL2 is produced by many cell types, including endothelial, fibroblasts, epithelial, smooth muscle, mesangial, astrocytic, monocytic, and microglial cells. CCL2 regulates the migration and infiltration of monocytes, memory T lymphocytes, and natural killer (NK) cells <sup>[1]</sup> . The chemokine CCL2 and its main chemokine receptor CCR2 have been implicated in the pathogenesis of several different disease processes, including vascular permeability and attraction of
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immune cells during metastasis, a number of different neurological disorders, autoimmune disease, obesity, and atherosclerosis<sup>[2]</sup>.

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## REFERENCES

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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