

# **Screening Libraries**

**Proteins** 

# **Product** Data Sheet

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

Cat. No.: HY-P700787

Synonyms: C-C motif chemokine 2; CCL2; HC11; MCAF; MCP-1; HSMCR30; MCP1; SCYA2; SMC-CF; GDCF-2

Species: Cynomolgus HEK293 Source:

Accession: P61274 (Q24-P99)

Gene ID: 102135739 Molecular Weight: 13-16 kDa

# **PROPERTIES**

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Normally 8% trehalose is added as protectant before lyophilization.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu g/mL$ in ddH <sub>2</sub> O.
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

MCP-1/CCL2 protein acts as a ligand for C-C chemokine receptor CCR2, leading to the activation and binding of CCR2 and subsequently inducing a strong chemotactic response and mobilization of intracellular calcium ions. It displays chemotactic activity specifically for monocytes and basophils, but not for neutrophils or eosinophils. Additionally, MCP-1/CCL2 plays a crucial role in mediating neuropathic pain resulting from peripheral nerve injury. It enhances NMDA-mediated synaptic transmission in dopamine D1 and D2 receptor-containing neurons, potentially through MAPK/ERK-dependent phosphorylation of GRIN2B/NMDAR2B. MCP-1/CCL2 exists as a monomer or homodimer, with its presence on endothelial cells facilitated by glycosaminoglycan (GAG) side chains of proteoglycans. Furthermore, it interacts with TNFAIP6 through its Link domain.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 1 of 1