

## 32-6610: MCP 2 Canine

**Application :** Functional Assay

**Alternative Name :** C-C motif chemokine 8, Monocyte chemoattractant protein 2, Monocyte chemotactic protein 2, MCP-2, Small-inducible cytokine A8, CCL8, MCP2.

### Description

Source: Escherichia Coli.

Sterile Filtered White lyophilized (freeze-dried) powder.

Chemokine (C-C motif) ligand 8 (CCL8) is a small cytokine belonging to the CC chemokine family that was once called monocyte chemotactic protein-2 (MCP-2). The CCL8 protein is produced as a precursor containing 109 amino acids, which is cleaved to produce mature CCL8 containing 75 amino acids. The gene for CCL8 is encoded by 3 exons and is located within a large cluster of CC chemokines on chromosome 17q11.2 in humans. MCP-2 is chemotactic for and activates a many different immune cells, including mast cells, eosinophils and basophils, (that are implicated in allergic responses), and monocytes, T cells, and NK cells that are involved in the inflammatory response. CCL8 elicits its effects by binding to several different cell surface receptors called chemokine receptors. These receptors include CCR1, CCR2B and CCR5.

MCP2 Canine Recombinant produced in E.coli is a single, non-glycosylated, polypeptide chain containing 76 amino acids and having a molecular mass of 8.8kDa. The CCL8 is purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 98.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

**Content :** MCP-2 protein was lyophilized from a 0.2µm filtered concentrated solution in PBS, pH7.4. It is recommended to reconstitute the lyophilized MCP2 in sterile 18M-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Storage condition :** Lyophilized MCP-2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CCL8 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Amino Acid :** QPDSVSIPIT CCFSMVKRKI PMQKLESYMR ITNSQCPQEA VIFKTKASRE ICADPKQKWV QDYMNHLDQK SQAQKP.

### Application Note

The biological activity determined by a chemotaxis bioassay using human peripheral blood monocytes is in a concentration range of 10-100 ng/ml.