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**Monocyte Chemotactic Protein-1 Human Recombinant (CCL2), His Tag
CHEMOKINE**

Catalog Number: PRP-270
Quantity: 10 micrograms, 50 micrograms, 1 milligram
Format: Sterile-filtered clear colorless solution
Host: *E. coli*

Background:

Chemokine (C-C motif) ligand 2 (CCL2) is a small cytokine belonging to the CC chemokine family that is also known as monocyte chemotactic protein-1 (MCP-1). It is found at the site of tooth eruption and bone degradation. In the bone, CCL2 is expressed by mature osteoclasts and osteoblasts and is under the control of nuclear factor κ B (NF κ B). CCL2 recruits immune cells, such as monocytes, to sites of tissue injury and infection. This chemokine is produced as a protein precursor containing signal peptide of 23 amino acids and a mature peptide of 76 amino acids. It is a monomeric polypeptide, with a molecular weight of approximately 13kDa. As with many other CC chemokines, CCL2 is located on chromosome 17 in humans. The cell surface receptors that bind CCL2 are CCR2 and CCR5.

Specificity and Preparation:

MCP-1 Human Recombinant also known as Monocyte Chemotactic and Activating Factor (MCAF) produced in *E. coli* is a non-glycosylated, polypeptide chain containing 97 amino acids (24-99) and having a molecular mass of 10.9 kDa. The MCP-1 is fused to 20 amino acids His-Tag at N-terminus and purified by proprietary chromatographic techniques. The His Tag MCP-1 protein solution contains 20mM Tris-HCL, 1mM DTT and 20% glycerol. Purity is greater than 95.0% as determined by SDS-PAGE.

Amino acid sequence:

MGSSHHHHHH SSGLVPRGSH MQPDAINAPV TCCYNFTNRK ISVQRLASYR RITSSKCPKE
AVIFKTIVAK EICADPKQKW VQDSMDHLDK QTQTPKT

Usage and Storage:

Store at 4°C if entire vial will be used within 2-4 weeks. Store frozen at -20°C for longer periods of time. Avoid repeated freezing and thawing. Gently spin down material before use; 5-10 seconds in a microfuge should be adequate.

To view protocol(s) for this and other products please visit: www.ATSBio.com/support/protocols