

# Recombinant Murine Macrophage Inflammatory Protein-1 alpha/CCL3 (rMuMIP-1 $\alpha$ /CCL3)

## PrimeGene Technical Data Sheet

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<b>Catalog Number:</b>	224-03
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 7.9 kDa protein containing 69 amino acid residues, including the four highly conserved cysteine residues present in CC chemokines.
<b>Quantity:</b>	2 $\mu$ g/10 $\mu$ g/1000 $\mu$ g
<b>AA Sequence:</b>	APYGADTPTA CCFSYSRKIP RQFIVDYFET SSLCSQPGVI FLTKRNRQIC ADSKETWVQE YITDLELNA
<b>Purity:</b>	> 98 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The biological activity determined by a chemoattract bioassay using murine splenocytes is in a concentration range of 10-100 ng/ml.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 $\mu$ m filtered concentrated solution in 30 % Acetonitrile and 0.1 % TFA.
<b>Endotoxin:</b>	Less than 0.1 EU/ $\mu$ g of rMuMIP-1 $\alpha$ /CCL3 as determined by LAL method.
<b>Reconstitution:</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $\leq$ -20 °C. Further dilutions should be made in appropriate buffered solutions.
<b>Shipping:</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>
<b>Usage:</b>	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

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### ***Murine Macrophage Inflammatory Protein-1 alpha/CCL3***

CCL3, also known as macrophage inflammatory protein-1 $\alpha$  (MIP-1 $\alpha$ ), is a cytokine belonging to the CC chemokine family that is involved in the acute inflammatory state in the recruitment and activation of polymorphonuclear leukocytes. Studies showed CCL3 can bind to CCR1, CCR4 and CCR5. MIP-1 $\alpha$  can induce a dose-dependent inhibition of different strains of HIV-1, HIV-2, and simian immunodeficiency virus (SIV). Recombinant murine MIP-1 $\alpha$  is a 7.9 kDa protein containing 69 amino acid residues, including the four highly conserved cysteine residues present in CC chemokines and mature mouse CCL3 shares 73 %, 91 % and 82 % amino acid sequence identity with human, rat and cotton rat CCL3, respectively.