

**Recombinant Murine Macrophage Inflammatory  
Protein-1 gamma/CCL9/CCL10  
(rMuMIP-1 $\gamma$ /CCL9/CCL10)  
ChemWhat Technical Data Sheet (TDS)**

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<b>Catalog Number:</b>	224-09
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 11.6 kDa, a single non-glycosylated polypeptide chain containing 101 amino acids.
<b>Quantity:</b>	5 $\mu$ g /20 $\mu$ g /1000 $\mu$ g
<b>AA Sequence:</b>	QITHATETKE VQSSLKAQQG LEIEMFHMGE QDSSDCCLSY NSRIQCSRFI GYFPTSGGCT RPGIIFISKR GFQVCANPSD RRVQRCIERL EQNSQPRTYK Q
<b>Purity:</b>	> 95 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human neutrophils is in a concentration range of 0.1-10 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 PBS, pH 7.4.
<b>Endotoxin:</b>	Less than 1 EU/ $\mu$ g of rMuMIP-1 $\gamma$ /CCL9/CCL10 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 $^{\circ}$ 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 <math>^{\circ}</math>C as supplied.</li><li>● 1 month, 2 to 8 <math>^{\circ}</math>C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 <math>^{\circ}</math>C under sterile conditions after reconstitution.</li></ul>
<b>Usage:</b>	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

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***Murine Macrophage Inflammatory Protein-1 gamma/CCL9/CCL10***

Murine CCL9/10 is belonging to the CC chemokine family. It is encoded by the gene CCL9. MRP-2 (CCL9/10) was isolated from a murine macrophage cell line, RAW 264.7. MRP-2 shows a 51 % sequence identity at the protein level to MRP-1 (C10) and 46% identity to MIP-1-alpha (CCL3). The functional receptor for CCL9/10 has been identified as CCR1. In contrast, other CCR1 ligands, CCL3/MIP-1alpha and CCL5/RANTES are considered to be primary CCR1 ligands in inflammatory responses. CCL9 can activate osteoclasts suggesting an important role for it in bone resorption. Murine CCL9/10 is 75 % amino acid identical to rat CCL9/10.