

## Recombinant Human Macrophage Inflammatory Protein-4 (rh MIP-4 / CCL18)

**Synonyms:** Small inducible cytokine A18 (SCYA18), Pulmonary and activation-regulated chemokine (PARC), CC chemokine PARC, Alternative macrophage activation-associated CC chemokine 1 (AMAC-1), Dendritic cell chemokine 1 (DCCK1), CKb7

**Introduction:** Chemokine (C-C motif) ligand 18 (CCL18) is a small cytokine belonging to the CC chemokine family that was previously called PARC (pulmonary and activation-regulated chemokine). MIP-4 is approximately 60% identical in amino acid sequence to MIP-1a. It is expressed at high levels in lungs and at lower levels in certain lymphoid tissues, such as the lymph nodes, and is chemotactic for activated T cells and nonactivated lymphocytes. The gene for human MIP-4 contains three exons and is located on chromosome 17.

**Description:** rh MIP-4 produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 69 amino acids and having a molecular mass of 7813 Dalton. The MIP-4 is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** Lyophilized from 0.22 µm filtered solution in 20 mM Tris, 200 mM NaCl, pH 7.4  
The aliquots of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rh MIP-4 in sterile H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rh MIP-4, although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh MIP-4 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.

**Purity:** Greater than 95.0% as determined by SDS-PAGE.

**Amino acid sequence:** AQVGTNKELC CLVYTSWQIP QKFIVDYSET SPQCPKPGVI LLTKRGRQIC  
ADPNKKWVQK YISDLKLNA

**Endotoxicity:** The endotoxin level is less than 1 EU / µg determined by LAL method.

**Biological Activity:** The activity is calculated by the ability to chemoattract human T lymphocytes at 1.0-10.0 ng/ml.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	11343252
<i>medium</i>	10 µg	Cat.N°	11343253
<i>large</i>	50 µg	Cat.N°	11343255
<i>x-large</i>	250 µg	Cat.N°	11343257
<i>xx-large</i>	1000 µg	Cat.N°	11343258

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