

DATASHEET Version 20181206

MPIF-1/CCL23, Human

Cat. No.: Z03248-10

Size: 10.0 ug

Synonyms: MPIF-1/CCL23, Human

Description:

Myeloid progenitor inhibitory factor 1 (MPIF-1), also known as Chemokine (C-C motif) ligand 23 (CCL23) is a small cytokine belonging to the CC chemokine family.MPIF-1is predominantly expressed in lung and liver tissue, but is also found in bone marrow and placenta. It is also expressed in some cell lines of myeloid origin. It is highly chemotactic for resting T cells and monocytes and slightly chemotactic for neutrophils. MPIF-1 has been shown to inhibit colony formation of bone marrow myeloid immature progenitors. It has also been attributed to an inhibitory activity on hematopoietic progenitor cells. MPIF-1 is a ligand for the chemokine receptor CCR1.

Recombinant human MPIF-1/CCL23 produced in CHO cells is a single polypeptide chain containing 99 amino acids. A fully biologically active molecule, rhMPIF-1/CCL23 has a molecular mass of 12 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

00001 RVTKDAETEF MMSKLPLENP VLLDRFHATS ADCCISYTPR 00041 SIPCSLLESY FETNSECSKP GVIFLTKKGR RFCANPSDKQ

00081 VQVCVRMLKL DTRIKTRKN

Source: CHO Species: Human

Biological Activity: The EC $_{50}$ value of human MPIF-1/CCL23 on Ca $^{2+}$ mobilization assay in CHO-K1/Ga15/hCCR1 cells (human Ga15 and human CCR1 stably expressed in CHO-K1 cells) is less than 2 μ g/ml.

Molecular Weight: 12 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O or PBS at 100 µg/ml.

Purity: > 98% as analyzed by SDS-PAGE.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant humanMPIF-1/CCL23 remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, human MPIF-1/CCL23 should be stable up to 1 week at 4°C or up to 2 months at -20°C.