

# **Screening Libraries**

**Proteins** 



## **Product** Data Sheet

### MIP-3 alpha/CCL20 Protein, Human

Cat. No.: HY-P7262

Synonyms: rHuMIP-3α/CCL20; C-C motif chemokine 20; MIP3A; SCYA20

Species: Source: E. coli

P78556 (A27-M96) Accession:

Gene ID: 6364

Molecular Weight: Approximately 8.0 kDa

#### **PROPERTIES**

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ASNFDCCLGY TDRILHPKFI VGFTRQLANE GCDINAIIFH

TKKKLSVCAN PKQTWVKYIV RLLSKKVKNM

#### **Biological Activity**

Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human T-lymphocytes is in a concentration range of 10.0-50.0 ng/mL.

#### **Appearance**

Lyophilized powder.

#### **Formulation**

Lyophilized from a 0.2 µm filtered solution in 20 mM PB, pH 7.4, 100 mM NaCl.

#### **Endotoxin Level**

<1 EU/µg, determined by LAL method.

#### Reconsititution

It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH<sub>2</sub>O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

#### Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

#### **Shipping**

Room temperature in continental US; may vary elsewhere.

#### **DESCRIPTION**

#### Background

CCL20, also known as macrophage inflammatory protein 3 alpha (MIP-3-alpha) and liver-activated regulatory chemokine (LARC), is a small cytokine belonging to the CC chemokine family and is located on chromosome 2 in the human genome. It is expressed at lower levels in the thymus, testis, prostate and intestine. CCL20 binds to and acts as a chemokine receptor CCR6 and synergistically inhibits the function of CD8 T cells with CCR6. CCL20 has antimicrobial activity and has been implicated in autoimmune diseases such as inflammatory bowel disease, rheumatoid arthritis, and psoriasis, as well as oncological diseases. It can induce Tregs to invade tumor tissue, recruit dendritic cells to promote immunosuppression, and induce endothelial cell proliferation and neointima formation<sup>[1][2]</sup>.

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Caution: Product has not been fully validated for medical applications. For research use only.

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