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ProductInformation

HCC-1
Human Recombinant

Product Number **H0656**
Storage Temperature -20°C

Product Description

HCC-1 (hemofiltrate C-C chemokine-1) was initially isolated from the hemofiltrate of chronic renal failure patients. Mature HCC-1 consists of 74 amino acids including four cysteines linked to disulfide bonds, shows a sequence identity of 46% with macrophage inflammatory protein (MIP)-1 and MIP-1, and 29-37% with the other human C-C chemokines. Unlike MIP-1 and the other C-C chemokines, HCC-1 is expressed constitutively in several normal tissues, such as spleen, liver, skeletal and heart muscle, gut, and bone marrow and is present at high concentrations (1-80 nM) in plasma.[1]

Like MIP-1, HCC-1 induces proliferation of $CD34^+$ cells and acts via receptors that also recognize MIP-1. Unlike MIP-1, however, HCC-1 also demonstrates weak chemotactic activities on human monocytes, but is inactive on T lymphocytes, neutrophils, and eosinphils.[1]

Procedure

The biological activity of HCC-1 is measured by its monocyte chemotactic activity using 2-day cultured human mononuclear cells. [2]

Preparation Instructions

Reconstitute the contents of the vial using 0.2 µm-filtered PBS containing 0.1% HSA or BSA to a concentration not less than 100 µg/ml.

Storage/Stability

Prior to reconstitution, store at -20EC for 6 months. After reconstitution, store at 2-8EC for a maximum of one month. For extended storage, freeze in working aliquots at -70EC or -20EC. Repeated freezing and thawing is not recommended.

Product Profile

Expressed in *E. coli*
Molecular Weight 8.7 kD
Purity: 97% as determined by SDS-PAGE
EC_{50}: 1.5-15 :g/ml
Package Size: 10 µg
Formulation: Lyophilized from a 0.2 µm-filtered solution of PBS, pH 7.4.
Carrier Protein: 0.5 mg bovine serum albumin (BSA)
Sterility: 0.2 µm-filtered, aseptic fill
Endotoxin: 0.1 ng/µg

References

1. Schulz-Knappe, *et al*. (1996), J. Exp.Med. **183**:295

2. Matsushima, K. *et al*. (1989), J. Exp. Med. 169:1485

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