

# **Epithelial Neutrophil-Activating Protein 78 (CXCL5), mouse recombinant (rmENA-78)**

Catalog No: 97259
Lot No: XXXXX
Source: E. coli

Synonyms: C-X-C motif chemokine 5, Small-inducible cytokine B5, Cytokine LIX, Cxcl5, Scyb5, LIX, GCP-2, Scyb6,

ENA-78, AMCF-II

## **Background**

Chemokine (C-X-C motif) ligand 5 (CXCL5) is a small cytokine belonging to the CXC chemokine family that is also known as epithelial-derived neutrophil-activating peptide 78 (ENA-78). It is produced following stimulation of cells with the inflammatory cytokines interleukin-1 or tumor necrosis factor-alpha. Expression of CXCL5 has also been observed in eosinophils, and can be inhibited with the type II interferon IFN-?. This chemokine stimulates the chemotaxis of neutrophils possesses angiogenic properties. It elicits these effects by interacting with the cell surface chemokine receptor CXCR2. The gene for CXCL5 is encoded on four exons and is located on human chromosome 4 amongst several other CXC chemokine genes. CXCL5 has been implicated in connective tissue remodelling.

## Description

Epithelial Neutrophil-Activating protein 78 mouse recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 93 amino acids and having a molecular mass of 9.8 kDa. CXCL5 is purified by proprietary chromatographic techniques.

## **Physical Appearance**

Sterile filtered white lyophilized (freeze-dried) powder.

#### **Formulation**

Lyophilized from a 0.2  $\mu$ m filtered concentrated (1.0 mg/ml) solution in 20 mM sodium phosphate buffer, pH 7.4 and 150 mM NaCl.

# Solubility

It is recommended to reconstitute the lyophilized ENA-78 in sterile 18 M $\Omega$ -cm H $_2$ O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

#### Stability

Lyophilized ENA-78, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CXCL5 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 97.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

## **Amino Acid Sequence**

APSSVIAATE LRCVCLTVTP KINPKLIANL EVIPAGPQCP TVEVIAKLKN QKEVCLDPEA PVIKKIIIQK ILGSDKKKAK RNALAVERTA SVQ





# **Activity**

Determined by its ability to chemoattract human peripheral blood neutrophils using a concentration range of 10 - 100 ng/ml corresponding to a specific activity of 10,000 - 100,000 IU/mg.

# Usage

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