

Epithelial Neutrophil-Activating Protein 78 (CXCL5), amino acids 8-78, human recombinant (rHuENA78)

Catalog No: 97435 Lot No: XXXXX Source: *E. coli*

Synonyms: Small inducible cytokine B5, CXCL5, Epithelial-derived neutrophil-activating protein 78, Neutrophil-

activating peptide ENA-78, ENA-78(1-78), chemokine (C-X-C motif) ligand 5, SCYB5

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 human recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 71 amino acids (8-78) and having a molecular mass of 7.8 kDa. CXCL5 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a 0.2 µm filtered concentrated solution in 1xPBS, pH 7.4.

Solubility

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

Stability

Lyophilized ENA78, 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

LRELRCVCLQ TTQGVHPKMI SNLQVFAIGP QCSKVEVVAS LKNGKEICLD PEAPFLKKVI QKILDGGNKE N





Activity

The biological activity was determined by its ability to chemoattract human peripheral blood neutrophils using a concentration range of 10.0 - 100.0 ng/ml.

Usage

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