

# Recombinant Human Chemokine (C-X-C Motif) Ligand 5

Human, Recombinant (CXCL5)

Expressed in *E. coli*

Cat. No. CRP08140

Lot. No. (See product label)

## PRODUCT INFORMATION

**Description:** Epithelial cell-derived neutrophil-activating peptide 78 (ENA-78) is a member of the CXC subfamily of chemokines that has the Glu-Leu-Arg (ELR) motif preceding the CXC motif. Similar to other ELR containing CXC chemokines, ENA-78 is a potent neutrophil chemoattractant and activator. Proteolysis of ENA-78 with cathepsin G and chymotrypsin have yielded N-terminally truncated variants with increased biological activities. ENA-70 and ENA-74 represent truncated recombinant ENA-78 variants missing 8 and 4 aa residues, respectively, from the N-terminus. Recombinant ENA-70 and ENA-74 have been shown to have increased potency in neutrophil chemotaxis and myeloperoxidase and elastase release assays.

**Amino-Acid Sequence:** 74aa. non-glycosylated

**M. W. :** 8.0 kDa

**Recombinant:** Expressed in *E. coli*

**Purity:** >97% by SDS-PAGE and HPLC analyses.

**Formulation:** Lyophilized from a 0.2µm filtered concentrated (1.0mg/ml) solution in 20mM PB, pH 7.4, 50mM NaCl.

**Biological activity:** Fully biologically active when compared to standard. Determined by its ability to chemoattract human peripheral blood neutrophils using a concentration range of 5.0-50.0 ng/ml.

**Endotoxin:** Less than 1EU/mg of rHuENA-78/CXCL5 as determined by LAL method.

**Reconstitution:** We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤-20°C. Further dilutions should be made in appropriate buffered solutions.

**Storage:** This lyophilized preparation is stable for several weeks at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

## GENE INFORMATION

**Gene Name:** [CXCL5](#)

**Synonyms:** ENA-78; SCYB5; ENA-78(1-78); ENA78; Epithelial-derived neutrophil-activating protein 78; Neutrophil-activating peptide ENA-78; Small-inducible cytokine B5; chemokine (C-X-C motif) ligand 5; epithelial-derived neutrophil activating protein 78; epithelial-derived neutrophil-activating peptide 78; neutrophil-activating protein 78; small inducible cytokine B5; small inducible cytokine subfamily B (Cys-X-Cys), member 5 (epithelial-derived neutrophil-activating peptide 78); CXCL5\_HUMAN; C-X-C motif chemokine 5 [Precursor]; CXCL5

**UniProt ID:** [P42830](#)

**mRNA Refseq:** [NM\\_002994](#)

**Protein Refseq:** [NP\\_002985](#)

**MIM:** [600324](#)

**GeneID:** [6374](#)

**Chromosome Location:** 4q12-q13

**Summary:** The protein encoded by this gene is an inflammatory chemokine that belongs to the CXC chemokine family. This chemokine is produced concomitantly with interleukin-8 (IL8) in response to stimulation with either interleukin-1 (IL1) or tumor necrosis factor-alpha (TNFA). This chemokine is a potent chemotaxin involved in neutrophil activation.

**Pathway:** Cytokine-cytokine receptor interaction

**Function:** Chemokine activity

## REFERENCES

- Persson T, Monsef N, Andersson P, Bjartell A, Malm J, Calafat J, Egesten A. Expression of the neutrophil-activating CXC chemokine ENA-78/CXCL5 by human eosinophils. *Clin. Exp. Allergy*. 2003;33 (4): 531-537.
- O'Donovan N, Galvin M, Morgan JG. Physical mapping of the CXC chemokine locus on human chromosome 4. *Cytogenet. Cell Genet*. 1999; 84 (1-2): 39-42.

**FOR RESEARCH USE ONLY**

Creative Biolabs All rights reserved.

45-16 Ramsey Road Shirley, NY 11967, USA  
Technical Support: T: 631-871-5806 · F: 631-207-8356  
E-mail: [info@creative-biolabs.com](mailto:info@creative-biolabs.com)  
[www.creative-biolabs.com](http://www.creative-biolabs.com)