

Epithelial-derived Neutrophil Activating Protein 78

Human, Recombinant (rHuENA-78/rHuCXCL5)

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].

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

2005-2008 Creative Biolabs. All rights reserved.

21 Brookhaven BLVD · Port Jefferson Station, NY 11776, USA
Technical Support: T: 631-871-5806 · F: 631-614-7828
E-mail: info@creative-biolabs.com
www.creative-biolabs.com