

DATASHEET Version 20181206

ENA-78/CXCL5 (5-78aa), Human

Cat. No.: Z02820-1

Size: 1.0 mg

Synonyms: ENA-78/CXCL5 (5-78a.a.), Human;

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:

00001 AAVLRELRCV CLQTTQGVHP KMISNLQVFA IGPQCSKVEV 00041 VASLKNGKEI CLDPEAPFLK KVIQKILDGG NKEN Source: E. coli
Species: Human

Biological Activity: Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human peripheral blood neutrophils is in a concentration of 5.0-10 ng/ml.

Molecular Weight: Approximately 8.1 kDa, a single non-glycosylated polypeptide chain containing 74 amino acids.

Formulation: Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM PB, pH 7.4, 50 mM NaCl.

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

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 \leq -20 °C. Further dilutions should be made in appropriate buffered solutions.

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

Endotoxin Level: Less than 1 EU/µg of rHuENA-78, 5-78a.a./CXCL5 as determined by LAL method.

Storage: This lyophilized preparation is stable 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.