

Recombinant Human Epithelial Neutrophil Activating Peptide-78, 5-78 a.a./CXCL5

#R00358

Size: 5 µg/100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

CXCL5 is a small cytokine also known as epithelial-derived neutrophil-activating peptide 78 (ENA-78). The gene for human CXCL5 is encoded by four exons which belong to CXCL5 gene located on human chromosome 4. The protein is produced following stimulation of cells with the inflammatory cytokines interleukin-1 or tumor necrosis factor-alpha. In vitro, ENA-78 (8-78) and ENA-78 (9-78) show a threefold higher chemotactic activity for neutrophil granulocytes. They are produced by proteolytic cleavage after secretion from peripheral blood monocytes. Recombinant human CXCL5 (5 - 78 a.a.) contains 74 amino acids and it is a single non-glycosylated polypeptide chain. Human CXCL5 shares 57 % amino acid sequence identity with mouse and rat CXCL5.

AA Sequence

AAVLRELRCVCLQTTQGVHPKMISNLQVFAIGPQCSK
VEVVASLKNGKEICLDPEAPFLKKVIQKILDGGNKEN

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.

Product Specification

Synonyms	ENA-78 (5-78), CXCL5 (5-78), Neutrophil Activating Peptide ENA-78, Small-inducible cytokine B5
Accession	P42830
GeneID	6374
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 8.1 kDa, a single non-glycosylated polypeptide chain containing 74 amino acids.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
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 10.0-100.0 ng/ml.
Physical	Sterile Filtered White lyophilized
Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 20 mM PB, pH 7.4, 50 mM NaCl.
Endotoxin	Less than 1 EU/μg of rHuENA-78, 5-78a.a./CXCL5 as determined by LAL method.