

Product No. E-9769
Epithelial Neutrophil Activating Peptide-78 (ENA-78)
Recombinant, Human
Expressed in *E. coli*

Description

Epithelial Neutrophil Activating Peptide-78 (ENA-78) was initially discovered from the conditioned medium of human pulmonary epithelial cells (A549) which had been stimulated with TNF- α or IL-1 β .¹ ENA-78 is an 8.3 kD protein with 78 amino acids containing 4 cysteines positioned identically to those of IL-8.¹ ENA-78 is a member of the alpha (C-X-C) supergene family which includes platelet factor-4, macrophage inflammatory protein-2 α and macrophage inflammatory protein-2 β .¹ ENA-78 shares 53% sequence homology with NAP-2 and 52% sequence homology with GRO α .¹ ENA-78 shares several properties of neutrophil activation with NAP-2 and IL-8. ENA-78 induces chemotactic activity in neutrophils, as well as release of elastase from cytochalasin B-pretreated neutrophils and the induction of cytosolic calcium release.² In response to ENA-78, neutrophils migrate into inflamed joints of patients with rheumatoid arthritis.³

Performance Characteristics

The biological activity of recombinant, human ENA-78 is measured by its ability to induce myeloperoxidase release from cytochalasin B-treated neutrophils.⁴ The EC₅₀ is defined as the effective concentration of growth factor that elicits a 50% increase in myeloperoxidase release from neutrophils in a cell based bioassay.

Product Information

Expressed in *E. coli*
Molecular Weight: 8.3 kD
Purity: \geq 97% as determined by SDS-PAGE
EC₅₀: 1 - 10 μ g/ml
Package Size: 10 μ g/vial

Formulation: Lyophilized from a 0.2 μ m-filtered solution of PBS, pH 7.4.

Carrier Protein: 500 μ g bovine serum albumin (BSA)

Sterility: 0.2 μ m-filtered, aseptic fill

Endotoxin: \leq 0.1 ng/ μ g ENA-78

Reconstitution and Use

Reconstitute the contents of the vial using 0.2 μ m-filtered PBS containing 0.1% HSA or BSA to a concentration of not less than 10 μ g/ml.

Storage

Prior to reconstitution, store at -20°C for no more than 6 months. After reconstitution, store at 2-8°C for a maximum of one month. For extended storage, freeze in working aliquots at -70°C or -20°C. Repeated freezing and thawing is not recommended.

References

1. Walz, A., et al., *J. Exp. Med.*, **174**, 1355 (1991).
2. Walz, A., et al., in *Chemotactic Cytokines*, Plenum Publishing Corp. (In press).
3. Koch, A., et al., *J. of Clin. Invest.*, **94**, 1012 (1994).
4. Schröder, J., et al., *J. Immunol.*, **139**, 3474 (1987)