

## 32-12012: Human Beta Defensin-3

**Gene :** DEFB103A  
**Gene ID :** 414325  
**Uniprot ID :** P81534  
**Alternative Name :** DEFB-3, Beta-defensin 3, Å Defensin, beta 103, Defensin-like protein

### Description

**Source:** Genetically modified E.coli.

**Predicted MW:** Monomer, 5.2 kDa (45 aa)

Beta-Defensin 3 (BD-3), also known as DEFB-3, is a member of the defensin class of antimicrobial peptides. Beta defensins exert host defense responses against viruses, bacteria, and fungi through the binding and permeabilizing of microbial membranes. BD-3 expression is stimulated by interferon-gamma and is an important molecule during adaptive immunity. BD-3 functions to activate monocytes and mast cells, and has antibacterial functions towards Gram-negative and Gram-positive bacteria. Further, BD-3 blocks human immunodeficiency virus type 1 (HIV-1) replication through the downregulation of the HIV-1 co-receptor, CXCR4.

### Product Info

**Amount :** 20 µg / 100 µg  
**Purification :** Reducing and Non-Reducing SDS PAGE at  $\geq 95\%$   
Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)  
**Content :** Sterile water at 0.1 mg/mL  
**Storage condition :** Store at  $-20^{\circ}\text{C}$   
**Amino Acid :** GIINTLQKYK CRVRGGRCVAV LSCLPKKEEQI GKCSTRGRKC CRRKK

### Application Note

**Endotoxin:** Less than  $0.1 \text{ ng}/\mu\text{g}$  (1 IEU/ $\mu\text{g}$ ) as determined by LAL test.

Centrifuge vial before opening, Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at  $-80^{\circ}\text{C}$  and avoid repeat freeze thaws. Upon reconstitution, a small amount of visible precipitate can be expected. A 10% overfill has been added to the total material vial to compensate for this loss.

