

# BACKGROUND

Interleukin 32 alpha (IL-32a) is one of approximately six splice variants of the IL-32 gene. IL-32g has been shown to induce IL-8, TNFa, and MIP-2 production from human & mouse macrophage cell lines. IL-32a is upregulated in activated T cells, natural killer cells, and IFNγ-treated epithelial cells.

Recombinant human IL-32a is a non-glycosylated protein, containing131 amino acid, with a molecular mass of 14.9 kDa.

#### Alternative Names: NK4

## Amino Acid Sequence:

MCFPKVLSDD MKKLKARMHQ AIERFYDKMQ NAESGRGQVM SSLAELEDDF KEGYLETVAA YYEEQHPELT PLLEKERDGL RCRGNRSPVP DVEDPATEEP GESFCDKSYG APRGDKEELT PQKCSEPQSS K

# **TECHNICAL INFORMATION**

Source: F.coli

### **Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

### Formulation:

Recombinant human IL-32a is lyophilized from 50 mM Na2PO4, pH 7.5.

### Stability:

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

#### Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

#### **Protein Content and Purity determined by:**

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

#### Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

### **Biological Activity:**

The activity is determined by the dose-dependent induction of TNFa production from human PBMCs and is typically in the range of 0.125-1.0 ug/ml.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

