

# Human Interleukin-32 / IL-32 Protein (isoform alpha, His Tag)

Catalog Number: 11064-H08H



**Sino Biological Inc.**

Biological Solution Specialist

## General Information

### Gene Name Synonym:

NK4, TAIF, TAIFa, TAIFb, TAIFc, TAIFd, IL-32beta, IL-32alpha, IL-32delta, IL-32gamma, IL32

### Protein Construction:

A DNA sequence encoding the human IL32 isoform alpha (IL32A) (NP\_001012651.1) precursor (Met 1-Lys 131) was expressed with a polyhistidine tag at the C-terminus.

**Source:** Human

**Expression Host:** Human Cells

## QC Testing

**Purity:** > 95 % as determined by SDS-PAGE

### Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Met 1

### Molecular Mass:

The recombinant human IL32A comprises 137 amino acids with a predicted molecular mass of 15.7 kDa. As a result of glycosylation, it migrates as an approximately 20 kDa band in SDS-PAGE under reducing conditions.

### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

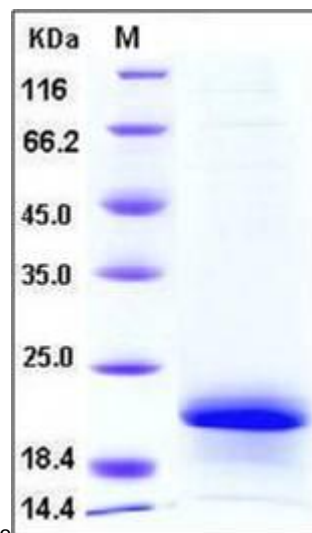
## Usage Guide

### Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### SDS-PAGE:



### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## Protein Description

IL-32 is a recently discovered cytokine that induces various proinflammatory cytokines (TNF-alpha, IL-1beta, IL-6) and chemokines in both human and mouse cells through the NF-kappaB and p38 MAPK inflammatory signal pathways. Upon stimulation with inflammatory cytokines, IL-32 is abundantly expressed in epithelial and endothelial cells. It is regulated robustly by other major proinflammatory cytokines, and is crucial to inflammation and immune responses. IL-32 has been involved in Mycobacterium tuberculosis and chronic proinflammatory diseases such as rheumatoid arthritis. It is a potent inducer of prostaglandin E release in mouse macrophages and human blood monocytes, an important property for inflammation. Four of the IL-32 isoforms (alpha, beta, gamma and delta) are the most representative IL-32 transcripts, and gamma isoform of IL-32 is the most active, although all isoforms are biologically active.

## References

1. Joosten, L.A. et al., 2006, Proc Natl Acad Sci USA. 103 (9): 3298-3303.
2. Novick, D. et al., 2006, Proc Natl Acad Sci USA. 103 (9): 3316-3321.
3. Kim, S. et al., 2008, BMB Rep. 41 (11): 814-819.
4. Choi, J. D. et al., 2009, Immunology. 126 (4): 535-542.

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