

# Recombinant human GILT/IFI30 protein

Catalog Number: ATGP1753

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

58-232aa

### UniProt No.

P13284

### NCBI Accession No.

NP\_006323

### Alternative Names

Gamma-interferon-inducible lysosomal thiol reductase, GILT, IFI-30, IP30

## PRODUCT SPECIFICATION

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### Molecular Weight

22.5 kDa (199aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.1M NaCl, 10% glycerol, 1mM DTT

### Purity

> 85% by SDS-PAGE

### Tag

His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

IFI30, also as known as gamma-interferon-inducible lysosomal thiol reductase, belongs to the GILT family. This protein is a lysosomal thiol reductase that at low pH can reduce protein disulfide bonds. The enzyme is expressed constitutively in antigen-presenting cells and induced by gamma-interferon in other cell types. This enzyme has an important role in MHC class II-restricted antigen processing. This protein facilitates the generation of MHC class II-restricted epitopes from disulfide bond-containing antigen by the endocytic reduction of disulfide bonds. Also facilitates MHC class I-restricted recognition of exogenous antigens containing disulfide

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bonds by CD8+ T-cells or cross-presentation. Recombinant human IFI30 protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by conventional column chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer.

### Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGSM>NAPLVN VTLYYEALCG GCRAFLIREL FPTWLLVMEI LNVTLVPYGN  
AQEQNVSGRW EFKCQHGEES CKFNKVEACV LDELDMELAF LTIVCMEEFE DMERSLPLCL QLYAPGLSPD TIMECAMGDR  
GMQLMHANAQ RTDALQPPHE YPWVTVNGK PLEDQTQLLT LVCQLYQGK

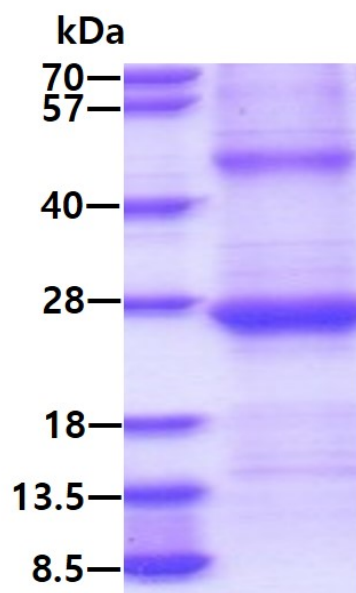
### General References

Arunachalam B, et al. (2000) Proc Natl Acad Sci U S A 97 (2): 745-50.

Luster AD, et al. (1988) J Biol Chem 263 (24): 12036-43.

## DATA

### SDS-PAGE



3µg by SDS-PAGE under reducing condition and visualized by coomassie blue stain.