



# Recombinant Protein Technical Manual

## Recombinant Human IFI30 Protein (His Tag)

RPES2221

### Product Data:

**Product SKU:** RPES2221

**Size:** 20µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** P13284

### Protein Information:

**Molecular Mass:** 24.7 kDa

**AP Molecular Mass:** 31-34 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 96 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** GILT;IFI-30;IFI30;IP-30;IP30

## Immunogen Information:

**Sequence:** Met 1-Lys243

## Background:

IFI30 belongs to the GILT family. This family includes the two characterised human gamma-interferon-inducible lysosomal thiol reductase (GILT) sequences: P13284 and Q9UL08. It also contains several other eukaryotic putative proteins with similarity to GILT. The aligned region contains three conserved cysteine residues. In addition, the two GILT sequences possess a C-X(2)-C motif that is shared by some of the other sequences in the family. This motif is thought to be associated with disulphide bond reduction. IFI30 is a lysosomal thiol reductase that can reduce protein disulfide bonds. It facilitates the generation of MHC class II-restricted epitopes from disulfide bond-containing antigen by the endocytic reduction of disulfide bonds. It also facilitates MHC class I-restricted recognition of exogenous antigens containing disulfide bonds by CD8+ T-cells or crosspresentation. IFI30 may facilitate the complete unfolding of proteins destined for lysosomal degradation and plays an important role in antigen processing.