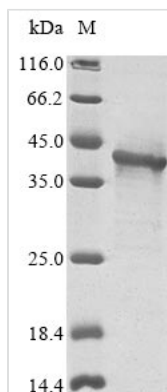




Recombinant Human Interferon kappa (IFNK)

Product Code	CSB-EP889172HU
Abbreviation	Recombinant Human IFNK protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q9P0W0
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	LDCNLLNVHLRRVTWQNLRLHSSMSNSFPVECLRENI AFELPQEFLQYTQPMK RDIKKAFYEMSLQAFNIFSQHTFKYWKERHLKQIQIGLDQQA EYLNQCLEEDKN ENEDMKEMKENEMKPSEARVPQLSSLELRRYFHRIDNFLKEKKYSDCAWEIV RVEIRRCLYYFYKFTALFRRK
Research Area	Immunology
Source	E.coli
Target Names	IFNK
Expression Region	28-207aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	35.1 kDa
Protein Length	Full Length of Mature Protein

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Description

This recombinant Human IFNK protein is typically achieved by the manipulation of IFNK gene expression in E.coli cells so that it expresses large amounts of a recombinant IFNK gene. In order to get enough amount of the IFNK protein, strain selection, codon optimization, fusion systems, co-expression, mutagenesis, and isotope labeling techniques are used. Finally, the IFNK protein is isolated from the samples such as cell lysates or medium. Protein refolding, cleavage of fusion moieties and chromatography techniques are involved in the protein purification process.

IFNK is a multifunctional type I IFN that elicits autoimmunity when transgenically expressed in the β cells of the pancreatic islets in mice. IFNK is induced after viral infection or treatment of cells with double-stranded RNA (dsRNA). IFNK signaling stimulates a collection of genes, including IRF1, STAT1, MXA, PKR, and OAS1, which are common to signaling via the type I interferon receptor, and modulates the release of cytokines from monocytes. Different from other members of the type I IFN family, IFNK is constitutively and highly expressed in human keratinocytes. IFNK plays an important role in keratinocyte host defense against herpes simplex virus-1 (HSV-1).

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.