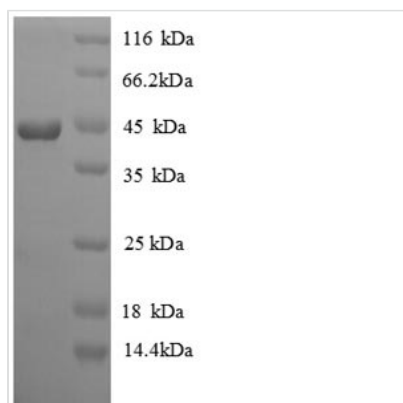




Recombinant Chicken Interferon gamma (IFNG)

Product Code	CSB-EP011050CH
Relevance	Produced by lymphocytes activated by specific antigens or mitogens. IFN-gamma, in addition to having antiviral activity, has important immunoregulatory functions. It is a potent activator of macrophages, it has antiproliferative effects on transformed cells and it can potentiate the antiviral and antitumor effects of the type I interferons .
Abbreviation	Recombinant Chicken IFNG 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.	P49708
Product Type	Recombinant Protein
Immunogen Species	Gallus gallus (Chicken)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	HTASSLNLVQLQDDIDKLKADFNSSHSDVADGGPIIVEKLKNWTERNEKRIILSQ IVSMYLEMLENTDKSKPHIKHISEELYTLKNNLPDGVKKVKDIMDLAKLPMNDLR IQRKAANELFSILQKLVDPPSFKRKRSQSQRRCNC
Research Area	Others
Source	E.coli
Target Names	IFNG
Expression Region	20-164aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal GST-tagged
Mol. Weight	43.7kDa
Protein Length	Full Length of Mature Protein

Image



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



Description

The Recombinant Chicken IFNG protein is a protein encoded by recombinant DNA that was cloned in an expression vector that supported the expression of IFNG gene. This recombinant IFNG protein was expressed in the host. The expression region is 20-164aa of the Chicken IFNG. In the production, the expression vector contains N-terminal GST tag. Every production step was performed with a strict QC system. The purity of this protein is 90%+ determined by SDS-PAGE.

interferon-gamma/Interferon γ coded by the IFNG gene is among the common cytokines known to affect immune related disorders. Blockade of PD1/PD-L1 activates T cells accompanied by interferon- gamma (IFN-g) secretion, which has been proposed to mediate both pro- and anti-tumoral activities. IFN-g mediates adaptive resistance through PD-L1 dependent and independent mechanisms, which is becoming a key issue to broaden cancer immunotherapy. Other research demonstrates that liver type 1 innate lymphoid cells develop locally via an interferon- γ -dependent loop. Specifically, deficiency in the gene encoding interferon- γ or one of its receptors (Ifngr1) selectively reduced the frequency and number of ILC1s and not cNK cells in the liver. Delivery of a plasmid containing the interferon- γ (IFN- γ) cDNA to IFN-g-deficient mice via hydrodynamic tail-vein injection selectively increased the frequency and number of liver's ILC1s but not of liver cNK cells. Moreover, IFN- γ signaling promoted the expansion and differentiation of LSM cells but not of ILC1s, supporting a model in which IFN- γ acts on these local progenitors to promote liver ILC1 development. The findings advance researchers' knowledge of the importance of extramedullary hematopoiesis to cells of lymphoid origin.

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.