

# Recombinant Human IFN- $\gamma$ Protein

## Product information

Product No.	Size	Concentration
YJ-O-181-5	5 $\mu$ g	0.5mg/ml
YJ-O-181-100	100 $\mu$ g	0.5mg/ml

## Product description

Recombinant Human IFN- $\gamma$  Protein is derived from the human IFN- $\gamma$  gene and recombinantly expressed in *E. coli*. The gene is located on human chromosome 12q15. Belonging to the Type II interferon family, IFN- $\gamma$  is a secreted protein primarily produced by activated natural killer cells, CD4<sup>+</sup> and CD8<sup>+</sup> T lymphocytes. IFN- $\gamma$  not only exhibits antiviral activity but also plays critical immunomodulatory roles: it acts as an effective activator of macrophages, exerts antiproliferative effects on transformed cells, and enhances the antiviral and antitumor effects of Type I interferons. IFN- $\gamma$  receptors are present on most immune cells, which respond to IFN- $\gamma$  signaling by increasing the surface expression of Class I MHC (major histocompatibility complex) proteins, enabling antigen presentation to helper T cells (CD4<sup>+</sup>). IFN- $\gamma$  is essential for innate and adaptive immunity against viral or intracellular bacterial infections, as well as for tumor control. Abnormal IFN- $\gamma$  expression has also been linked to several auto-inflammatory and autoimmune diseases.

- Storage solution: 20 mM PBS, pH=7.4.

## Product components

Components	Size1	Size2
Recombinant Human IFN- $\gamma$ Protein	5 $\mu$ g	100 $\mu$ g

## Transportation and storage

- Storage: This product should be stored at -20°C or below, and can be stored for at least 12 months.
- Transportation: Dry ice.

## Product application

- IFN- $\gamma$  can be used to generate inflammatory M1 cells from the human monocytic cell line THP1.
- IFN- $\gamma$  is applicable for research related to cytokines and receptors.

## Precaution

- Try to avoid freeze-thaw cycles of this product after receipt;
- Please wear lab coat and disposable gloves when using;
- This product should not be used directly for clinical diagnosis and treatment.