

Interferon gamma (IFN- γ), Rat

Cat.no. PK0282

Product size: 10ug 50ug 1mg

Source: E. coli

Species: Rat

Biological Activity: ED50 <0.5 ng/ml, measured by cytotoxicity assay using WEHI-279 cells, corresponding to a specific activity of >2 \times 10⁶ units/mg.

Molecular Weight: 15.5 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O or PBS at 100 μ g/ml.

Purity: > 95% by SDS-PAGE and HPLC analyses.

Endotoxin Level: < 0.2 EU/ μ g, determined by LAL method.

Storage: Lyophilized recombinant Rat IFN- γ remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, recombinant Rat IFN- γ should be stable up to 1 week at 4°C or up to 2 months at -20°C.

Description: Interferon gamma (IFN- γ), also known as Type II interferon, is a cytokine produced primarily by T-lymphocytes and natural killer cells. The active form of IFN- γ is an antiparallel dimer that interacts with the receptor IFN- γ R1 and activates the IFN- γ /JAK/STAT pathway. IFN- γ signaling promotes biological functions primarily related to antiviral and antibacterial defense, apoptosis, inflammation, and regulation of innate and acquired immune responses. While IFN- γ -induced inflammatory cascades summon a variety of immune-related cell types, such as macrophages, natural killer (NK) cells and cytotoxic T lymphocytes (CTLs), IFN- γ is also implicated in resistance to NK cell and CTL responses and in immune escape in a variety of cancers. Recombinant Rat Interferon gamma (IFN- γ) produced in E.coli is a single non-glycosylated polypeptide chain containing 134 amino acids.

Amino Acid Sequence:

00001 GTLIESLESL KNYFNSSSMD AMEGKSLLLD IWRNWQK DGN

00041 TKILESQIIS FYLRLFV LK DNQAISNNIS VIESHLITNF

00081 FSNSKAKKDA FMSIAKFEVN NPQIQHKAVN ELIRVIHQLS

00121 PESSLRKRKR SRC

Synonyms: Interferon gamma; IFN-gamma; Immune interferon; IFNG

Note: For research use only, not for use in diagnostic procedure.