

PPH77 PODS® Human IFN-γ

Description

The product contains the polyhedrin protein co-crystalized with Human IFN-γ. Interferon γ (IFN-γ) is a type II interferon that is critical during adaptive and innate immune responses to infection. IFN-γ is produced by T cells and Natural Killer cells following antigen-specific activation. IFN-γ binds IFN-γ receptors (IFN-γ R1 and IFN-γ R2), which are expressed on most immune cells, to activate the JAK-STAT pathway. IFN-γ induced signaling increases the expression of class 1 major histocompatibility complex (MHC) molecules. Human IFN-γ is not cross-reactive with mouse IFN-γ.

Length	211 aa
Molecular Weight	49.4 kDa
Source	<i>Spodoptera frugiperda (Sf9) cell culture</i>
Accession Number	P01579

Usage Recommendation

PODS® co-crystals provide a depot of proteins which are steadily secreted. It has been estimated that the biological activity of 50 million PODS® co-crystals generates the same peak dose as 3.3 µg of standard recombinant protein. However, at 5 days following the start of seeding the PODS® co-crystals, there are more than 50% of these peak levels still present in the culture system. Ultimately, the amount of PODS® co-crystals that is optimal for a particular experiment should be determined empirically. Based on previous data, we suggest using 50 million PODS® co-crystals in place of 3.3 µg of standard growth factor as a starting point. To control for cross-reactivity with cells or as a negative control, we recommend using PODS® growth factors alongside [PODS® Empty crystals](http://www.cellgs.com/products/podsand8482-empty.html), as the latter do not contain or release cargo protein.

Specifications

Alternative Names	Interferon-γ, interferon-gamma, interferon gamma, type II interferon, T cell interferon, immune Interferon, MAF, IFG, IFI, IFN-gamma, IFN gamma
Endotoxin Level	<0.06 EU/ml as measured by gel clot LAL assay
Formulation	PODS® were lyophilized from a volatile solution
AA Sequence	MQDPYVKEAE NLKKYFNAGH SDVADNGTLF LGILKNWKEE SDRKIMQSQI VSFYFKLFKN FKDDQSIQKS VETIKEDMNV KFFNSNKKKR DDFEKLTNYS VTDLNVQRKA IHELIQVMAE LSPAAGTKGR KRSQMLFRGR RASQDPAFLY KVVVDGYLLAF NSQRRSHTLR LLGPFQYFNF SETDRGHPLF RLPLKYPSKA IPADELIDNL H

Preparation and Storage

Reconstitution	PODS® co-crystals may be reconstituted at 200 million co-crystals/ml in water. 20% glucose has a buoyant density closer to PODS® co-crystals and can be useful for aliquoting. PODS® co-crystals are highly stable when stored in aqueous solution (pH range 6 - 8).
Stability and Storage	Upon receipt, store at 4°C. PODS® co-crystals are stable for at least 1 year when dry and 6 months when resuspended.