

PPH83 PODS[®] Human IL-10

Description

The product contains the polyhedrin protein co-crystallized with Human IL-10. Interleukin-10 (IL-10) is an anti-inflammatory cytokine produced by macrophages and type 2 T helper (Th2) cells. IL-10 inhibits the production of pro-inflammatory cytokines such as interferon-gamma (IFN-gamma), Tumor Necrosis Factor alpha (TNF-alpha), interleukin-2 (IL-2), interleukin-3 (IL-3), interleukin-4 (IL-4), and Granulocyte-Macrophage Colony-Stimulating Factor (GM-CSF), made by macrophages and regulatory T cells. IL-10 also suppresses antigen presentation on antigen presenting cells, and enhances the survival, proliferation, and antibody production of B cells. Human IL-10 can act on mouse cells, while mouse IL-10 is not active on human cells.

Length	206 aa
Molecular Weight	24 kDa
Source	<i>Spodoptera frugiperda (Sf9) cell culture</i>
Accession Number	P22301

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	Interleukin-10, interleukin 10, IL10, IL 10, B-TCGF, CSIF, TGIF, cytokine synthesis inhibitory factor
Endotoxin Level	<0.06 EU/ml as measured by gel clot LAL assay
Formulation	PODS [®] were lyophilized from a volatile solution
AA Sequence	MADVAGTSNR DFRGREQRLF NSEQYNNNS KNSRPSTSLY KKAGFMSPGQ GTQSENSCTH FPGNLPNMLR DLRDAFSRVK TFFQMKDQLD NLLKESLLE DFKGYLGCQA LSEMIQFYLE EVMPQAENQD PDIKAHVNSL GENLKTLLRLR LRRCHRFLPC ENKSKAVEQV KNAFNKLQEK GIYKAMSEFD IFINYIEAYM TMKIRN

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.