

PPH175 PODS<sup>®</sup> Human IL-8

## Description

The product contains the polyhedrin protein co-crystallized with Human mature IL-8 (amino acids 23-99) which lacks the signal peptide and MDNCF $\alpha$  fragment. IL-8, also known as CXCL8 is a member of the CXC subfamily of chemokines and a major mediator of the inflammatory response. IL-8 functions as a chemotactic factor that attracts neutrophils as well as other granulocytes to sites of inflammation. It is secreted by several cell types including mononuclear macrophages, neutrophils, eosinophils, T-lymphocytes, fibroblast and epithelial cells in response to inflammatory stimuli. IL-8 also plays important functions in neutrophil activation, tumour migration, invasion and angiogenesis.

<b>Length</b>	122 aa
<b>Molecular Weight</b>	14 kDa
<b>Source</b>	<i>Spodoptera frugiperda (Sf9) cell culture</i>
<b>Accession Number</b>	P10145

## Usage Recommendation

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

## Specifications

<b>Alternative Names</b>	Interleukin-8, IL-8, C-X-C motif chemokine 8, CXCL8, Emotakin, Granulocyte chemotactic protein 1, GCP-1, Monocyte-derived neutrophil chemotactic factor (MDNCF), NAP-1
<b>Endotoxin Level</b>	<0.06 EU/ml as measured by gel clot LAL assay
<b>Formulation</b>	PODS <sup>®</sup> were lyophilized from a volatile solution
<b>AA Sequence</b>	MADVAGTSNR DFRGREQRLF NSEQYNNNS KNSRPSTSLY KKAGFAVLPR SAKELRCQCI KTYSKPFHPK FIKELRVIES GPHCANTEII VKLSDGRELC LDPKENWVQR VVEKFLKRAE NS

## Preparation and Storage

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