

PPH175 PODS[®] 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 α 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.

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

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 μ g 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 μ 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[®] growth factors alongside PODS[®] Empty crystals, as the latter do not contain or release cargo protein.

Specifications

Alternative Names	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
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 KKAGFAVLPR SAKELRCQCI KTYSKPFHPK FIKELRVIES GPHCANTEII VKLSDGRELC LDPKENWVQR VVEKFLKRAE NS

Preparation and Storage

Reconstitution	PODS [®] co-crystals may be reconstituted at 200 million co-crystals/ml in sterile PBS. 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.