

PPH145

PODS[®] Human IL-33

Description

The product contains the polyhedrin protein co-crystallized with Human IL-33. Also known as NF-HEV and DVS 27, IL-33 is a member of the IL-1 cytokine family and is constitutively expressed in smooth muscle and airway epithelial cells. It is a proinflammatory cytokine which binds and signals through the IL-1RL1/ST2 receptor to activate NF- κ -B and MAPK signalling pathways. IL-33 functions to induce type 2-associated cytokine production in polarized Type 2 helper T (Th2) cells.

Length	204 aa
Molecular Weight	23.182 kDa
Source	<i>Spodoptera frugiperda (Sf9) cell culture</i>
Accession Number	O95760

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-33, Interleukin-1 family member 11 (IL-1F11), NF-HEV, DVS 27
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 KKAGFSITGI SPITEYLASL STYNDQSITF ALEDESYEIIY VEDLKKDEKK DKVLLSYYES QHPSNESGDG VDGKMLMVTL SPTKDFWLHA NNKEHSVELH KCEKPLPDQA FFVLHNMHSN CVSFECKTDP GVFIGVKDNH LALIKVDSSE NLCTENILFK LSET

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.