

PPH330 PODS[®] Human Wnt-1

Description

The product contains the polyhedrin protein co-crystallized with Human Wnt-1. Wnt proteins constitute a large family of secreted proteins (sharing 20% to 85% amino acid identity) with different roles in cell fate decision, axon guidance, and tumour formation. Wnt-1 is a secreted glycoprotein that binds members of the Frizzled family of cell surface receptors and plays a crucial role in the embryonic development and carcinogenesis. Wnt-1 signaling is responsible for stabilizing the intracellular signaling protein β -catenin. For certain cell lines, Wnt-1 supports self-renewal while keeping undifferentiated.

Length	388 aa
Molecular Weight	43.5 kDa
Source	<i>Spodoptera frugiperda (Sf9) cell culture</i>
Accession Number	P04426

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](http://www.cellgs.com/products/podsand8482-empty.html), as the latter do not contain or release cargo protein.

Specifications

Alternative Names	Wingless type 1, Wnt 1, Wnt1, INT-1, Wnt-1 proto-oncogene protein (precursor)
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 NSEQYNYNNS KNSRPSTSLY KKAGFANSSG RWWGIVNVA STNLLTDSKS LQLVLEPSLQ LLSRKQRRLI RQNPGLHSV SGGQSAVRE CKWQFRNRRW NCPTAPGPHL FGKIVNRGCR ETAFIFAITS AGVTHSVARS CSEGSIESCT CDYRRRGPGG PDWHWGGCSD NIDFGRLFGR EFVDSGEKGR DLRFLMNLHN NEAGRITTVFS EMRQECKCHG MSGSCTVRTC WMRLPTLRV GDVLRDRFDG ASRVLYGNRG SNRASRAELL RLEPEDPAHK PPSPHDLVYF EKSPNFCTYS GRLGTAGTAG RACNSSSPAL DGCELLCCGR GHRTRTQRVT ERCNCTFHWC CHVSCRNCTH TRVLHECL

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.

