

PPH350 PODS[®] Human FGF-20

Description

The product contains the polyhedrin protein co-crystallized with Human FGF-20. Fibroblast Growth Factor 20 (FGF-20) is a member of the fibroblast growth factor family, more specifically of the FGF-9 subfamily based on their structural and sequence similarities. It is expressed by a variety of cell types including fibroblasts, dopaminergic neurons, keratinocytes and epithelial cells. FGF-20, also regarded as a secreted neurotrophic factor, is involved in many biological processes, such as tumour growth, tissue repair, and embryonic development, specifically in the development of the central nervous system. It has shown to interact with FGF receptors 1c, 2c, 3b and 3c and 4c.

Length	256 aa
Molecular Weight	28.6 kDa
Source	<i>Spodoptera frugiperda (Sf9) cell culture</i>
Accession Number	Q9NP95

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, as the latter do not contain or release cargo protein.

Specifications

Alternative Names	Fibroblast Growth Factor 20, FGF20, RHDA2
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 KKAGFAPLAE VGGFLGGLEG LGQQVGSNFL LPPAGERPPL LGERRSAAER SARGGPGAAQ LAHLHGILRR RQLYCRTGFH LQILPDGSVQ GTRQDHSFLG ILEFISVAVG LVSIRGVDSG LYLGMNDKGE LYGSEKLTSE CIFREQFEEN WYNTYSSNIY KHGDTGRRYF VALNKDGTTPR DGARSKRHQK FTHFLPRPVD PERVPELYKD LLMYT

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.