

## PPH146 PODS® Human FGF-2 (154)

### Description

The product contains the polyhedrin protein co-crystalized with Human FGF-2. Fibroblast Growth Factor 2 (FGF-2) is expressed by endothelial cells and is a mediator of angiogenesis. FGF-2 also has cardioprotective functions during heart injury. The application of FGF-2 is a critical component for embryonic stem cell culture systems and is necessary for maintaining cells in an undifferentiated state. Degredation of the full length FGF-2 N-terminus results in a truncated FGF-2 147 amino acids protein, when the protein is isolated from biological sources. The N-terminus extensions influence the localization of FGF-2 within the cell, but do not affect the biological activity of FGF-2.

<b>Length</b>	275 aa
<b>Molecular Weight</b>	30 kDa
<b>Source</b>	<i>Spodoptera frugiperda (Sf9) cell culture</i>
<b>Accession Number</b>	P09038

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

### Specifications

<b>Alternative Names</b>	Fibroblast Growth Factor 2, FGF2, FGF 2, HBGF-2, basic fibroblast growth factor, heparin-binding growth factor 2, FGFB, BFGF, bFGF, prostatropin
<b>Endotoxin Level</b>	<0.06 EU/ml as measured by gel clot LAL assay
<b>Formulation</b>	PODS® were lyophilized from a volatile solution
<b>AA Sequence</b>	MADVAGTSNR DFRGREQRLF NSEQYNNNS KNSRPSTSLY KKAGFAAGSP RTRGRRTEER PSGSRLGDRG RGRALPGGRL GGRGRGRAPE RVGGRGRGRG TAAPRAAPAA RGSRPGPAGT MAAGSITTLF ALPEDGGSGA FPPGHFKDPK RLYCKNGGFF LRIHPDGRVD GVREKSDPHI KLQLQAEERG VVSIKVCAN RYLAMKEDGR LLASKCVTDE CFFFERLESN NYNTYRSRKY TSWYVALKRT GQYKLGSKTG PGQKAILFLP MSAKS

### Preparation and Storage

<b>Reconstitution</b>	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).
<b>Stability and Storage</b>	Upon receipt, store at 4°C. PODS® co-crystals are stable for at least 1 year when dry and 6 months when resuspended.

