

PPH348 PODS® Human FGF-4

Description

The product contains the polyhedrin protein co-crystallized with Human FGF-4. Fibroblast Growth Factor 4 (FGF-4) is a secreted growth factor that is predominantly expressed during bone morphogenesis and embryonic limb development. FGF-4 is an important growth regulator for stem cells, fibroblasts, and endothelial cells. FGF-4 contains a single N-linked glycosylation signal. However, in vitro studies suggest that unglycosylated FGF-4 is cleaved into 13 kDa and 15 kDa truncated proteins that have greater biological activity than the wild type 19 kDa FGF-4 protein. Human FGF-4 shares high homology and is cross-reactive with mouse FGF-4.

Length 176 aa

Molecular Weight 24.5 kDa

Source *Spodoptera frugiperda (Sf9) cell culture*

Accession Number P08620

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 4, FGF4, FGF 4, transforming protein KS3, HBGF-4, HST-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 NSEQQNYNNNS KNSRPSTSILY KKAGFAPTA P NGTLEAEELER
RWESLVALSL ARLPVAAQPK EAAVQSGAGD YLLGIKRLRR LYCNVGIGFH LQALPDGRIG
GAHADTRDSL LEISPVERGV VSIFGVASRF FVAMSSKGKL YGSPFFTDEC TFKEILLPNN
YNAYEYKYP GMFIASKNG KTKKGNRVSP TMKVTHFLPR L

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.