

PPH327 PODS® Human CTGF

Description

The product contains the polyhedrin protein co-crystallized with Human CTGF. Connective Tissue Growth Factor (CTGF) is a mitogen that is secreted by vascular endothelial cells in response to basic fibroblast growth factor (FGF-2) or vascular endothelial growth factor (VEGF). CTGF promotes cell growth, migration, adhesion, and survival of endothelial cells. CTGF is also important during osteogenesis, chondrogenesis, and skeletogenesis. CTGF has an insulin-like growth factor binding protein (IGFBP) domain, a thrombospondin type 1 repeat (TSR) domain, and a C-terminal cysteine knot motif.

Length 143 aa

Molecular Weight 16.4 kDa

Source *Spodoptera frugiperda (Sf9) cell culture*

Accession Number P29279

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 < a href="http://www.cellgs.com/products/podsand8482-empty.html"> PODS® Empty crystals, as the latter do not contain or release cargo protein.

Specifications

Alternative Names Connective Tissue Growth Factor, IGF-binding protein 8, IGFBP8, IGFBP-8, IBP-8, CCN2, HCS24,insulin-like growth factor-binding protein HCS24, hypertrophic chondrocyte-specific protein 24, NOV2, CCN family member, 2MGC102839

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 KNSRPSTSLY KKAGFMGKKC IRTPKISKPI KFELSGCTSM KTYRAKFCGV CTDGRCCTPH RTTLPVEFK CPDGEVMKKN MMFIKTCACH YNCPGDNDIF ESLYYRKMYG DMA

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.