

## PPH323 PODS<sup>®</sup> Human TGF- $\alpha$

### Description

---

The product contains the polyhedrin protein co-crystallized with Human TGF- $\alpha$ . TGF- $\alpha$  is an EGF-related polypeptide growth factor, member of the EGF family, that signals through the EGF receptor. TGF- $\alpha$  is biologically active and seems to play a role in cell to cell interaction. This growth factor is expressed in tumours and transformed cells, but also present in normal tissues during embryogenesis and in adult tissues. Human, mouse and rat TGF- $\alpha$  are cross-species reactive.

<b>Length</b>	95 aa
<b>Molecular Weight</b>	10.7 kDa
<b>Source</b>	<i>Spodoptera frugiperda (Sf9) cell culture</i>
<b>Accession Number</b>	P01135

### Usage Recommendation

---

PODS<sup>®</sup> co-crystals provide a depot of proteins which are steadily secreted. It has been estimated that the biological activity of 50 million PODS<sup>®</sup> co-crystals generates the same peak dose as 3.3  $\mu$ g of standard recombinant protein. However, at 5 days following the start of seeding the PODS<sup>®</sup> co-crystals, there are more than 50% of these peak levels still present in the culture system. Ultimately, the amount of PODS<sup>®</sup> co-crystals that is optimal for a particular experiment should be determined empirically. Based on previous data, we suggest using 50 million PODS<sup>®</sup> co-crystals in place of 3.3  $\mu$ 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<sup>®</sup> growth factors alongside [PODS<sup>®</sup> 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>	TFGA, TGFA, TGFalpha, TGF-alpha, transforming growth factor alpha, transforming growth factor-alpha
<b>Endotoxin Level</b>	<0.06 EU/ml as measured by gel clot LAL assay
<b>Formulation</b>	PODS <sup>®</sup> were lyophilized from a volatile solution
<b>AA Sequence</b>	MADVAGTSNR DFRGREQRLF NSEQYNNNS KNSRPSTSLY KKAGFVVSHF NDCPDSHTQF CFHGTCRFLV QEDKPACVCH SGYVGARCEH ADLLA

### Preparation and Storage

---

<b>Reconstitution</b>	PODS <sup>®</sup> co-crystals may be reconstituted at 200 million co-crystals/ml in water. 20% glucose has a buoyant density closer to PODS <sup>®</sup> co-crystals and can be useful for aliquoting. PODS <sup>®</sup> 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 <sup>®</sup> co-crystals are stable for at least 1 year when dry and 6 months when resuspended.