

PPH2 PODS® Human GDNF

Description

The product contains the polyhedrin protein co-crystallized with Human GDNF. Glial cell-derived neurotrophic factor (GDNF) is a neurotrophic factor that signals through a multicomponent receptor system to activate receptor tyrosine kinase RET signaling. GDNF promotes dopamine uptake, prevents motor neuron apoptosis, and supports the survival and differentiation of neurons.

Length	180 aa
Molecular Weight	40 kDa
Source	<i>Spodoptera frugiperda (Sf9) cell culture</i>
Accession Number	P39905

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

Alternative Names	ATF, HFB1-GDNF, ATF1, ATF-1, astrocyte-derived trophic factor 2, glial cell line derived neurotrophic factor
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 NSEQYNNNS KNSRPSTSLY KKAGLMSPDK QMAVLP RRER NRQAAAANPE NSRGKGRRGQ RGKNRGCVLT AIHLNVTDLG LGYETKEELI FRYCSGSCDA AETTYDKILK NLSRNRRLVS DKVGQACCRP IAFDDDL SFL DDNLVYHILR KHS AKRCGCI

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.