PPH59 PODS® Human CNTF

Description

The product contains the polyhedrin protein co-crystalized with Human CNTF. Ciliary Neurotrophic Factor (CNTF) is a neurotrophic factor that promotes the survival of neuronal cell populations, neurite outgrowth, and neurotransmitter synthesis. CNTF also plays an important protective role during nervous system injury.

Length	244 aa
Molecular Weight	56 kDa
Source	*Spodoptera frugiperda (Sf9) cell culture*
Accession Number	P26441.1

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	Ciliary 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 NSEQYNYNNS KNSRPSTSLY KKAGFAFTEH SPLTPHRRDL CSRSIWLARK IRSDLTALTE SYVKHQGLNK NINLDSADGM PVASTDQWSE LTEAERLQEN LQAYRTFHVL LARLLEDQQV HFTPTEGDFH QAIHTLLLQV AAFAYQIEEL MILLEYKIPR NEADGMPINV GDGGLFEKKL WGLKVLQELS QWTVRSIHDL RFISSHQTGI PARGSHYIAN NKKM

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.