

PPH99

PODS® Human NT-3

Description

The product contains the polyhedrin protein co-crystallized with Human NT-3. Neurotrophin-3 (NT-3) is an important member of the Nerve Growth Factor (NGF) family of proteins. NT-3 promotes the growth, survival, and differentiation of neurons and synapses in the peripheral and central nervous systems. The receptor tyrosine kinase TrkC exclusively binds in high-affinity to NT-3. NT-3 also signals through the receptor tyrosine kinase TrkB, and through the low affinity nerve growth factor receptor (LNGFR).

Length 164 aa

Molecular Weight 37.6 kDa

Source *Spodoptera frugiperda (Sf9) cell culture*

Accession Number P20783

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 Neurotrophin 3, neurotrophin-3, NT3, neutrophic factor 3, NTF3

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 KKAGFYAEHK SHRGEYSVCD
SESLWVTDKS SAIDIRGHQV TVLGEIKTGN SPVKQYFYET RCKEARPVKN GCRGIDDKHW
NSQCKTSQTY VRALTSENNK LVGWRWIRID TSCVCALSRK IGRT

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.