DATA SHEET

PPH325 PODS® Human EPO

Description

The product contains the polyhedrin protein co-crystalized with Human EPO. Erythropoietin is a glycoprotein hormone in the type I cytokine family. EPO is primarily produced in the kidney by a population of fibroblast-like cortical interstitial cells adjacent to the proximal tubules, and in much lower quantity, but functionally significant amounts, by fetal hepatocytes. EPO plays a role in erythropoiesis being responsible for stimulating proliferation and differentiation of erythroid progenitor cells.

Length	211 aa
Molecular Weight	23.6 kDa
Source	*Spodoptera frugiperda (Sf9) cell culture*
Accession Number	CAA26094

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	Erythropoietin, EP, epoetin, MGC138142, MVCD2
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 KKAGFAPPRL ICDSRVLERY LLEAKEAENI TTGCAEHCSL NENITVPDTK VNFYAWKRME VGQQAVEVWQ GLALLSEAVL RGQALLVNSS QPWEPLQLHV DKAVSGLRSL TTLLRALGAQ KEAISPPDAA SAAPLRTITA DTFRKLFRVY SNFLRGKLKL YTGEACRTGD R

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.