

PP303 PODS® GFP

Description

The product contains polyhedrin protein co-crystallized with Green Fluorescent Protein (GFP). GFP is a uniquely versatile biomarker and, encased into PODS® crystals, offers a simple way to visualize and localize PODS® crystals embedded in biomaterials, such as hydrogels and scaffolds, using fluorescence microscopy. PODS® GFP crystals can be excited at 488 nm and optimally detected at 510 nm, compatible with commonly available filter sets.

Length	240
Molecular Weight	32.1 kDa
Source	<i>Spodoptera frugiperda (Sf9) cell culture</i>

Usage Recommendation

PODS® GFP crystals display the same physical properties as other PODS® growth factor products. While PODS® GFP behave in the same way as other PODS® co-crystals, they differ in that they do not contain a cargo protein that elicits effects on cells. Instead of this, they have fluorescent proteins (GFP) embedded. PODS® GFP can be used analogous to PODS® Empty as an inert control, but the primary purpose is to enable visualization and localization of PODS® crystals in cell culture, e.g. in 3D scaffolds, hydrogels and other biomaterials, utilizing fluorescence microscopy.

Specifications

Alternative Names	Bombyx mori cypovirus polyhedrin protein, green fluorescent protein
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 KKAGFMVSKG EELFTGVVPI LVELDGDVNG HKFSVSGEGE GDATYGKLTLL KFICTTGKLP VPWPTLVTTT TYGVQCFSRY PDHMKQHDFD KSAMPEGYVQ ERTIFFKDDG NYKTRAEVKF EGDTLVNRIE LKGIDFKEDG NILGHKLEYN YNSHNVYIMA DKQKNGIKVN FKIRHNIEDG SVQLADHYQQ NTPIGDGPVL LPDNHYLSTQ SALS KDPNEK RDHMVLLFV TAAGITLGMD QLYK*

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.