



Fluodyn™ C-PHYCOCYANIN

From *Spirulina Platensis*, Precipitated PureGrade

“Improve your fluorescence power with our high quality C-Phycocyanin”

Product Information

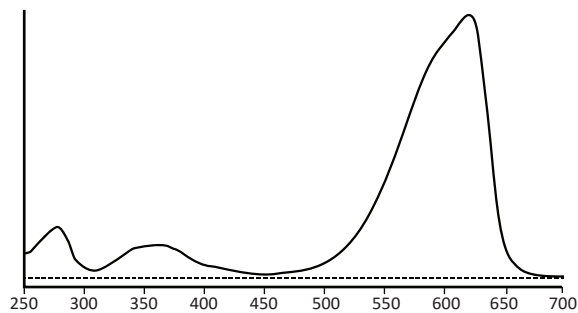
Overview

Fluodyn™ C-Phycocyanin (C-PC) is a light-harvesting phycobiliprotein and one of the major accessory pigment constituent in the photosynthetic machinery of *Spirulina Platensis*. It's composed of two dissimilar α and β protein subunits of approximately 17 000 and 19 500 Daltons, respectively, with one bilin chromophore attached to the α subunit, two to the β subunit and exists as a complex of trimer, hexamer and decamer aggregates. When purified and isolated, the protein become highly fluorescent because the molecule no longer have any nearby acceptors to which to transfer the absorbed energy. C-PC is a natural blue dye, watersoluble, brilliantly coloured and highly fluorescent. The broad absorption band of our protein results in a significant separation of excitation and emission wavelengths, the Stokes shift, so that phycocyanin fluorescence can be easily discriminated from that of other dyes or from endogenous fluorescent molecules in samples.

Fluodyn™ C-Phycocyanin is proposed under precipitated or lyophilized form. Precipitated form is provided with Quick Desalting System ready to use in few minutes.

Spectrum

Fig. 1. Absorption spectra, wavelength in nm.



References

Glazer AN, "Phycobilisomes: structure and dynamics." *Annu Rev Microbiol*, Vol. 36, 1982.

Kronick Mel N. , "The use of phycobiliproteins as fluorescent labels in immunoassay", *Journal of Immunological Methods*, vol. 92, 1986.

Wormick, J. M., Moran, A., "Nature of excited states and relaxation mechanisms in C-phycocyanin." *J Phys Chem B*, vol. 113, 2009.

Absorption maximum	620 nm ±2
Emission maximum	640 nm ±2
Quantum yield	0.81
Purity	$A_{620}/A_{280} > 4$ $A_{650}/A_{620} < 0.3$
Molecular weight	104 KDa
Extinction coefficient	7
Isoelectric point	4.65

Precipitated Form (with QDS*)

Concentration	> 10 mg.ml⁻¹
Formula	Ammonium sulfate 60% Sodium azide and EDTA
Stability	Cf. product packaging
Storage	Store at 4°C away from light. Do not freeze
Origin	France

*Quick Desalting System

Specifications



All Biosciencia® products are manufactured in adherence to the same high standards. The quality and integrity of each batch is not only tested at each step of production and after production but we also strictly monitor their storage conditions to avoid any abnormal degradation. This high level of attention means that you always receive a certified, high quality product. (Each product is registered with a unique batch number and a Certificate of Analysis.)

**For in vitro research use only.
Not for diagnostic or therapeutic procedures.**