

**Product number: CI-APC**  
**Product name: Lyophilized Crosslinked  
 Allophycocyanin**

**General Data**

**Molecular Mass:** 105 kDa

**Solubility:** Water, Aqueous Buffers

**Insoluble:** Acetone, Chloroform, Toluene

**Storage:** Store in absence of light, desiccate and refrigerate – do not freeze

**Description**

Lyophilized CI-APC is a lyophilized phycobiliprotein purified from proprietary spirulina. It includes a  $(\alpha\beta)_3$  subunit structure. No ammonium sulfate or other materials that may interfere with your conjugation process are added to this product.

**Applications**

- Immuno-blotting
- Immuno-staining
- Resonance Energy Transfer (RET) Acceptor
- Flow Cytometry

**Advantages**

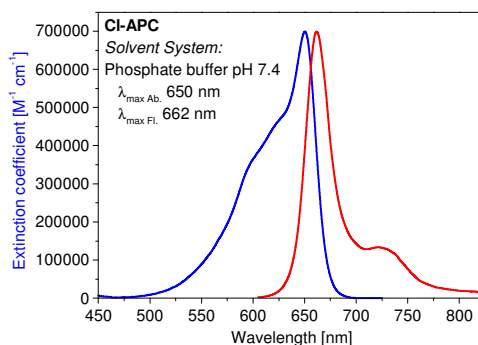
- Perfectly suited for excitation with the 635 nm diode laser
- Sensitive; high extinction coefficients and high quantum yields
- Good aqueous solubility; this label does not alter the solubility of bioconjugates

**Spectral Data**

**Solvent System:** phosphate buffer pH 7.4

Sample	$A_{650}/A_{280}$	$A_{650}/A_{620}$	Crosslinking Rate	Absorption max. [nm]	Extinction Coefficient [ $M^{-1}\cdot cm^{-1}$ ]	Emission* max. [nm]	Quantum Yield [%]
CI-APC	> 4.6	> 1.6	> 1.1	650	700,000	662	35

\* Excitation at 600 nm



Absorption and emission spectrum of CI-APC in phosphate buffer (pH 7.4)

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### Important Notes

#### Reconstitution:

Reconstitute the whole bottle of lyophilized CI-APC (5mg) with your specific volume of conjugation buffer to adjust the concentration for further use.

#### Weight:

One bottle of lyophilized CI-APC contains about 5 mg of CI-APC with added sugar as protective. Please refrain from determining the CI-APC concentration directly by weight. In order to obtain an accurate concentration of CI-APC, it is recommended to use its extinction coefficient and determine the concentration using the following formula:

$$[\text{CI-APC}] = 0.149 \times A_{651}$$

where [CI-APC] is the concentration of CIAPC in mg/ml and  $A_{651}$  is the measured absorbance at 651 nm, provided  $A_{651}$  is in the range of 0.3 to 0.8 cm<sup>-1</sup>.

#### Usage:

No preservative (NaN<sub>3</sub>) is added to the product. Once the protein is reconstituted it should be used as soon as possible.