

**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 the product.

## Applications

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

## Advantages

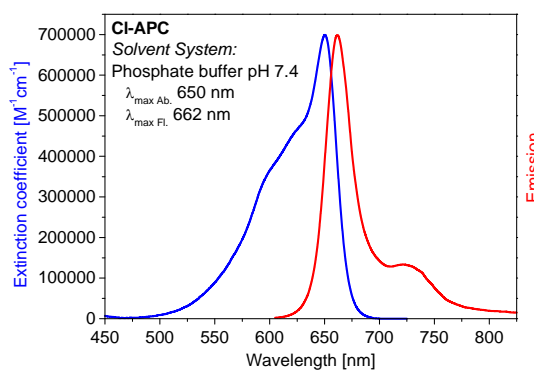
- Perfectly suited for excitation with the 635 nm diode laser
- Sensitive; high extinction coefficients and high quantum yields
- Good aqueous solubility; this label does not alter the solubility of bioconjugates

## 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 [ $M^{-1}cm^{-1}$ ] | Emission <sup>1</sup> max. [nm] |
|--------|-------------------|-------------------|-------------------|----------------------|--|---------------------------------|
| CI-APC | > 4.6             | > 1.6             | > 1.1             | 650                  | 700,000                                    | 662                             |

<sup>1</sup> 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** (5 mg) 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:

$$[\text{CI-APC}] = 0.149 \times A_{650}$$

where **[CI-APC]** is the concentration of **CI-APC** in mg/mL and  $A_{651}$  is the measured absorbance at 651 nm, provided  $A_{650}$  is in the range of 0.3 to 0.8  $\text{cm}^{-1}$ .

**Usage:** No preservative ( $\text{NaN}_3$ ) is added to the product. Once the protein is reconstituted it should be used as soon as possible.