

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

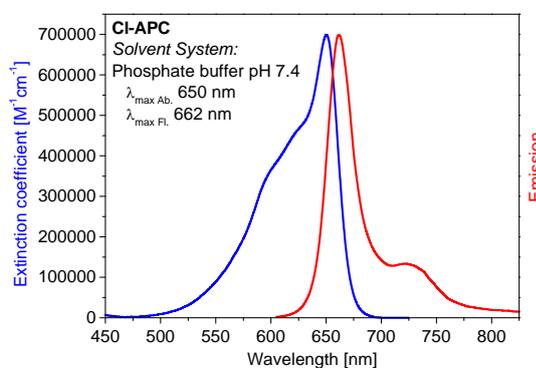
- Perfectly suited for excitation with the 635 nm diode laser
- Sensitive; high extinction coefficients and high quantum yields
- Good aqueous solubility; this label does not alter the solubility of bioconjugates

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 ¹ max. [nm]
CI-APC	> 4.6	> 1.6	> 1.1	650	700,000	662

¹ 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 cm^{-1} .

Usage: No preservative (NaN_3) is added to the product. Once the protein is reconstituted it should be used as soon as possible.