

# Product Information

## Allophycocyanin (APC), Cross-linked Lyophilized Solid, Ammonium-Free

**Catalog Number:** 29092-10mg, 29092-100mg, 29092-1000mg

**Unit Size:** 10 mg, 100 mg, 10 x 100 mg

### Storage and Handling

Store at 4°C and protect from light. Lyophilized solids are stable for at least 12 months from date of receipt when stored as recommended.

Stock solutions may be prepared in water or PBS. Solutions can be stored protected from light at 4°C, for at least one month. For longer-term storage, single-use aliquots can be stored at -20°C for at least 3 months. Aliquots should not be refrozen after thawing.

**Molecular Weight:** ~105,000  
**Color and Form:** Purple solid  
**Solubility:** Water or aqueous buffer  
**Absorption/Emission:** 651/660 nm

### Product Description

Allophycocyanin (APC) is a highly stable and soluble fluorescent phycobiliprotein from red algae. Phycobiliproteins have exceptional fluorescence characteristics due to their biological role as light harvesters in cyanobacteria and certain algae. For this reason, phycobiliproteins like APC are commonly used to generate fluorescent probes through covalent conjugation to proteins and antibodies. Biotium's APC is a stable cross-linked form of the APC alpha and beta subunits. This cross-linked form of APC is functionally and spectrally identical to native APC.

Ammonium sulfate is typically added as a stabilizer in most commercial APC products. However, under conditions commonly used for bioconjugation, ammonium will be converted to ammonia that can interfere with the labeling. Thus, APC with ammonium sulfate needs to undergo buffer exchange to remove the ammonium, which adds an additional tedious step to the conjugation process. For greater convenience, Biotium's APC is lyophilized in a proprietary buffer that is both ammonium-free and protective of the spectral and chemical properties of the fluorescent protein. No buffer exchange is required, simply dissolve the lyophilized APC in your buffer of choice for conjugation.

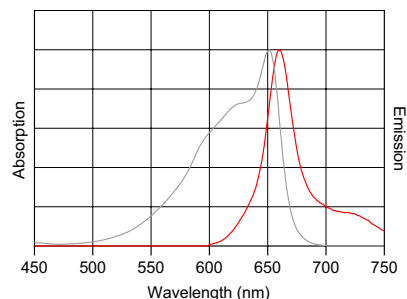


Figure 2. Absorbance (grey) and emission (red) spectra of APC.

### Related Products

Cat. No.	Product
92453, 92306, 92307	Mix-n-Stain™ APC Antibody Labeling Kit
92310, 92311	Mix-n-Stain™ APC-CF@750T Antibody Labeling Kit
92347, 92348	Mix-n-Stain™ APC-CF@790T Antibody Labeling Kit
92452, 92298, 92299	Mix-n-Stain™ R-PE Antibody Labeling Kit
92230... 92463	Mix-n-Stain™ CF@ Dye Antibody Labeling Kits
92208... 92228	CF@ Dye & Biotin SE Protein Labeling Kits
29048	Streptavidin, APC Conjugate
29057	Annexin V, APC Conjugate
29091	R-Phycoerythrin (R-PE), Lyophilized Solid, Ammonium-Free
30071	AccuOrange™ Protein Quantitation Kit
22004	Ultrafiltration vial, 10K MWCO (pack of 5)
22018	Ultrafiltration vial, 3K MWCO (pack of 5)
41024-4L	Water, Ultrapure Molecular Biology Grade

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