

ReadiUse™ Preactivated APC and APC Tandems

Ordering Information

Product Number: See Table---2 Components
(1mg/vial + Buccutite™ MTA 100 ug/vial)

Storage Conditions

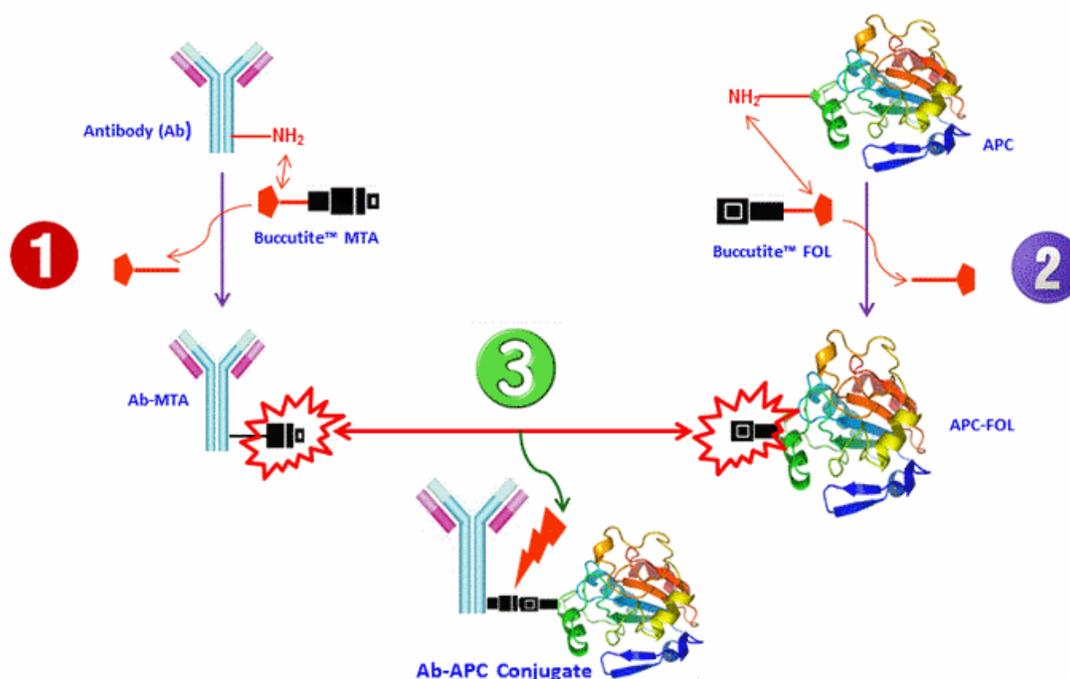
Store desiccated at 4°C and protected from light.
Expiration date is 12 months from the date of receipt.

Introduction:

Allophycocyanin (APC) is a phycobiliprotein isolated from *Spirulina* sp., a blue-green alga. Like other phycobiliproteins, APC is fluorescent, with an extremely high absorptivity and high quantum efficiency. ReadiUse™ Preactivated APC or APC-ifluor Tandems have been pre-activated with our proprietary linker Buccutite™ FOL, which readily reacts with Buccutite™ MTA-containing molecules under extremely mild neutral conditions. Our Buccutite™ bioconjugation system is much more robust and easier to use and enables faster and quantitative conjugation of biomolecules with higher efficiencies and yields.

Conjugation Principle

APC was premodified with our Buccutite™ FOL as shown in Step 2 (provided). Your antibody (or other proteins) is modified with our Buccutite™ MTA to give MTA-modified protein as shown in Step 1. The MTA-modified protein readily reacts with FOL-modified APC (provided) to give the desired APC-antibody conjugate as shown in Step 3.



Conjugation Protocols:

- Pre-activate antibody with Buccutite™ MTA
 - Reconstitute Buccutite™ MTA in DMSO at ~10 mg/mL.
Note: Please store unused Buccutite™ MTA at -20°C and could be used up to two freeze and thaw cycles.
 - Prepare target antibody (Ab) in pH = 8.5~9.0 buffer at concentration above 1mg/ml.

- 1.3 Add Buccutite™ MTA to Ab solution at the ratio of 8~10 µg Buccutite™ MTA /100 µg Ab.
 - 1.4 Mix well and react at RT for 60 minutes, rotating during the reaction.
 - 1.5 Purify the reaction mixture with desalting column to remove unreacted Buccutite™ MTA and exchange buffer to PBS or buffer of your choice.
 - 1.6 Collect the Buccutite™ MTA-activated Ab, and estimate the concentration by 70% yield of the original starting amount.
2. Conjugate with pre-activated APC or APC tandems
 - 2.1 Reconstitute pre-activated APC or APC tandems in 100 µL ddH₂O to 10mg/mL.
Note: Reconstituted pre-activated APC or APC tandems could be stored at 4 °C for one month, kept from light.
 - 2.2 Add APC or APC tandems directly to MTA-activated target Ab solution (from 1.5) at the ratio of 130 µg APC or APC tandems /100µg MTA-activated Ab.
 - 2.3 Rotate the mixture for 1 hour at room temperature
 - 2.4 The Ab/APC or APC tandems conjugates are now ready to use.
Note 1(Optional): Ab/APC or APC tandems conjugates could be further purified through size exclusion chromatography to get best performance.
Note 2: The antibody conjugate should be stored at > 0.5 mg/mL in the presence of a carrier protein (e.g., 0.1% bovine serum albumin) and 0.02-0.05% sodium azide.
Note 3: The Ab/APC or APC tandems conjugates solution is recommended to be stored at 4 °C and kept from light.

Product Ordering Information

Cat. #	Product Name	Unit Size
2561	ReadiUse™ Preactivated APC	1 mg
2570	ReadiUse™ Preactivated APC-iFluor™ 700 Tandem	1 mg
2571	ReadiUse™ Preactivated APC-iFluor™ 750 Tandem	1 mg
2586	ReadiUse™ Preactivated APC-Cy5.5 Tandem	1 mg
2587	ReadiUse™ Preactivated APC-Cy7 Tandem	1 mg