

ReadiUse™ Preactivated PE, PE-iFluors and PE-iFluor Tandems

Ordering Information

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

Storage Conditions

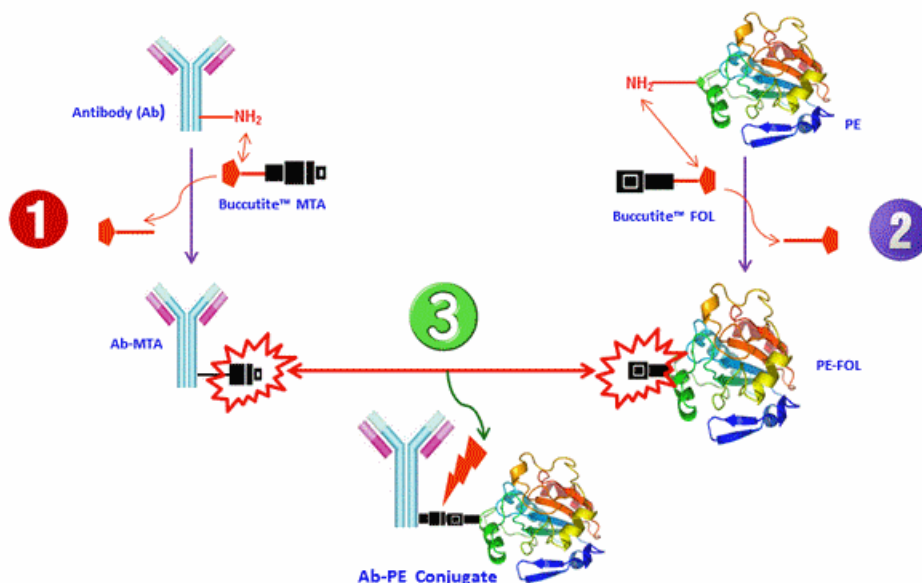
Store desiccated at 4°C and protected from light.
Expiration date is 12 months from the date of receipt.

Introduction:

R-Phycoerythrin (PE) is isolated from red algae. Its primary absorption peak is at 565 nm with secondary peaks at 496 and 545 nm. ReadUse™ Preactivated PE-iFluor dyes and 647 PE-iFluor Tandem dyes has 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

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



Conjugation Protocols:

1. Pre-activate Antibody with Buccutite™ MTA
 - 1.1 Reconstitute Buccutite™ MTA in DMSO at ~10 mg/mL.
Note: Please store unused MTA at -20°C and could be used up to two freeze and thaw cycles.
 - 1.2 Prepare target antibody (Ab) in pH = 8.5~9.0 buffer at concentration above 1 mg/ml.
 - 1.3 Add the MTA to Ab solution at the ratio of 8~10 µg 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 MTA and exchange buffer to PBS or buffer of your choice.

- 1.6 Collect the MTA-activated Ab, and estimate the concentration by 70% yield of the original starting amount.
2. Conjugate with Pre-activated PE, PE-iFluors, or PE-iFluor Tandems
- 2.1 Reconstitute pre-activated PE, PE, PE-iFluors, or PE-iFluor Tandems in 100 μ L ddH₂O to 10mg/mL.
Note: Reconstituted pre-activated PE, PE-iFluors, or PE-iFluor Tandems are not stable and could be stored at 4 °C for one month, please kept it from light.
- 2.2 Add pre-activated PE, PE-iFluors, or PE-iFluor Tandems directly to MTA-activated target Ab solution (from 1.5) at the ratio of 300 μ g PE-iFluor647/100 μ g MTA-activated Ab.
- 2.3 Rotate the mixture for 1~2 hours at room temperature
- 2.4 The Ab/ PE, PE-iFluors, or PE-iFluor Tandems conjugates are now ready to use.
Optional: Ab/ PE, PE-iFluors, or PE-iFluor Tandems conjugate could be further purified through size exclusion chromatography to get best performance.
Note1: 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.
Note2: The Ab/ PE, PE-iFluors, or PE-iFluor Tandems conjugate solution could be stored at 4 °C for two months and kept from light.

Product Ordering Information

Cat. #	Product Name	Unit Size
2560	ReadiUse™ Preactivated PE	1 mg/Vial + Buccutite™ MTA 100 μ g/Vial
2577	ReadiUse™ Preactivated PE-iFluor™ 647 Tandem	1 mg/Vial + Buccutite™ MTA 100 μ g/Vial
2578	ReadiUse™ Preactivated PE-iFluor™ 750 Tandem	1 mg/Vial + Buccutite™ MTA 100 μ g/Vial
2580	ReadiUse™ Preactivated PE-Cy5 Tandem	1 mg/Vial + Buccutite™ MTA 100 μ g/Vial
2581	ReadiUse™ Preactivated PE-Cy5.5 Tandem	1 mg/Vial + Buccutite™ MTA 100 μ g/Vial
2582	ReadiUse™ Preactivated PE-Cy7 Tandem	1 mg/Vial + Buccutite™ MTA 100 μ g/Vial
2583	ReadiUse™ Preactivated PE-Texas Red Tandem	1 mg/Vial + Buccutite™ MTA 100 μ g/Vial