SETA BioMedicals
Fluorescent Tools for BioMedical Applications

http://www.setabiomedicals.com
e-mail: info@setabiomedicals.com

Product number: R-PE
Product name: Lyophilized R-Phycoerythrin

General Data

Molecular Mass: 240 kDa

Solubility: Water, Aqueous Buffers

Insoluble: Acetone, Chloroform, Toluene

Storage: Store in absence of light, desiccate and refrigerate. Do not freeze.

Description

Lyophilized **R-PE** is a lyophilized phycobiliprotein from water with sugar as additive. No ammonium sulfate or other materials that may interfere with your conjugation process are added to this product. **R-PE** consists of α, β and γ subunits and is present as $(\alpha\beta)_6\gamma$.

Applications

- Immunoblotting
- Immunostaining
- Resonance Energy Transfer (RET) Acceptor
- Flow Cytometry

Advantages

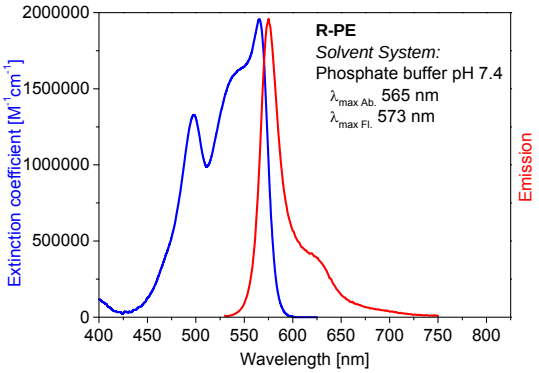
- Perfectly suited for excitation with the 488-nm or 532-nm diode lasers
- Sensitive; high extinction coefficient and high quantum yield
- Good aqueous solubility; this label does not alter the solubility of bioconjugates

Spectral Data

Solvent System: phosphate buffer pH 7.4

Sample	A_{565}/A_{280}	A_{565}/A_{498}	A_{620}/A_{565}	Absorption max. [nm]	Extinction Coefficient [$M^{-1}cm^{-1}$]	Emission[1] max. [nm]
R-PE	> 5.4	> 1.5	> 0.005	565, 539, 498	1,960,000 at 565 nm	573

[1] Excitation at 525 nm



Absorption and emission spectrum of **R-PE** in phosphate buffer (pH 7.4)

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Important Notes

Reconstitution: Reconstitute the whole bottle of lyophilized **R-PE** (5 mg) with your specific volume of conjugation buffer to adjust the concentration for further use.

Weight: One bottle of lyophilized **R-PE** contains about 5 mg of **R-PE** with added sugar as protective. Please refrain from determining the **R-PE** concentration directly by weight. In order to obtain an accurate concentration of **R-PE** in mg/mL, use the extinction coefficient and determine the concentration using the following formula:

$$[\textbf{R-PE}] = 0.122 \times A_{565}$$

where **[R-PE]** is the concentration of **R-PE** in mg/mД and A_{565} is the absorbance at 565 nm,
provided A_{565} is in the range between 0.3 to 0.8

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