

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

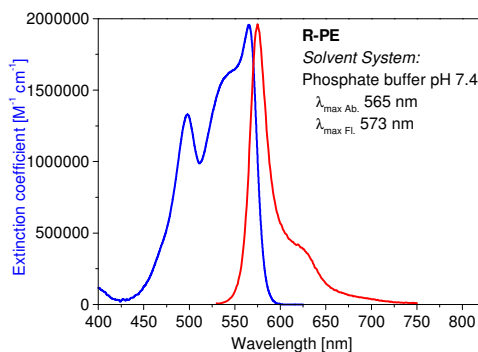
- Perfectly suited for excitation with the 488nm or 532nm diode lasers
- Sensitive; high extinction coefficients and high quantum yields
- Good aqueous solubility; this label does not alter the solubility of bioconjugates

Spectral Data

Solvent System: phosphate buffer pH 7.4

Sample	A_{565}/A_{280}	A_{565}/A_{498}	A_{620}/A_{565}	Absorption max. [nm]	Extinction Coefficient [$M^{-1}\cdot cm^{-1}$]	Emission* max. [nm]	Quantum Yield [%]
R-PE	> 5.4	> 1.5	> 0.005	565, 539, 498	1,960,000 (565nm)	573	83

* Excitation at 525 nm



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

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Reconstitution:

Reconstitute the whole bottle of lyophilized R-PE (5mg) 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:

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

where [R-PE] is the concentration of R-PE in mg/ml 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 (NaN₃) is added to the product. Once the protein is reconstituted it should be used as soon as possible.