

R-Phycoerythrin (R-PE), Red Algae

CATALOG #:	6005-1 6005-5	1 mg 5 mg
SOURCE:	R-PE is a phycobiliprotein purified from Febico's proprietary red algae. It is made up of (αβ) 6γ subunit structure.	
PURITY:	A566/A280 ≥ 5.5 A566/A498 ≤ 1.5	
IMPURITY:	A620/A566 ≤ 0.005	
MOL. WEIGHT:	~ 240 kDa	
ABSORPTION MAXIMUM:	566 nm	
EMISSION MAXIMUM:	575 nm	
EXTINCTION COEFFICIENT:	1.96 X 10 ⁶ cm ⁻¹ M ⁻¹	
QUANTUM YIELD:	0.84	
FORM:	Suspension	

FORMULATION: R-PE is supplied in 100 mM Potassium Phosphate buffer, pH 7.0 with 60% Saturated (NH₄)₂SO₄, 1 mM EDTA and 1 mM Sodium Azide. The protein is very stable and can be stored in this buffer for many years.

STORAGE CONDITIONS: Store R-PE in dark at ~ 2-8 °C. **Do not freeze.**

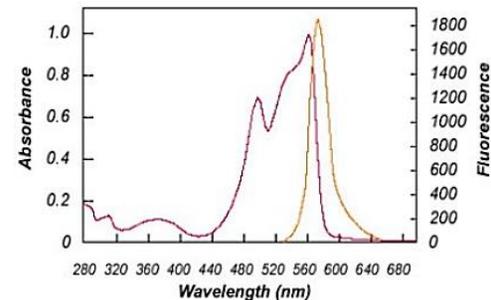
USAGE: Before use, centrifuge the R-PE suspension at 10,000 g for 10 min at 4 °C. Discard the supernatant and resuspend the pellet (R-PE) into the desired buffer. R-PE is stored in a salt solution and it must be extensively dialyzed using BioVision's Dialyzer tubes or desalted using columns (BioVision Cat # 6564-25) prior to use, to remove any remaining ammonium sulphate.

APPLICATIONS/ADVANTAGES:

- Can be cross linked or conjugated to other molecules to make fluorescent probes.
- Useful as a fluorescence-based indicator for the presence of cyanobacteria.
- Can be used for a variety of immunofluorescence applications.
- A useful fluorophore in various electrophoretic procedures.

DESCRIPTION: R-phycoerythrin (R-PE) is an intensely bright phycobiliprotein isolated from red algae that exhibits extremely bright red-orange fluorescence with high quantum yields. The broad excitation spectrum provides the advantage for multi-color immunofluorescent staining or cell sorting. R-PE consists of a, b and g subunits and is present as (ab) 6g. R-PE and the closely related BPE are the most intensely fluorescent phycobiliproteins having orange fluorescence. R-PE is a large molecule used for fluorescence-based detection, primarily in flow cytometry, microarray assays, ELISAs, and other applications that require high sensitivity but not photostability. In practical applications, the sensitivity of R-PE conjugates is usually 5 to 10 times greater than those of the corresponding fluorescein conjugates.

EXCITATION AND EMISSION SPECTRA:



RELATED PRODUCTS:

- Fluorescent Protein Set (**K816-6-100**)
- Blue Fluorescent Protein (BFP) (**4994-100, -1000, -5000**)
- Cyan Fluorescent Protein (**4996-100, -1000, -5000**)
- Recombinant Red Fluorescent Protein (dsRed) (**4997-100, -1000**)
- Enhanced Green Fluorescent Protein (EGFP) (**4999-100, -1000, -5000**)
- Yellow Fluorescent Protein (**4998-100, -1000, -5000**)

FOR RESEARCH USE ONLY! Not to be used in humans.