

PE [R-Phycoerythrin]

Cat #: B-CHM303

Size: 1mg / 5mg / 10mg / 50mg / 100mg / 500mg / 1g

Storage: Store at 4°C protected from light.

Product Introduction

Phycoerythrin is isolated and purified from red algae, capable of emitting strong fluorescence, excellent absorbance, and high quantum yield. It has a wide excitation and emission range in the visible spectral region. By using conventional labeling methods, it can be easily combined with biotin, avidin, and various monoclonal antibodies to form fluorescent probes, which are used for antibody fluorescence labeling such as fluorescence microscopy, fluorescence immunoassay, dual or multicolor fluorescence analysis, cancer cell surface antigen detection, flow cytometry fluorescence measurement, and diagnostic and bioengineering technologies such as in vivo imaging applications.

Product Properties

Form: Freeze dried powder

Molecular weight and subunit : The molecular weight of intact PE has been found to be about 240,000 daltons, PE has three types of subunits: alpha (20,000 daltons), beta (20,000 daltons) and gamma (30,000 daltons). The molecular weight of intact PE has been found to be about 240,000 daltons. The alpha subunit of PE contains only the phycoerythrobilin (PEB) chromophore, while beta and gamma subunits contain both PEB and phycourobilin (PUB).

Spectral properties: Ex / Em = 450-500 nm / 575 ± 5 nm

Purity: Amax/A280 >5.6

Shipping and Storage

Storage conditions: Store at 4°C protected from light.

Stability: Stable for at least 12 months under proper storage conditions.

Product Advantages

1. Freeze dried powder, which can instantly dissolve in water and does not contain ammonium sulfate that affects product activation, making it easy to use;
2. Having a wide absorption spectrum within a wide pH range makes it easier to choose an appropriate excitation wavelength, resulting in efficient fluorescence emission with specific fluorescence emission peaks during excitation;
3. High absorbance and fluorescence quantum yield, strong and stable fluorescence, and high sensitivity;
4. Having a small fluorescence background, difficult to quench, and a longer fluorescence preservation period;
5. Easy to cross-link and bind with other molecules, with less non-specific adsorption;
6. Extracted from pure natural marine organisms, without any toxic or side effects, and without radioactivity, it is very safe to use. It is easy to bind with substances such as antibodies, biotins, affinins, and immune proteins to produce fluorescent probes.

