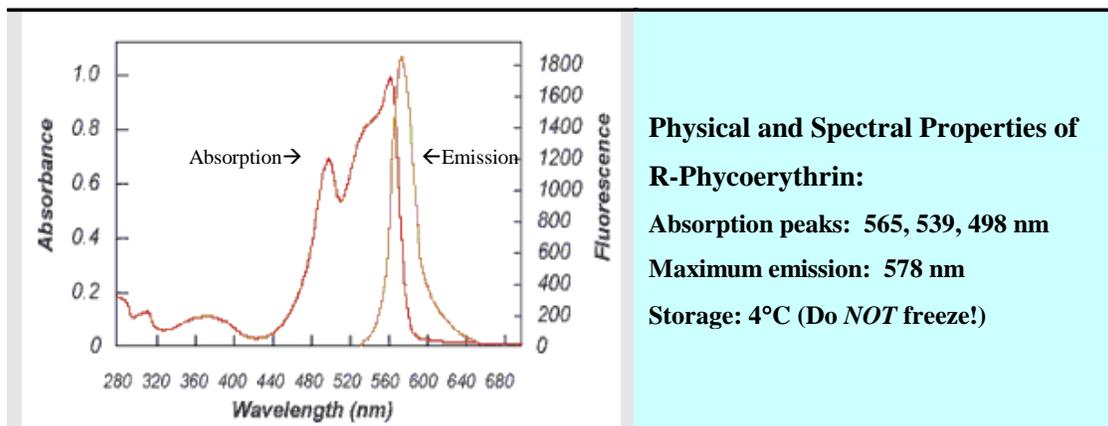


ANASPEC

SMCC Activated R-Phycoerythrin



Catalog Number: AS-72110

Size: 1 mg

Concentration: 1mg/ml

Description: R-PE (R-Phycoerythrin),¹ a fluorescent protein, belongs to the phycobiliprotein family of highly soluble and fluorescent proteins derived from cyanobacteria and eukaryotic algae. R-PE is made of α , β and γ subunits and is present as $(\alpha\beta)_6\gamma$. The polymer is very stable since it does not dissociate even when diluted to 10^{-12} M.

The protein has broad absorption bands with peaks at 565 nm ($\epsilon_M = 1.96 \times 10^6 \text{ M}^{-1}\text{cm}^{-1}$), 498 ($\epsilon_M = 1.53 \times 10^6 \text{ M}^{-1}\text{cm}^{-1}$), and 539 nm ($\epsilon_M = 1.62 \times 10^6 \text{ M}^{-1}\text{cm}^{-1}$); consequently, it can be excited with versatile excitation sources. The broad excitation spectrum also provides the advantage for multi-color immunofluorescent staining or cell sorting. For example, a sample labeled with fluorescein and R-PE can be excited with a single light source at 488 nm but detected at 520 nm and 575 nm, respectively. R-PE and the closely related B-PE are the most intensely fluorescent phycobiliproteins with orange fluorescence. They are significantly brighter and more photostable than conventional organic fluorophores.²

SMCC Activated R-PE, with a maleimide group introduced, allows it to be conveniently conjugated to the thiol groups of proteins, without the need for additional activation.

SMCC Activated R-PE is supplied in MES buffer, pH 6.0 with EDTA and preservative. Store at 4°C and keep from light.

References

1. Glazer, AN. and L. Stryer, *Methods Enzymol.* **184**, 188 (1990).
2. Oi, VT. et al. *J. Cell Biol.* **93**, 981 (1982).