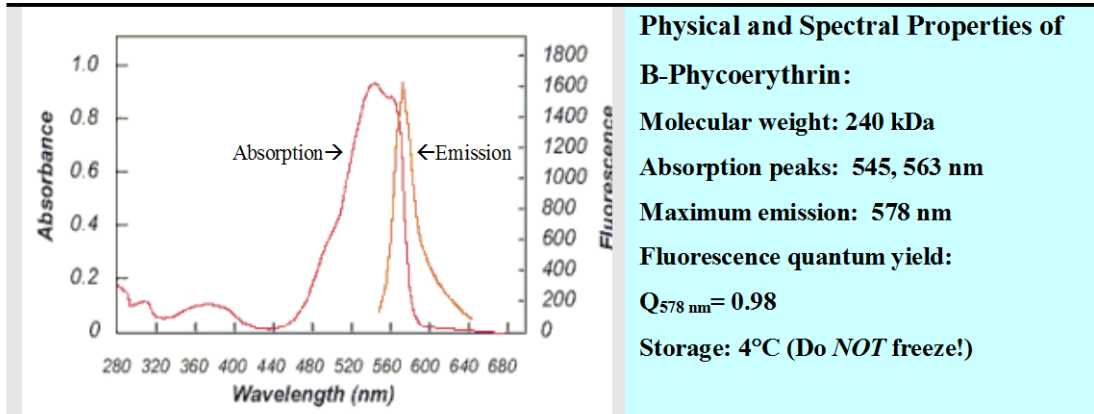


B-Phycoerythrin



Catalog Number: AS-82001

Size: 1 mg

Description: B-PE (B-Phycoerythrin),¹ a fluorescent protein, belongs to the phycobiliprotein family of highly soluble and fluorescent proteins derived from cyanobacteria and eukaryotic algae. B-PE is made of α , β and γ subunits and is present as $(\alpha\beta)_6\gamma$. The absorption bands peak at 545 nm ($\epsilon_M = 2.41 \times 10^6 \text{ M}^{-1}\text{cm}^{-1}$) and 563 nm ($\epsilon_M = 2.33 \times 10^6 \text{ M}^{-1}\text{cm}^{-1}$).^{1,2} B-PE and the closely related R-PE are the most intensely fluorescent phycobiliproteins. They are significantly brighter and more photostable than conventional organic fluorophores.³ B-PE labeled streptavidins, primary and secondary antibodies have been widely used in applications such as flow cytometry and multi-color immunofluorescent staining.

B-PE is supplied in sodium phosphate buffer, pH 7.0 with ammonium sulfate. The protein is very stable and can be stored for years in this buffer.

Before use, centrifuge the B-PE suspension at 10,000g for 10 min at 4°C. Discard the supernatant. Resuspend the pellet (B-PE) into the desired buffer. Desalt the sample using either Sephadex G-25 or dialysis. Store B-PE at 4°C and keep away from light.

References

1. Glazer, AN. and CS. Hixson, *J. Biol. Chem.* **252**, 32 (1977).
2. Lundell, DJ. et al. *J. Biol. Chem.* **259**, 5472 (1984).
3. Oi, VT. et al. *J. Cell Biol.* **93**, 981 (1982).