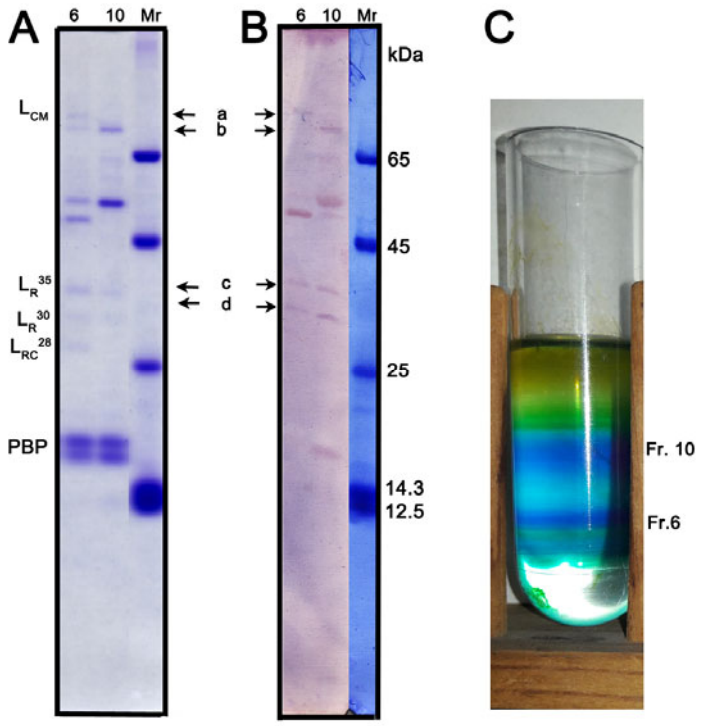

Fig. 4S. SDS-PAGE and immunoblot analysis of fractions 6 and 10 of the sucrose centrifugation gradient. A. Coomassie blue staining of the gel gradient (10-20% acrylamide). 6 and 10 indicate the fractions derived from the sucrose gradient of cells grown in far red light. The components of the hemidiscoidal PBS (fr 6) are shown at the left side of the gel. L_{CM}, L_R^{35}, L_R^{30}, L_{RC} and PBP indicate core membrane linker, PC-rod linker of apparent mass of 35 kDa, PC-rod linker of apparent mass of 30 kDa, rod core linker and phycobiliproteins, respectively. B. Immunoblot of fractions 6 and 10 probed with rod linker, (30 kDa) antibody. The molecular weight of the markers (Mr) are in kDa. Arrows with letters a to d indicate the core membrane linker (L_{CM}) for the hemidiscoidal-PBS (a), and the core-PBS (b) the rod linkers L_R^{35} (c) and L_R^{30} (d). detected by the antibody C. Sucrose centrifugation gradient showing the separation of PBP complexes. Fr 6 hemidiscoidal PBS and Fr. 10 core-PBS described in the text and in A, B of this suppl. Fig. and in Figs. 2 and 3.

The antibodies were raised in rabbit against two different PBS proteins using the L_{CM} and the rod linker of approximately 30 kDa of *A. maxima.* We presented the identification of the of L_{CM} in Fig 3C because we had the control of the immunoblot with PBS of *A. maxima,* but now we have added Supp. Fig 4. with a clearer immunoblot for the L_{CM} of the hemidiscoidal PBS and the core PBS. In addition, now it can be appreciated that the relation of this linker with the PBPs is higher in the hemidiscoidal PBS compared with the core-PBS (Coomassie blue stained). The core-membrane linker, L_{CM} is a multidomain protein responsible for the assembly of the core of the PBS and it's attachment to the membrane. The L_{CM}, is the final energy acceptor of the PBS and is formed by a PBP domain with a cysteine residue where the phycocyanobilin is covalently attached. The presence of the chromophore is responsible for the fluorescence in the presence of Zn^{2+} ions when excited with UV light. The core membrane linkers retain the chromophore in SDS-PAGE when attached to the cysteine despite that the protein is unfolded. The rod linker domain, repetitive domains called REP, this domain is homologous to the rod linkers and are in number from two to four.