## **Exciton Band Structure in Bacterial**

## **Peripheral Light-Harvesting Complexes**

## (Supporting Information)

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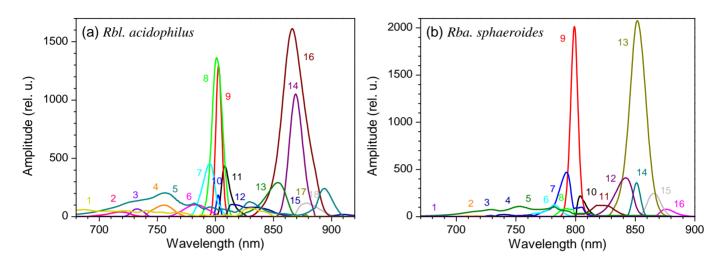
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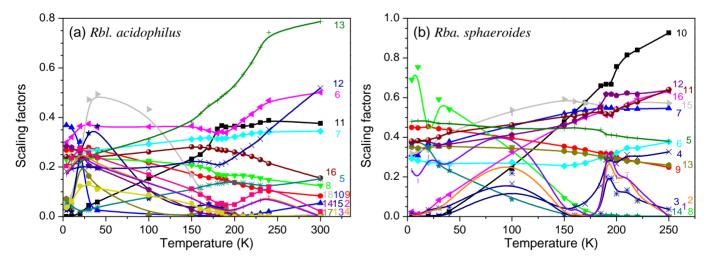
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Explicit content of the self-modeling curve resolution procedure applied to the data array of the LH2 absorption spectra of *Rba. shpaeroides* and *Rbl. acidophilus* bacterial species measured at 16 and 18 temperatures, respectively, in the range of 4 to 300 K is shown in Figs. S1 and S2.



**Fig. S1.** Graphical representation of the **S** matrix columns. (a) p (p = 18) "pure" spectral components (m = 641 wavelength points) of LH2 absorption spectrum for *Rbl. acidophila*. (b) p (p = 16) "pure" spectral components (m = 641 wavelength points) of LH2 absorption spectrum for *Rba. Sphaeroides*.



**Fig. S2.** Graphical presentation of the **D** matrix columns. (a) Temperature dependence (n = 18 points) of the weighting vectors of p (p = 18) "pure" spectral components of LH2 absorption spectrum for *Rbl. Acidophilus*. (b) Temperature dependence (n = 16 points) of the weighting vectors of p (p = 16) "pure" spectral components of LH2 absorption spectrum for *Rba. shpaeroides*. Different colors correspond to various spectral components shown in Fig. S1.