Conformational switching explains the intrinsic multifunctionality of plant light-harvesting complexes

Kruger, Tjaart P. J.; Wientjes, Emilie; Croce, Roberta; van Grondelle, Rienk

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Supporting Information

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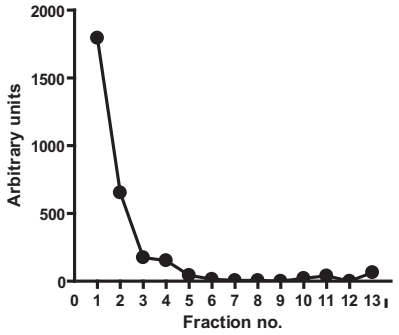

Fig. S1. Liposomes sediment to low-density sucrose fractions. Liposomes (1 mM total lipid) consisting of 10% mol 1,2-dioleoyl-sn-glycero-3-phosphoethanolamine-N-(7-nitro-2-1,3-benzoxadiazol-4-yl were generated, transferred to a three-step sucrose gradient buffered to pH 5, and centrifuged at 200,000 × *g*. Gradient fractions were collected, and the liposome content of each fraction was determined by fluorescence emission at 530 nm by using an FL 600 microplate fluorescence reader.

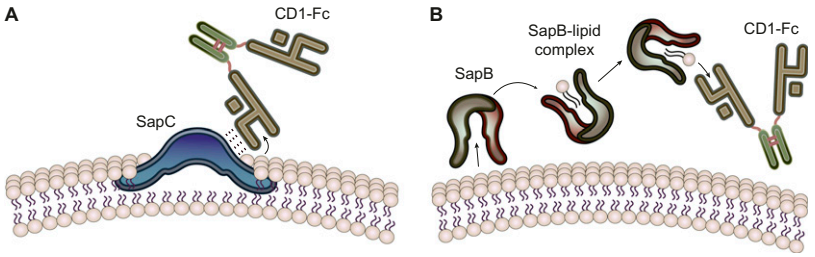

Fig. S2. Schematic model of SapC- and SapB-mediated CD1 lipid loading. (*A*) Membrane-embedded SapC disrupts the ordered lipid lattice of membrane bilayers and orients CD1-Fc toward accessible lipids bordering the site of perturbation via protein–protein interactions. (*B*) SapB extracts target lipids from membrane bilayers and forms soluble SapB–lipid intermediates. SapB–lipid intermediates load CD1-Fc molecules in the fluid phase, away from the lipid bilayer.