

Supplementary Material for the manuscript

Lipid Composition Affects the Efficiency in the Functional Reconstitution of the Cytochrome *c* Oxidase

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S1. Proteoliposome size distributions

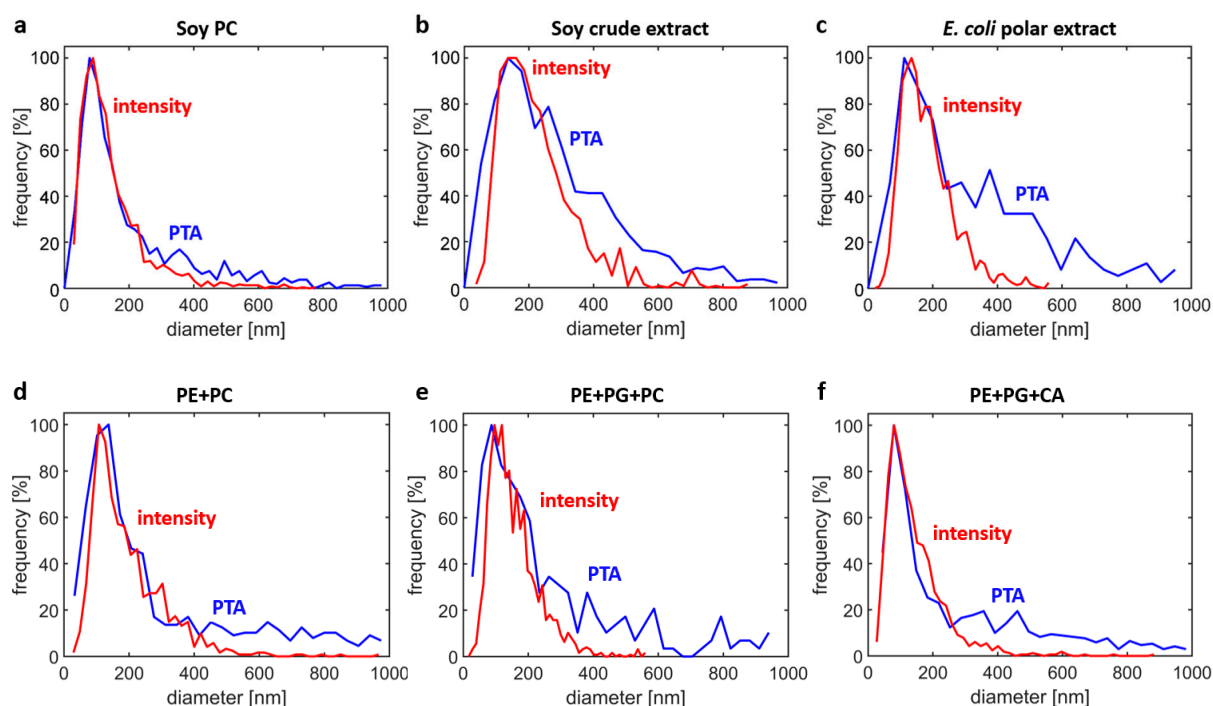


Figure S1. Size distributions of CcO-containing proteoliposomes which have been formed using either (a) the PC fraction of soybean-derived lipids, (b) a crude lipid fraction of soybean-derived lipid, (c) the polar extract of *E. coli* or (d-f) the “PE+PC”, “PE+PG+PC”, and “PE+PG+CA” mixture (as detailed in Table 1 of the main manuscript). Shown are the size distributions obtained using particle tracking analysis (PTA) of suspended proteoliposomes (blue traces) as well as using the fluorescence intensity of surface-tethered proteoliposomes (red traces; see Material and Methods section for details on these methods).

S2. Proton turnover rate distributions for proteoliposomes made from a crude extract of soybean lipids

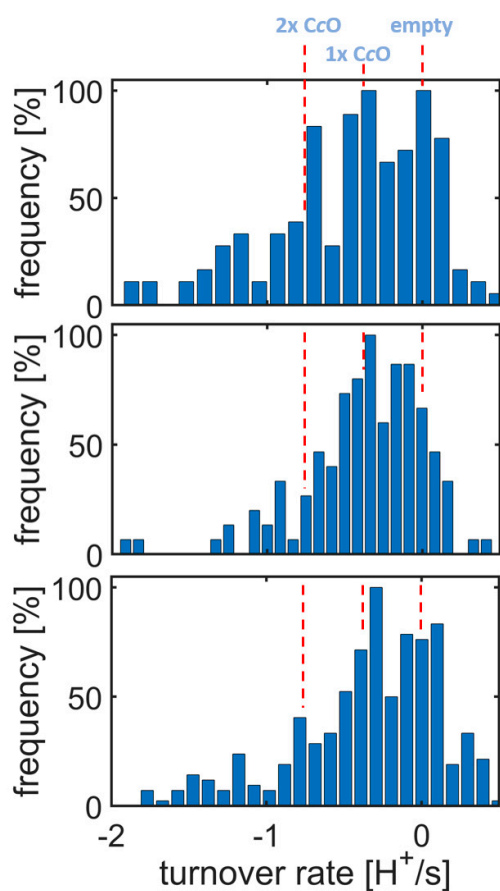


Figure S2. Distributions of the total proton turnover rate extracted from repetitions of the single-liposome assay applied to CcO-containing proteoliposomes (made from a crude extract of soybean lipids). These repetitions have been done on 3 independent measurement days using freshly prepared proteoliposomes. The red dashed lines indicate the position of peaks that replicate well in the repetitions.