**Functional specificity between phosphatidylglycerophosphate synthase and cardiolipin synthase revealed by the isolation and characterization of a cardiolipin synthase CrCLS1 in *Chlamydomonas reinhardtii***

Chun-Hsien Hung1,Koichi Kobayashi2, Hajime Wada2,3, Yuki Nakamura1,4\*

1Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan.

2 Department of Life Sciences, Graduate School of Arts and Sciences, The University of Tokyo, Komaba 3-8-1, Meguro-ku, Tokyo 153-8902, Japan.

3 CREST , JST, 4-8-1 Honcho, Kawaguchi, Saitama 332-0012, Japan.

4PRESTO, JST, 4-8-1 Honcho, Kawaguchi, Saitama 332-0012, Japan.

\*Corresponding: Yuki Nakamura, Institute of Plant and Microbial Biology, Academia Sinica, 128 sec.2 Academia Rd., Nankang, Taipei 11529, Taiwan. [nakamura@gate.sinica.edu.tw](mailto:nakamura@gate.sinica.edu.tw)

**Supplementary Tables**

|  |  |  |
| --- | --- | --- |
| **Supplemental Table 1 List of strains used in this study.** | | |
| **Strain** | **Genotype** | **Source** |
| BY4741 | *MATα, his3*Δ*0 leu2*Δ*0 met15*Δ*0 ura3*Δ*0* | - |
| ∆*crd1* | *gep4*∆::*KANMX,* BY4741 | Thermo scientific |
| CHY035 | pCH078, BY4741 | (Hung et al. 2015b) |
| CHY135 | pCH178, *crd1∆::KANMX*, BY4741 | This work |
| CHY136 | pCH078, *crd1∆::KANMX*, BY4741 | This work |
| *Synechocystis* sp. PCC 6803 | Wild type | - |
| *pgsA* | *pgsA*::KmR | (Hagio et al. 2000) |
| CHS004 | ∆*pgsA* *slr2031*∆::*CrPGP1* | (Hung et al. 2015a) |
| CHS005 | ∆*pgsA* *slr2031*∆::*CrPGP2* | (Hung et al. 2015a) |
| CHS006 | ∆*pgsA* *slr2031*∆::*CrCLS1* | This work |
| CC-503 | cw92 mt+ | Chlamydomonas Resource Center |