

SUPPORTING INFORMATION

Table S1. List of yeast strains used in this study.

Strain and Ref.	Genotype	Source
Wild type (BY4742) (1)	<i>MATα</i> ; <i>his3Δ1</i> , <i>leu2Δ0</i> , <i>lys2Δ0</i> , <i>ura3Δ0</i> carrying pRS316-CYC1p (<i>URA3 CEN6 CIDEA</i>)	
<i>dgk1Δ</i> (2)	<i>dgk1::KanMX</i> , <i>his3Δ1</i> , <i>leu2Δ0</i> , <i>lys3Δ0</i> , <i>ura3Δ0</i> carrying pRS316-CYC1p (<i>URA3 CEN6 CIDEA</i>)	M.L. Gaspar
<i>dgk1Δpah1Δ</i> (2, 3)	<i>dgk1::KanMX pah1Δ::LEU2</i> , <i>his3Δ1</i> , <i>leu2Δ0</i> , <i>lys3Δ0</i> , <i>ura3Δ00</i> carrying pRS316-CYC1p (<i>URA3 CEN6 CIDEA</i>)	M.L. Gaspar
<i>cho2Δ</i> (4)	<i>cho2::KanMX his3Δ1</i> , <i>leu2Δ0</i> , <i>lys3Δ0</i> , <i>ura3Δ0</i> carrying pRS316-CYC1p (<i>URA3 CEN6 CIDEA</i>)	S.A. Henry
<i>pld1Δ</i> (5)	<i>pld1::HIS3</i> , <i>his3Δ1</i> , <i>leu2Δ0</i> , <i>ura3Δ0</i> carrying pRS316-CYC1p (<i>URA3 CEN6 CIDEA</i>)	S.A. Henry
<i>dga1Δlro1Δare1Δare2Δ</i> (6-8)	<i>dga1::KanMX</i> , <i>lro1::KanMX</i> , <i>are1::KanMX</i> , <i>are2::KanMX</i> , <i>his3Δ1</i> , <i>leu2Δ0</i> , <i>lys2Δ0</i> , <i>ura3Δ0</i> carrying pRS316-CYC1p (<i>URA3 CEN6 CIDEA</i>)	S.D. Kohlwein
<i>tgl3Δtgl4Δtgl5Δ</i> (9, 10)	<i>tgl3::KanMX</i> , <i>tgl4::KanMX</i> , <i>tgl5::KanMX</i> , <i>his3Δ1</i> , <i>leu2Δ0</i> , <i>lys2Δ0</i> , <i>ura3Δ0</i> carrying pRS316-CYC1p (<i>URA3 CEN6 CIDEA</i>)	S.D. Kohlwein
<i>PAH1-7A</i> (11, 12)	<i>MATα</i> ; <i>his3Δ1</i> , <i>leu2Δ0</i> , <i>lys2Δ0</i> , <i>ura3Δ0</i> carrying pRS415- <i>PAH1</i> ^{S110A/S114A/S168A/S602A/T723A/S744A/S748A} (<i>LEU2 CEN6 PAH1-7A</i>) + pRS316-CYC1p (<i>URA3 CEN6 CIDEA</i>)	This study

1. Brachmann CB, Davies A, Cost GJ, Caputo E, Li J, Hieter P, et al. Designer deletion strains derived from *Saccharomyces cerevisiae* S288C: a useful set of strains and plasmids for PCR-mediated gene disruption and other applications. *Yeast*. 1998;14(2):115-32.
2. Han GS, O'Hara L, Carman GM, Siniossoglou S. An unconventional diacylglycerol kinase that regulates phospholipid synthesis and nuclear membrane growth. *J Biol Chem*. 2008;283(29):20433-42.
3. Santos-Rosa H, Leung J, Grimsey N, Peak-Chew S, Siniossoglou S. The yeast lipin Smp2 couples phospholipid biosynthesis to nuclear membrane growth. *EMBO J*. 2005;24(11):1931-41.
4. Summers EF, Letts VA, McGraw P, Henry SA. *Saccharomyces cerevisiae* cho2 mutants are deficient in phospholipid methylation and cross-pathway regulation of inositol synthesis. *Genetics*. 1988;120(4):909-22.
5. Rose K, Rudge SA, Frohman MA, Morris AJ, Engebrecht J. Phospholipase D signaling is essential for meiosis. *Proc Natl Acad Sci U S A*. 1995;92(26):12151-5.
6. Oelkers P, Tinkelenberg A, Erdeniz N, Cromley D, Billheimer JT, Sturley SL. A lecithin cholesterol acyltransferase-like gene mediates diacylglycerol esterification in yeast. *J Biol Chem*. 2000;275(21):15609-12.
7. Oelkers P, Cromley D, Padamsee M, Billheimer JT, Sturley SL. The DGA1 gene determines a second triglyceride synthetic pathway in yeast. *J Biol Chem*. 2002;277(11):8877-81.
8. Sandager L, Gustavsson MH, Stahl U, Dahlqvist A, Wiberg E, Banas A, et al. Storage lipid synthesis is non-essential in yeast. *J Biol Chem*. 2002;277(8):6478-82.
9. Athenstaedt K, Daum G. Tgl4p and Tgl5p, two triacylglycerol lipases of the yeast *Saccharomyces cerevisiae* are localized to lipid particles. *J Biol Chem*. 2005;280(45):37301-9.
10. Kurat CF, Wolinski H, Petschnigg J, Kaluarachchi S, Andrews B, Natter K, et al. Cdk1/Cdc28-dependent activation of the major triacylglycerol lipase Tgl4 in yeast links lipolysis to cell-cycle progression. *Mol Cell*. 2009;33(1):53-63.
11. Choi HS, Su WM, Morgan JM, Han GS, Xu Z, Karanasios E, et al. Phosphorylation of phosphatidate phosphatase regulates its membrane association and physiological functions in *Saccharomyces cerevisiae*: identification of SER(602), THR(723), AND SER(744) as the sites phosphorylated by CDC28 (CDK1)-encoded cyclin-dependent kinase. *J Biol Chem*. 2010;286(2):1486-98.
12. Choi HS, Su WM, Han GS, Plote D, Xu Z, Carman GM. Pho85p-Pho80p phosphorylation of yeast Pah1p phosphatidate phosphatase regulates its activity, location, abundance, and function in lipid metabolism. *J Biol Chem*. 2012;287(14):11290-301.