

# Supplemental Materials

*Molecular Biology of the Cell*

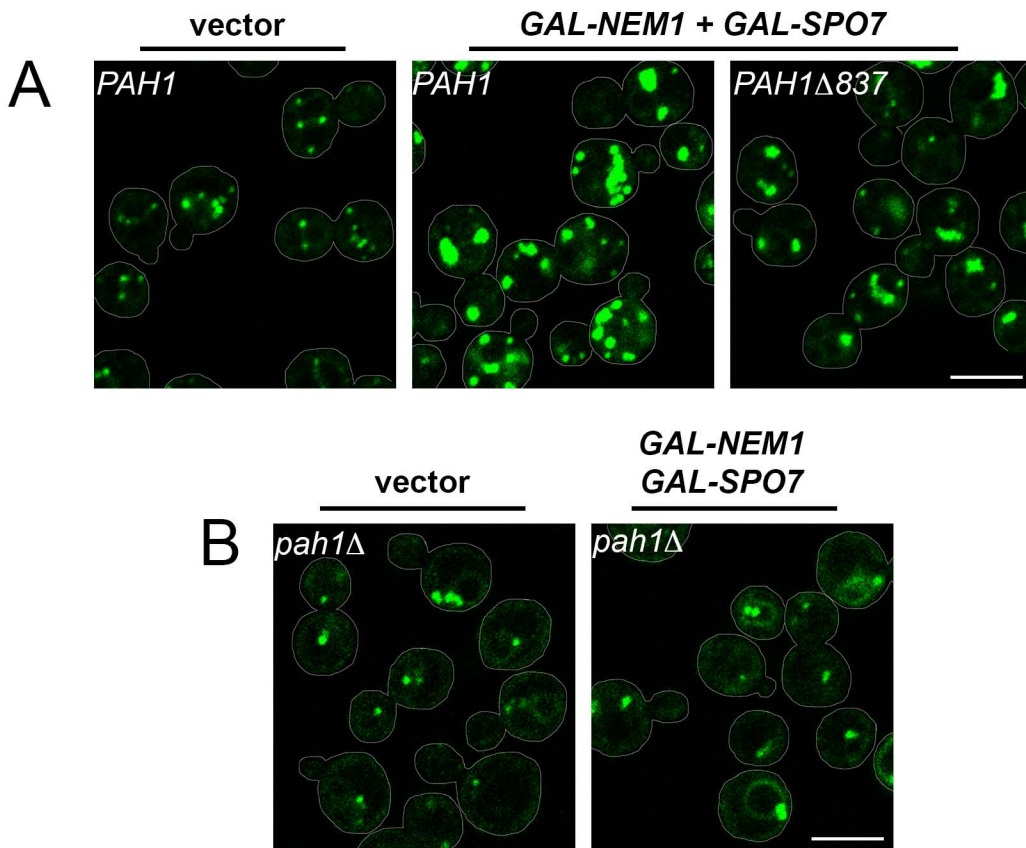
Karanasios et al.

**Table S1**

Plasmid	Description	Ref./source
YCplac111-PAH1-PtA	PAH1-PtA under control of the PAH1 promoter in CEN/LEU2 vector	Santos-Rosa <i>et al.</i> , (2005)
pRS313-GAL1/10-NEM1-Myc	NEM1-Myc under control of the GAL1/10 promoter in CEN/HIS3 vector	This study
YEplac352-GAL1/10-SPO7	SPO7 under control of the GAL1/10 promoter in 2 $\mu$ /URA3 vector	This study
YCplac33-GAL1/10-NEM1	NEM1 under control of the GAL1/10 promoter into CEN/URA3 vector	Han <i>et al.</i> , (2008)
pRS313-GAL1/10-SPO7	SPO7 under control of the GAL1/10 promoter into CEN/HIS3 vector	Han <i>et al.</i> , (2008)
pASZ11-GAL1/10-NEM1	NEM1 under control of the GAL1/10 promoter into CEN/ADE2 vector	This study
YCplac111-PAH1 $\Delta$ 722-PtA	PAH1-PtA C-terminal truncation ending at residue 722, under control of the PAH1 promoter in CEN/LEU2 vector	This study
YCplac111-PAH1 $\Delta$ 664-PtA	PAH1-PtA C-terminal truncation ending at residue 664, under control of the PAH1 promoter in CEN/LEU2 vector	This study
YCplac111-PAH1 $\Delta$ 595-PtA	PAH1-PtA C-terminal truncation ending at residue 595, under control of the PAH1 promoter in CEN/LEU2 vector	This study
YCplac111-PAH1 $\Delta$ [3-109]-PtA	PAH1-PtA lacking residues 4 to 108, under control of the PAH1 promoter in CEN/LEU2 vector	This study
YCplac111-PAH1 $\Delta$ [108-339]-PtA	PAH1-PtA lacking residues 109 to 338, under control of the PAH1 promoter into CEN/LEU2 vector	This study
YCplac111- PAH1 $\Delta$ 837-PtA	PAH1-PtA C-terminal truncation ending at residue 837, under control of the PAH1 promoter into CEN/LEU2 vector	This study
YCplac111- PAH1 $\Delta$ 798-PtA	PAH1-PtA C-terminal truncation ending at residue 798, under control of the GAL1/10 promoter into CEN/LEU2 vector	This study
YCplac111- PAH1 $\Delta$ 755-PtA	PAH1-PtA C-terminal truncation ending at residue 755, under control of the GAL1/10 promoter in CEN/LEU2 vector	This study
YCplac111- PAH1 D3A-PtA	PAH1-PtA with D851A D852A D853A mutations, under control of the PAH1 promoter into CEN/LEU2 vector	This study
YCplac111- PAH1 D398A D400A-PtA	PAH1-PtA with D398A D400A mutations, under control of the PAH1 promoter in CEN/LEU2 vector	This study
YCplac111- PAH1 G80R-PtA	PAH1-PtA with G80R mutation, under control of the PAH1 promoter in CEN/LEU2 vector	This study
YCplac111-Lipin 2-PtA	Lipin 2 (mouse)-PtA, under control of the PAH1 promoter in CEN/LEU2 vector.	This study
YCplac111-Lipin 2-Pah1ShortC-PtA	Lipin 2 fused to the 26 C-terminal residues of Pah1p (837-862) and PtA,	This study

	under control of the <i>PAH1</i> promoter in <i>CEN/LEU2</i> vector.	
YEplac181-Lipin 2-Pah1LongC-PtA	Lipin 2 fused to the 277 C-terminal residues of Pah1p (586-862) and PtA, under control of the <i>PAH1</i> promoter in $2\mu$ / <i>LEU2</i> vector.	This study
YEplac195- P <sub>NOP1</sub> CTD1NEP1-Myc	CTD1NEP1 (human)-Myc under the control of <i>NOP1</i> promoter in $2\mu$ / <i>URA3</i> vector	This study
pRS423- P <sub>NOP1</sub> NEP1R1	NEP1R1 (human) under the control of <i>NOP1</i> promoter in $2\mu$ / <i>HIS3</i> vector	This study
YCplac111- <i>PAH1-GFP</i>	<i>PAH1-GFP</i> under control of the <i>PAH1</i> promoter in <i>CEN/LEU2</i> vector	Karanasios <i>et al.</i> , (2010)
YCplac111- <i>PAH1</i> $\Delta$ 837- <i>GFP</i>	<i>PAH1</i> $\Delta$ 837- <i>GFP</i> under control of the <i>PAH1</i> promoter in <i>CEN/LEU2</i> vector	This study
YCplac111-P <sub>NOP1</sub> <i>PAH1-GFP</i>	<i>PAH1-GFP</i> under control of the <i>NOP1</i> promoter in <i>CEN/LEU2</i> vector	This study
YCplac111-P <sub>NOP1</sub> <i>AT-GFP</i>	<i>PAH1</i> acidic tail residues (838-862)- <i>GFP</i> under the control of <i>NOP1</i> promoter in <i>CEN/LEU2</i> vector	This study
YCplac111-P <sub>NOP1</sub> - <i>GFP</i>	<i>GFP</i> under control of <i>NOP1</i> promoter in <i>CEN/LEU2</i> plasmid	This study
YCplac111- <i>PAH1</i>	<i>PAH1</i> under control of the <i>PAH1</i> promoter in <i>CEN/LEU2</i> vector	Santos-Rosa <i>et al.</i> , (2005)
YCplac111- <i>PAH1</i> $\Delta$ 837	<i>PAH1</i> $\Delta$ 837 under control of the <i>PAH1</i> promoter in <i>CEN/LEU2</i> vector	This study
YCplac111- <i>PAH1</i> D3A	<i>PAH1</i> with D851A D852A D853A mutations, under control of the <i>PAH1</i> promoter into <i>CEN/LEU2</i> vector	This study
YCplac111- <i>NEM1</i>	<i>NEM1</i> under control of the <i>NEM1</i> promoter in <i>CEN/LEU2</i> vector	This study
YEplac181- <i>GAL1/10-PAH1</i>	<i>PAH1</i> under control of the <i>GAL1/10</i> promoter in $2\mu$ / <i>LEU2</i> vector	Santos-Rosa <i>et al.</i> , (2005)
YEplac181- <i>GAL1/10-PAH1-7A</i>	<i>PAH1</i> 7A under control of the <i>GAL1/10</i> promoter in $2\mu$ / <i>LEU2</i> vector	O' Hara <i>et al.</i> , (2006)
YEplac181- <i>GAL1/10-PAH1</i> $\Delta$ 837-7A	<i>PAH1</i> $\Delta$ 837-7A under control of the <i>GAL1/10</i> promoter in $2\mu$ / <i>LEU2</i> vector	This study
YCplac111- <i>PAH1</i> $\Delta$ 837-7A	<i>PAH1</i> $\Delta$ 837-7A under control of the <i>PAH1</i> promoter in <i>CEN/LEU2</i> vector	This study

Figure S1



**Supplemental Figure 1.** Pah1p acidic tail-dependent changes in lipid droplet biogenesis visualized by BODIPY labeling. (A) *pah1Δ* cells expressing *PAH1* or *PAH1Δ837* were transformed with *GAL-NEM1* and *GAL-SPO7*, or the corresponding empty vectors, transferred from raffinose to galactose-containing medium and grown for five hours before imaging. Cells were labeled with BODIPY 493/503 and imaged by confocal microscopy. Representative single Z-plane for each strain is shown. Bar, 5 μm. (B) *pah1Δ* cells transformed with *GAL-NEM1* and *GAL-SPO7*, or the corresponding empty vectors, were grown in galactose-containing medium and imaged as in A. Bar, 5 μm. In all panels, the cell outlines are depicted.