

## **Supplemental Material to:**

**Sara Sheibani, Vincent R Richard, Adam Beach,  
Anna Leonov, Rachel Feldman, Leila Khelghatybana,  
Amanda Piano, Michael Greenwood, Hojatollah Vali,  
and Vladimir I Titorenko**

**Macromitophagy, neutral lipids synthesis, and  
peroxisomal fatty acid oxidation protect yeast from  
“liponecrosis”, a previously unknown form of programmed  
cell death**

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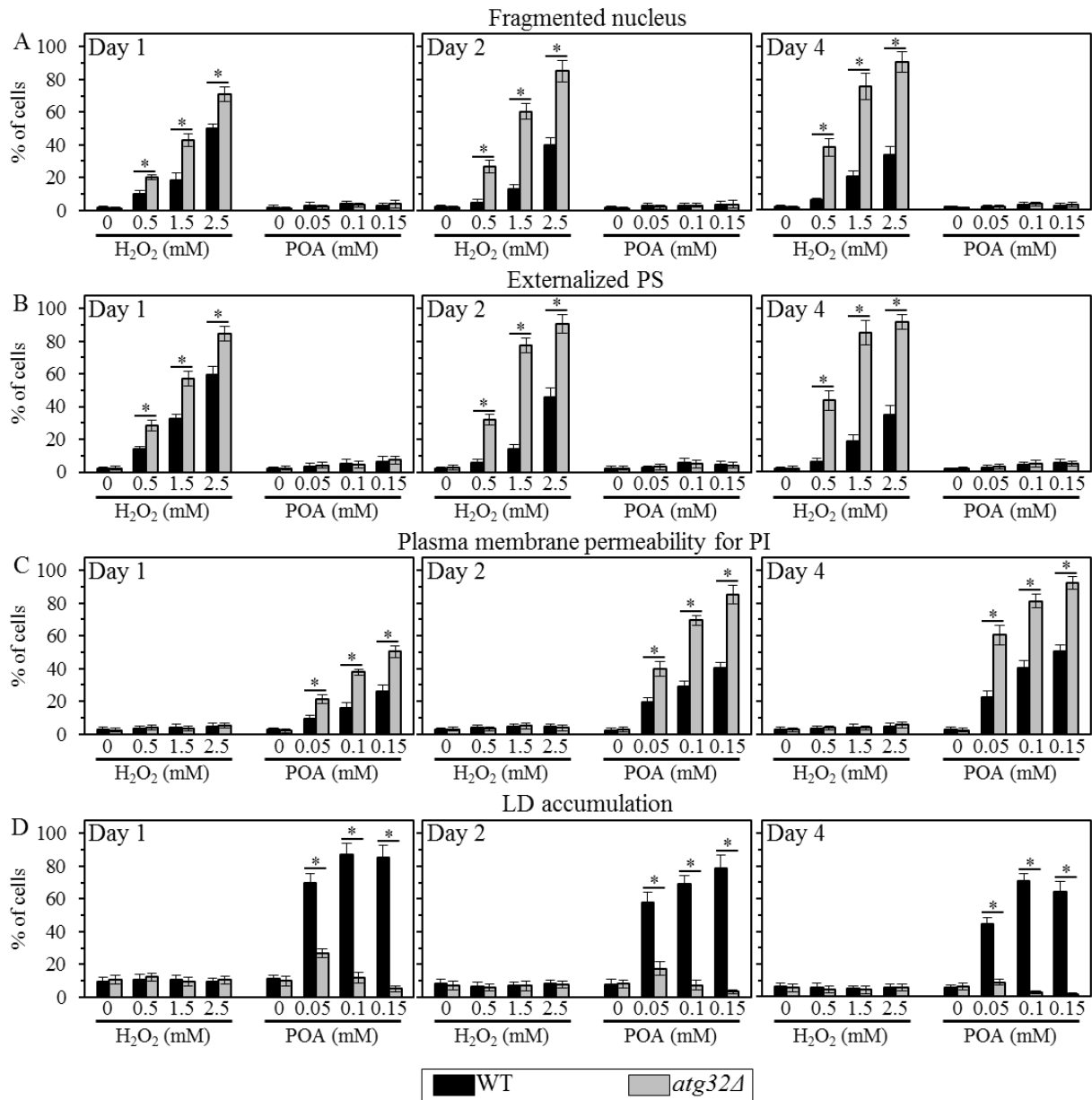
**<http://dx.doi.org/10.4161/cc.26885>**

**<http://www.landesbioscience.com/journals/cc/article/26885>**

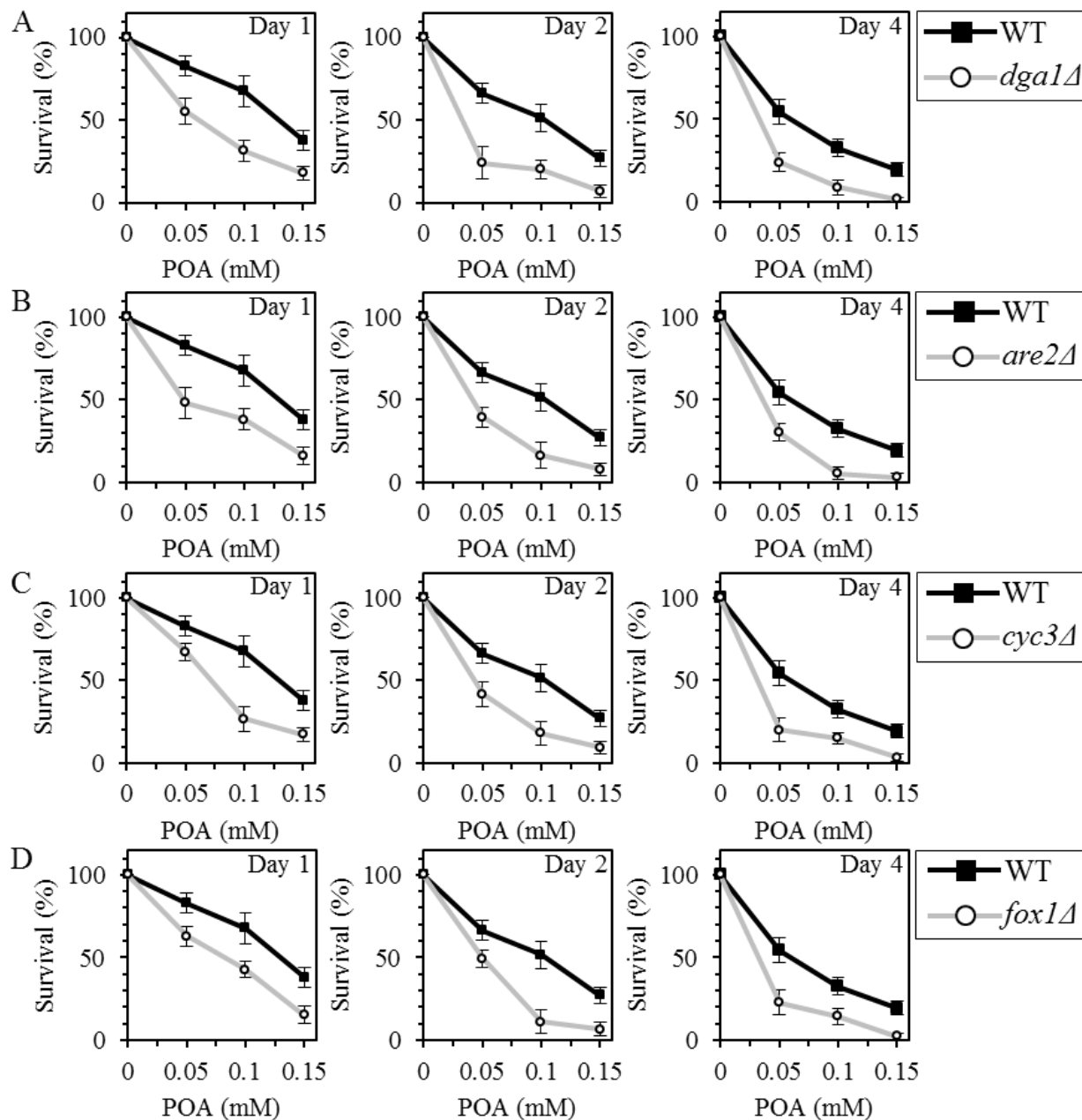
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**Figure S1.** Percentage of WT and *atg32Δ* cells that display nuclear fragmentation (A), phosphatidylserine (PS) externalization (B), propidium iodide (PI) positive staining (C) or LD accumulation (D). WT and *atg32Δ* cells were recovered at days 1, 2 and 4 of culturing in a nutrient-rich YP medium initially containing 0.2% glucose as carbon source. Fluorescence microscopy images of cells stained with DAPI (A), Annexin V (B), PI (C) or BODIPY 493/503 (D) were used for morphometric analysis; at least 800 cells of each strain were used for quantitation at each time-point. Data are presented as means  $\pm$  SEM ( $n = 3$ ;  $*p < 0.01$ ).



**Figure S2.** WT, *dga1Δ*, *are2Δ*, *cyc3Δ* and *fox1Δ* cells were recovered at days 1, 2 and 4 of culturing in a nutrient-rich YP medium initially containing 0.2% glucose as carbon source. Cell survival was assessed by measuring the clonogenicity of WT and mutant cells after 2 h of treatment with various concentrations of exogenous POA.