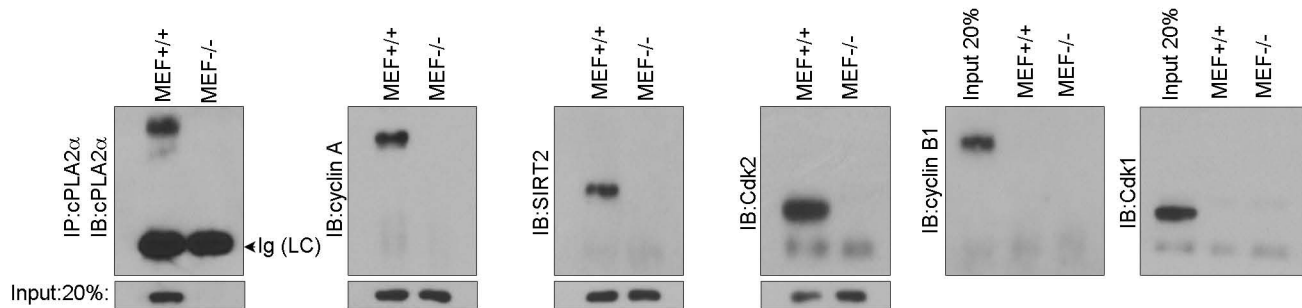


Suppl. Figure 1



Suppl. Figure 2

### Supplementary Figure 1.

(A) (Upper panel) schematic illustration of domain structures of cPLA<sub>2</sub>α (C2; calcium-binding domain). (Lower panel) EGY48 strain of yeast were transformed with the reporter plasmid pSH18-34, which contains LacZ with upstream LexA operators, and with the pJG4-5 vector containing PLIP, TIP60 and three cDNA clones identified to interact with cPLA<sub>2</sub>α<sup>1-215</sup> by the two hybrid interaction trap method. Yeast were also transformed with a vehicle plasmid (LexA-Bicoid) (a, c), or LexA-cPLA<sub>2</sub>α<sup>1-215</sup> (b, d), and grown in medium with or without X-Gal.

(B) Interaction of HA-cPLA<sub>2</sub>α with SIRT2 but not SIRT1 in HEK293 cell lysates using anti-SIRT2 and anti-SIRT1 antibodies respectively.

### Supplementary Figure 2.

cPLA<sub>2</sub>α was immunoprecipitated from WT and *cpla2α*<sup>-/-</sup> MEFs, and presence of cyclin A, SIRT2, Cdk2, cyclin B1, and Cdk1 were examined in the immunoprecipitates.

1 **Movies 1-3**

2 Movie of the control HEK293 cells treated with scrambled siRNA (Movie 1), HEK293 cells  
3 treated with cPLA<sub>2</sub>α (movie 2), or SIRT2 siRNAs (Movie 3) presented in Figure 5F. DNA was  
4 visualized by YFP-H2B. The cells were filmed from G2 phase until end of cytokinesis. Frames  
5 were collected at 5-min intervals. The display rate is 3 frame per second.

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