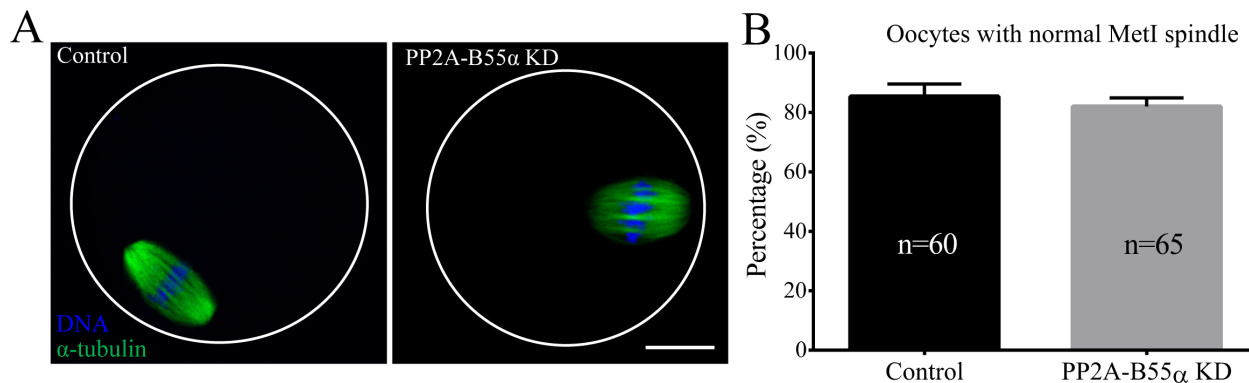
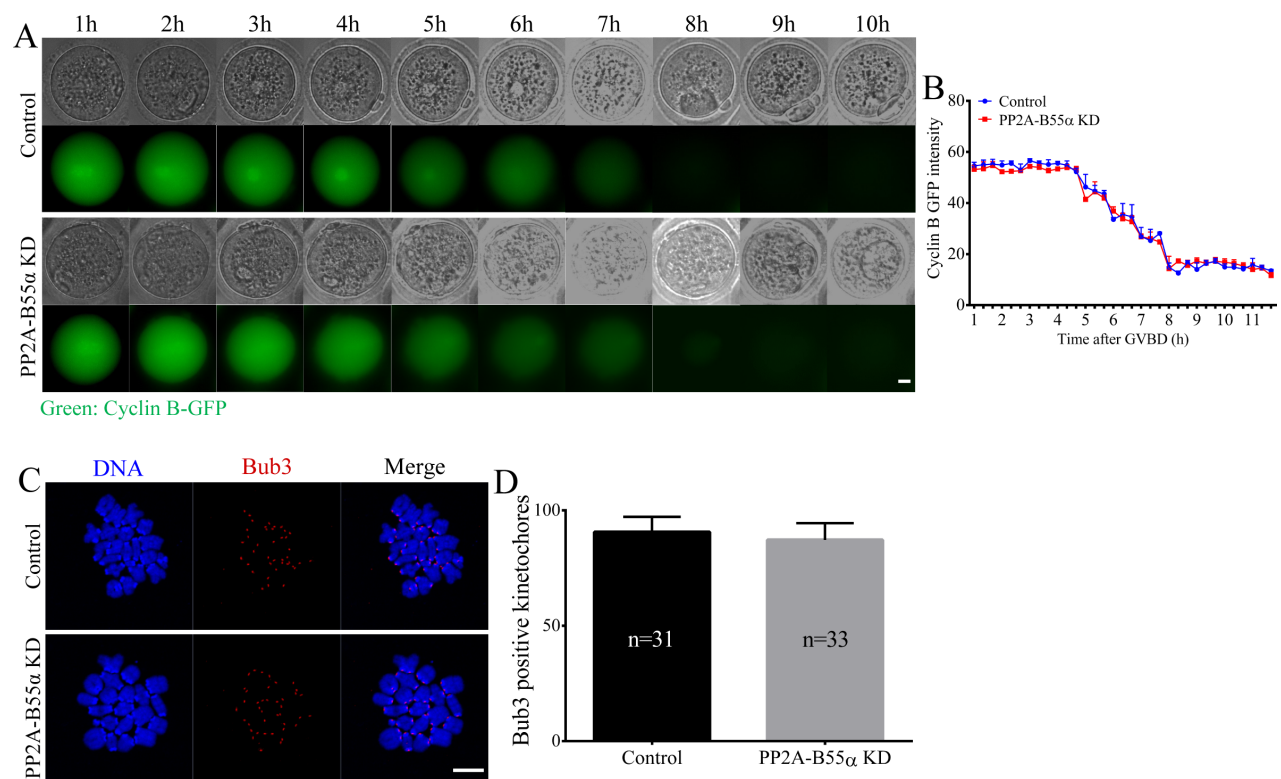


# Protein phosphatase 2A regulatory subunit B55 $\alpha$ functions in mouse oocyte maturation and early embryonic development

## Supplementary Materials



**Supplementary Figure 1: PP2A-B55 $\alpha$  knock down does not affect spindle formation at the MI stage.** (A) Oocytes at the MI stage were stained with an anti- $\alpha$ -tubulin antibody. (B) Percentage of oocytes with a normal spindle at the MI stage. Blue, DNA; green,  $\alpha$ -tubulin. Bar = 20  $\mu$ m. The data are the mean  $\pm$  SD of three independent experiments.



**Supplementary Figure 2: SAC activity in PP2A-B55 $\alpha$  knock down oocytes.** (A) Time-lapse live-cell imaging of PP2A-B55 $\alpha$ -KD oocytes expressing cyclin B-GFP mRNA. Time points indicate the culture duration. GFP levels were measured every 15 min. (B) Quantification of cyclin B-GFP levels. Green: cyclin B-GFP. Bar = 20  $\mu$ m. (C) Oocytes at the MI stage were stained with a Bub3 antibody. (D) Percentage of Bub3 positive kinetochores in the MI stage oocyte. Blue, DNA; red, Bub3. Bar = 20  $\mu$ m. The data are the mean  $\pm$  SD of three independent experiments.

### Supplementary Table 1: Primers used in this study

Gene	Primer sequence	Use of the primer
<i>PP2A-B55<math>\alpha</math></i>	F: 5'GAATTAATACGACTCACTATAGGGAGAAGTGCCCCGATTTAGGCC3'	dsRNA
	R: 5'GAATTAATACGACTCACTATAGGGAGAACTGTGCCTGTCAGACCC3'	
	F: 5'AGAGGAAGATGGAAGATATAGAG3'	qPCR
	R: 5'GAGTTGATGTGATAAGTGTGG3'	
<i>Ppia</i>	F: 5'CGCGTCTCCTTCGAGCTGTT3'	qPCR
	R: 5'TGTAAAGTCACCACCCTGGC3'	

F: forward; R: reverse; dsRNA: double-stranded RNA; qPCR: quantitative PCR.