Fig.S1

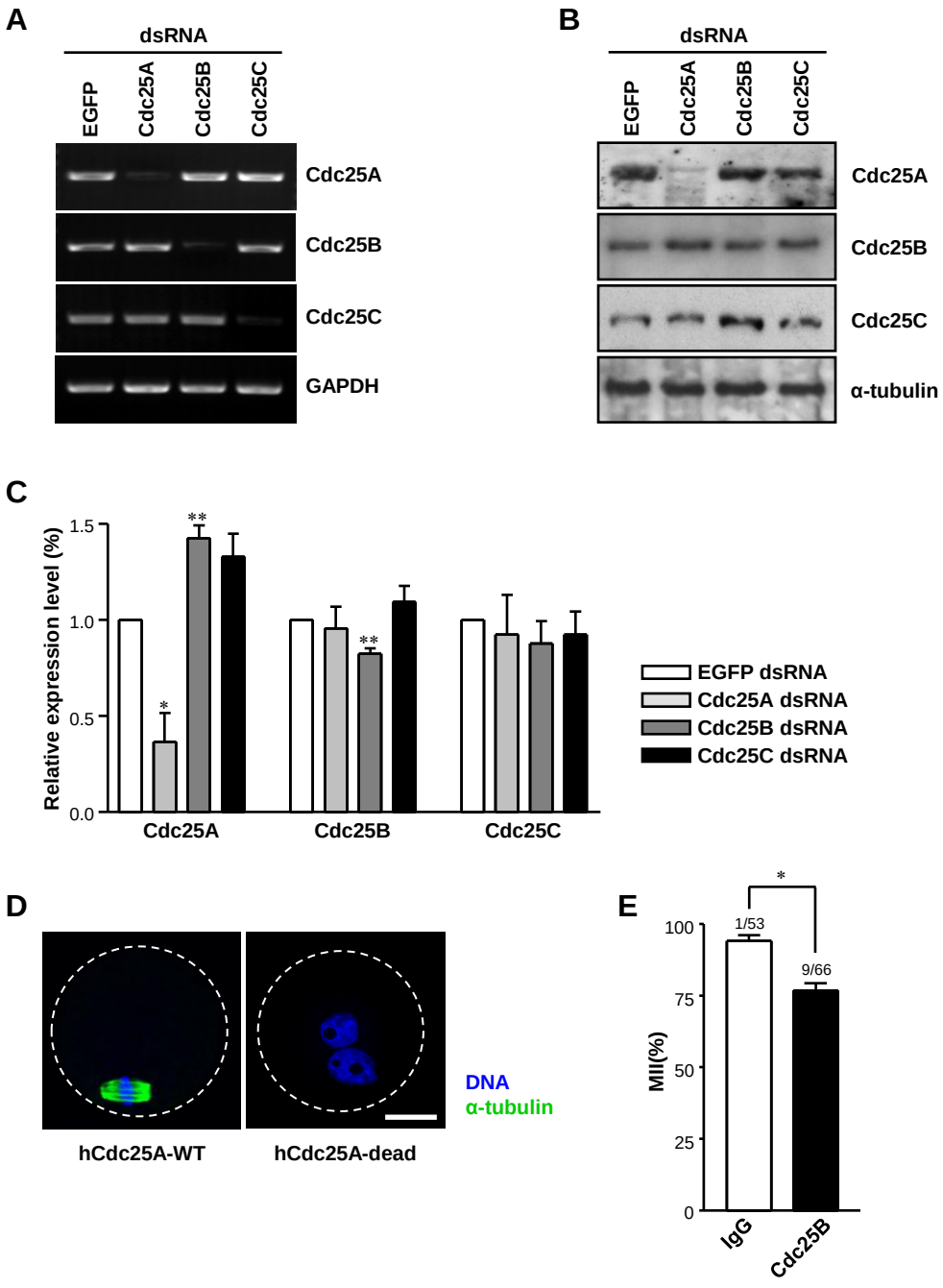


Fig S1. Knockdown of Cdc25 phosphatases. RT-PCR (A) and immunoblotting (B) of Cdc25s knockdown oocytes. (C) Protein levels were quantified and normalized to controls. (D) Rescue of Cdc25A knockdown by overexpressing human Cdc25A wild-type (WT), but not by overexpressing catalytically inactive (dead) human Cdc25A. Spindle and DNA were stained with α-tubulin and DAPI, respectively. Bar, 20μm. (E) Effect of Cdc25B antibody injection. MII oocytes were injected with antibodies against Cdc25B, and MII oocytes were counted after 8 hours. Normal IgG was used as a negative control. Data are the mean ± SEM from at least three independent experiments. Numbers above the bars indicate the number of oocytes in the MII stage and number of total oocytes. *p<0.05 and **p<0.005.

Fig.S2

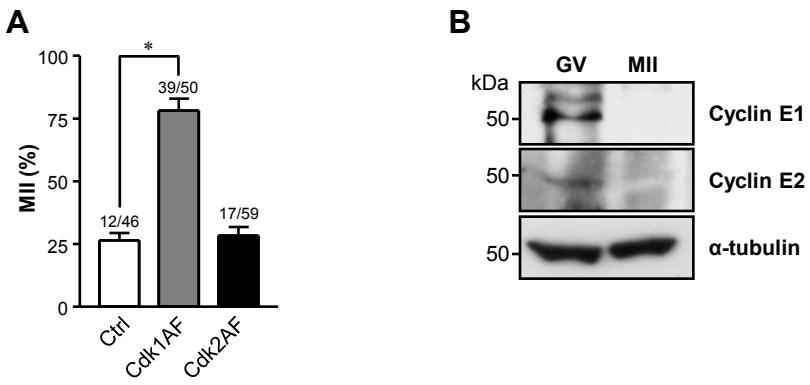
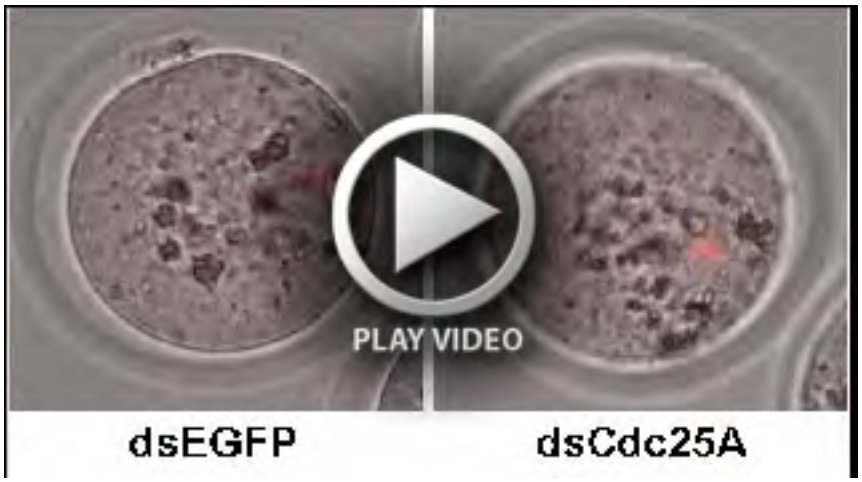


Fig S2. Cdk2-cyclin E is dispensable for MII arrest in mouse oocytes. (A) MII oocytes overexpressing Cdk1AF or Cdk2AF mutant were activated with strontium for 8 hours. Non-injected MII oocytes were used as a control (Ctrl). Numbers above the bars indicate the number of oocytes in the MII stage and number of total oocytes. (B) Immunoblotting of cyclin E in mouse oocytes. GV and MII oocytes were immunoblotted for cyclin E1 and E2. Each lane contains 250 oocytes. *p<0.001.



Movie 1. Knockdown of Cdc25A in mouse oocytes. MII oocytes coinjected with H2B-mCherry mRNA and dsRNAs corresponding to EGFP or Cdc25A were incubated for 2 hours to allow expression of fluorescent proteins and then examined by time-lapse microscopy. Frames were taken every 10 minute for 12 hours. The video is shown at 7 frames/s.

Table S1. Primer sequences used in this study

rPurpose	Target gene	Sequence (5' to 3')	
		Forward	Reverse
Preparation of dsRNA	Cdc25A	ATTAATACGACTCACTATAGGGAGAAGCTGCTGGCGGACTGTC	ATTAATACGACTCACTATAGGGAGACAAACAGCCCGCAACGAT
	Cdc25B	ATTAATACGACTCACTATAGGGAGAGATGGAAGTAGAGGAGC	ATTAATACGACTCACTATAGGGAGACTGGTCTTGCAGCCTGC
	Cdc25C	ATTAATACGACTCACTATAGGGAGACCACGACTCGGCAAACC	ATTAATACGACTCACTATAGGGAGACAGCCACTGTGTCTGGGC
	EGFP	ATTAATACGACTAACTATAGGGAGAATGGTGAGCAAGGGCGAG	ATTAATACGACTCACTATAGGGAGAGCTCGTCCATGCCGAGAG
RT-PCR	Cdc25A	GTCTCACGAGGAGCCTCC	CATGTGCAGATTCACGGC
	Cdc25B	GATGGAAGTAGAGGAGC	CTTCCAGGGGTGTCACAC
	Cdc25C	GAATGGGAGGCACCTAGG	GCACCGTTGGCAGCACAC
	GAPDH	ACCACAGTCCATGCCATCAC	TCCACCACCCTGTTGCTGTA