

**Supplementary Table 1.** Effect of supplementation of IVM medium with follicular fluid derived from HL or DL cows on mitochondrial function in oocytes

FF groups	Mitochondrial membrane potential			ATP content		
	No. of trials	No. of oocytes	Fluorescence intensity (Fold change, Mean $\pm$ SE)	No. of trials	No. of oocytes	ATP (pM, Mean $\pm$ SE)
HL	4	26	1.00 $\pm$ 0.07	4	26	3.43 $\pm$ 0.10
DL	4	32	1.08 $\pm$ 0.07	4	32	3.39 $\pm$ 0.14

FF was collected from follicles 3–6 mm in diameter from individual DL and HL cows. Four DL and HL cows were used for FF preparation and four sets of HL DL-FFs were used for the experiment. COCs collected from HL cows were divided into two groups and matured for 21 h in medium containing 10% HL-FF or DL-FF, after which the mitochondrial membrane potential and ATP content in oocytes were measured. Membrane potential and ATP measurements are described in the Materials and method section.