



**Figure S8.** The distribution of parent-of-origin nucleosomes at expressed genes/non-expressed genes in endosperm and its up and down 2kb regions. Blue line represents the maternal specifically positioned nucleosome (mat-nucleosome) and red line represents the paternal specifically positioned nucleosome (pat-nucleosome). Expressed genes in endosperm ( $\text{FPKM} \geq 1$ ), Non-expressed genes in endosperm ( $\text{FPKM} < 1$ ).