## Supplementary Information's for

## Functional roles of hnRNPA2/B1 regulated by METTL3 in mammalian embryonic development

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**Supplementary Figure 1.** Developmental delay of hnRNPA2/B1 KD embryos. Developmental competence was observed by time-lapse microscopy at 24 h after injection of eGFP dsRNA (negative) and hnRNPA2/B1 dsRNA (hnRNPA2/B1 KD) into zygotes. Experiments were repeated three times for each group. Developmental stage was evaluated at the 2C, 4C, morula, and blastocyst stages and evaluated by chromatin status.



**Supplementary Figure 2.** Localization of METTL3 in 1cell and 2cell embryos using confocal microscopy. METTL3 localized at the nucleus during early embryo development. Scale bar =  $10 \ \mu m$ 



**Supplementary Figure 3.** Quantification of m6A RNA methylation in control and METTL3 knockdown blastocysts. One hundred blastocysts were examined in each group for total RNA isolation.