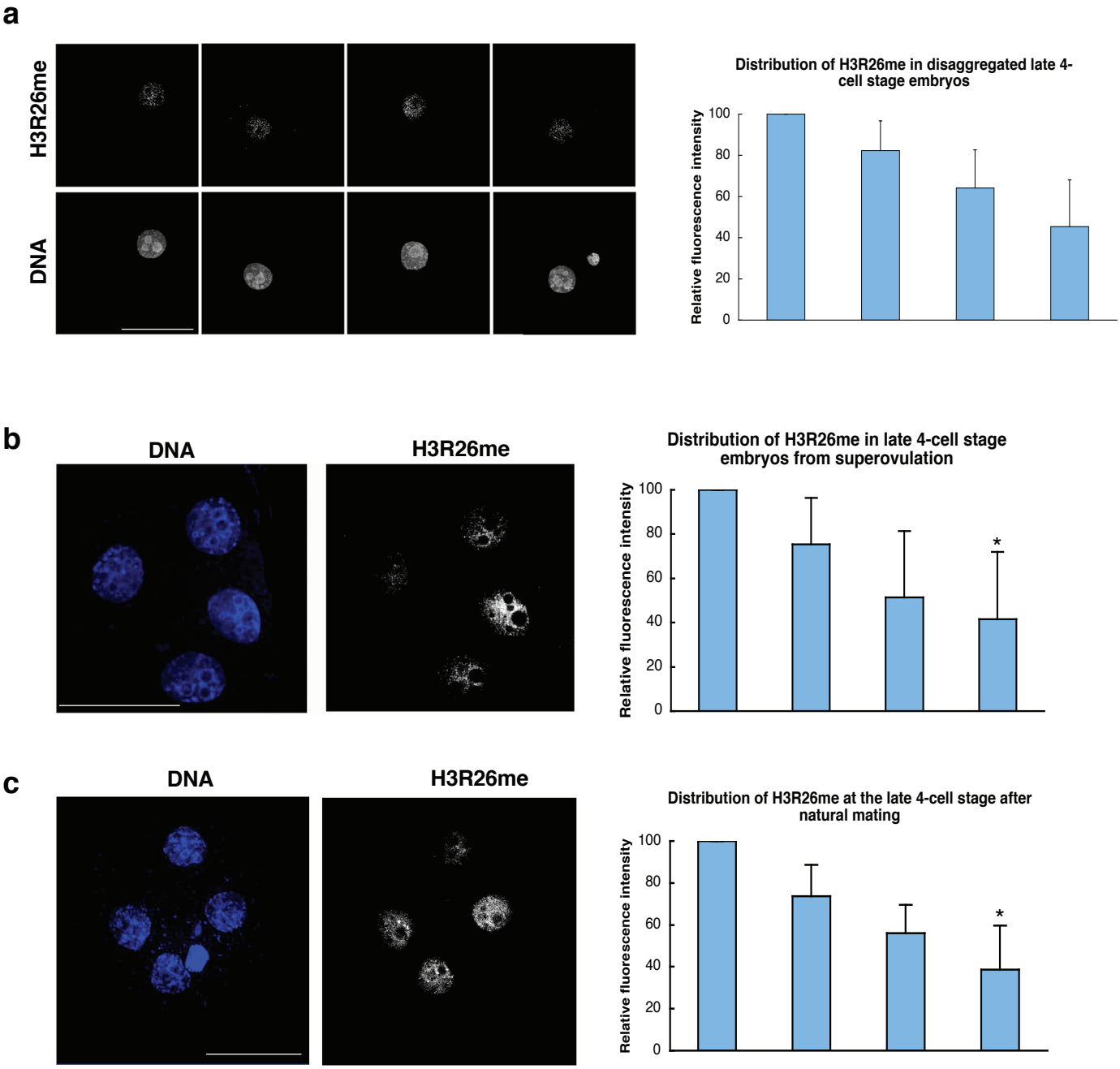

Figure S1. Levels of H3R26me are different in the blastomeres of the 4-cell stage embryo.
(a)Differences in the levels of H3R26me are not an artifact linked to differential scanning caused by embryo shape. Freshly collected late four cell stage embryos were processed for immunostaining with an H3R26me antibody. The cells of individual embryos were then disaggregated and scanned under confocal microscopy separately. Shown are projections of the 4 nuclei of a representative embryo (n=9) . Sections were taken every 0.8 μm. Fluorescence levels were quantified using the Volocity software and normalised against the blastomere showing the highest level which was set at 100%. Decreasing values of fluorescence were calculated, normalised in each embryo and averaged accordingly (n=9). Each bar represents the relative fluorescence level of each of the 4-cell stage blastomeres. Scale bar 10 μm.
(b-c) The variations in the distribution of H3R26me levels at the late 4-cell stage are similar whether they are obtained following hormonally induced superovulation (b; n=18) or derive from natural matings (c; n=14). Embryos were collected and processed as in (a) except that the scanning was done without disaggregating the cells. The levels of fluorescence were quantified in projections including all sections using the Volocity software and plotted as in (a*) (*p*= 0.0001). Shown are projections of representative embryos including all sections, which were taken every 0.8 μm. DNA was stained with TOTO-3. Scale bar 50 μm.