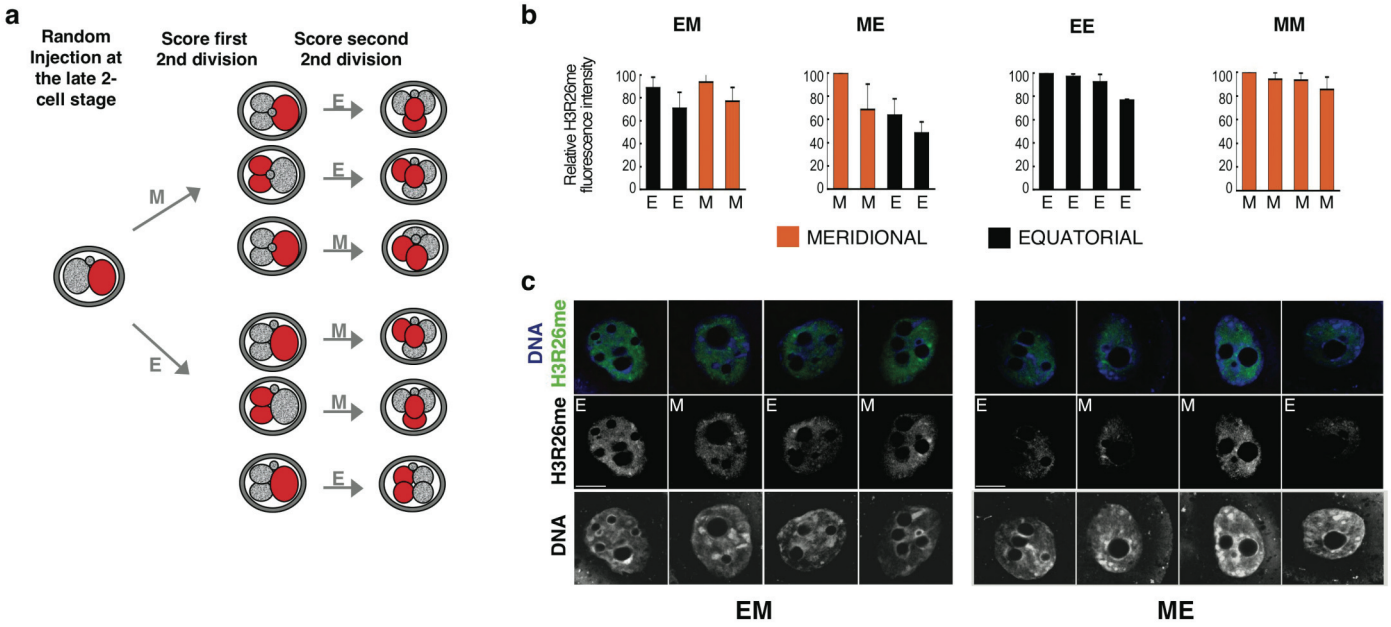

Figure S5. Levels of H3R26me correlate with the plane and order of division from the 2-cell stage

(a) Experimental design to group the embryos according to their division plane and order. A 2-cell stage blastomere was microinjected with rhodamine-coupled dextran and the embryos were monitored to determine the plane and order of division. Embryos were stained for H3R26me at the late 4-cell stage and levels of H3R26me were measured as in Figure 1.

(b) The sisters derived from late Equatorial divisions (ME embryos) display lower H3R26me levels than those derived from early Equatorial divisions (EM embryos) or from Meridional divisions. Embryos were grouped as EM (early division Equatorial, second division Meridional; n=23), ME (early division Meridional and second division Equatorial; n=20), EE (two Equatorial divisions; n=2) or MM (two Meridional divisions; n=3). H3R26me levels were analysed according to the presence of rhodamine-dextran, which allowed identification of the sisters derived from Equatorial (E cells, black bars) or Meridional (M cells, orange bars) divisions. In each embryo, levels of H3R26me were normalised to the highest blastomere, which was set at 100%. (Note that the MM and EE embryos are rare and constitute only ~20% of the embryos).

(c) Single optical sections of representative nuclei of one EM and one ME embryo . H3R26me shown in green,DNA in blue. Green and blue channels shown as grayscale at the bottom. Scale bar 10 μm. E or M cells are indicated.