

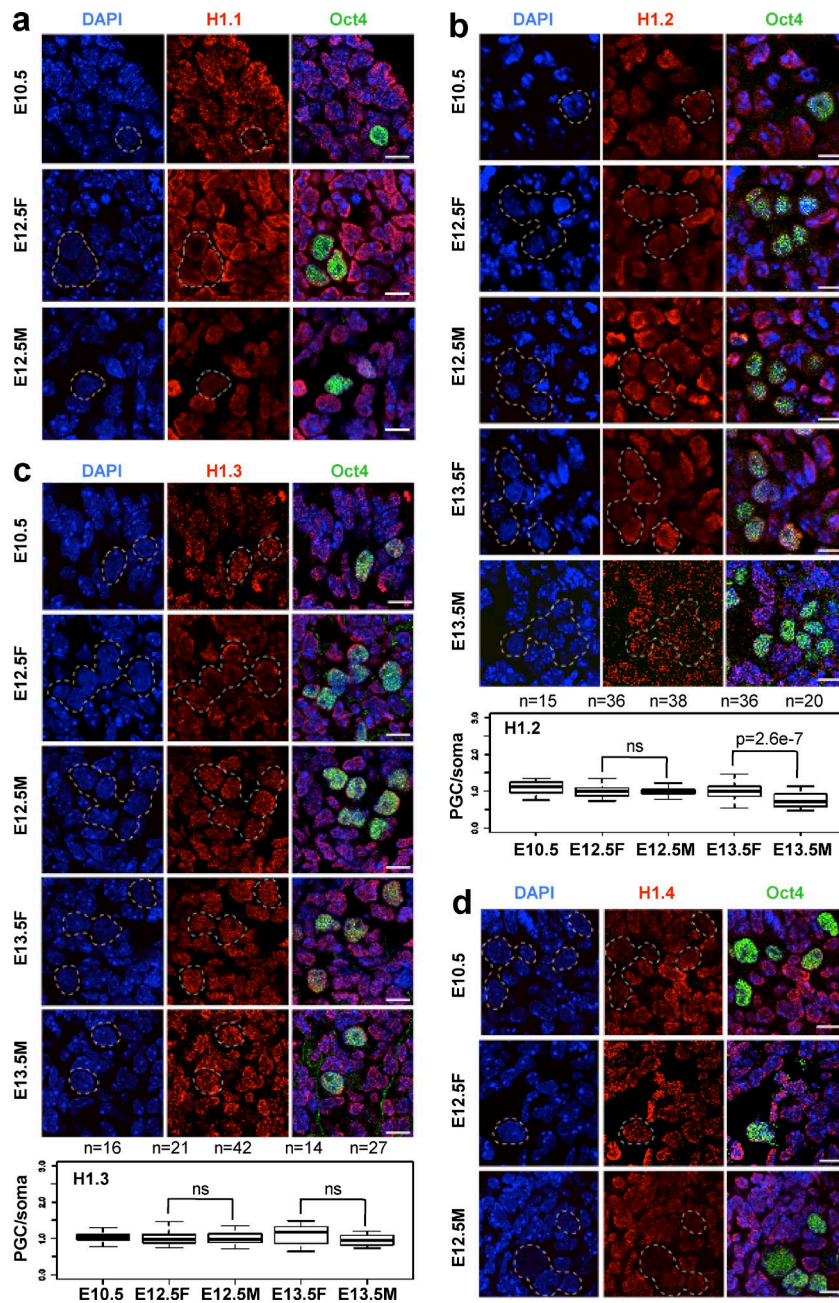
Izzo et al., <https://doi.org/10.1083/jcb.201611012>

Figure S1. **H1 subtype (H1.1–H1.4) expression during PGC development.** (a) Immunofluorescence with anti-Flag antibodies (red) of cryosections of genital ridges from Flag-HA-H1.1 knockin embryos at E10.5 and E12.5; female (F) and male (M). (b and c) Immunofluorescence with anti-Flag antibodies (red) of cryosections of genital ridges from Flag-HA-H1.2 (b) and Flag-HA-H1.3 (c) at E10.5, E12.5, and E13.5. The box plots show the quantification of the signal levels of the indicated H1 subtypes in OCT4-positive cells relative to OCT4-negative cells [PGC/somatic cells [soma]] during development. Error bars correspond to the minimum and maximum values. (d) Immunofluorescence with anti-Flag antibodies (red) of cryosections of genital ridges from Flag-HA-H1.4 at E10.5 and E12.5. In all cases for the E12.5 and E13.5 time points, male and female genital ridges were stained separately. PGCs were identified using anti-OCT4 (green) antibody. DNA was counterstained with DAPI. Representative images from at least three genital ridges across three independent experiments for each stage analyzed are shown. Bars, 10 μ m.

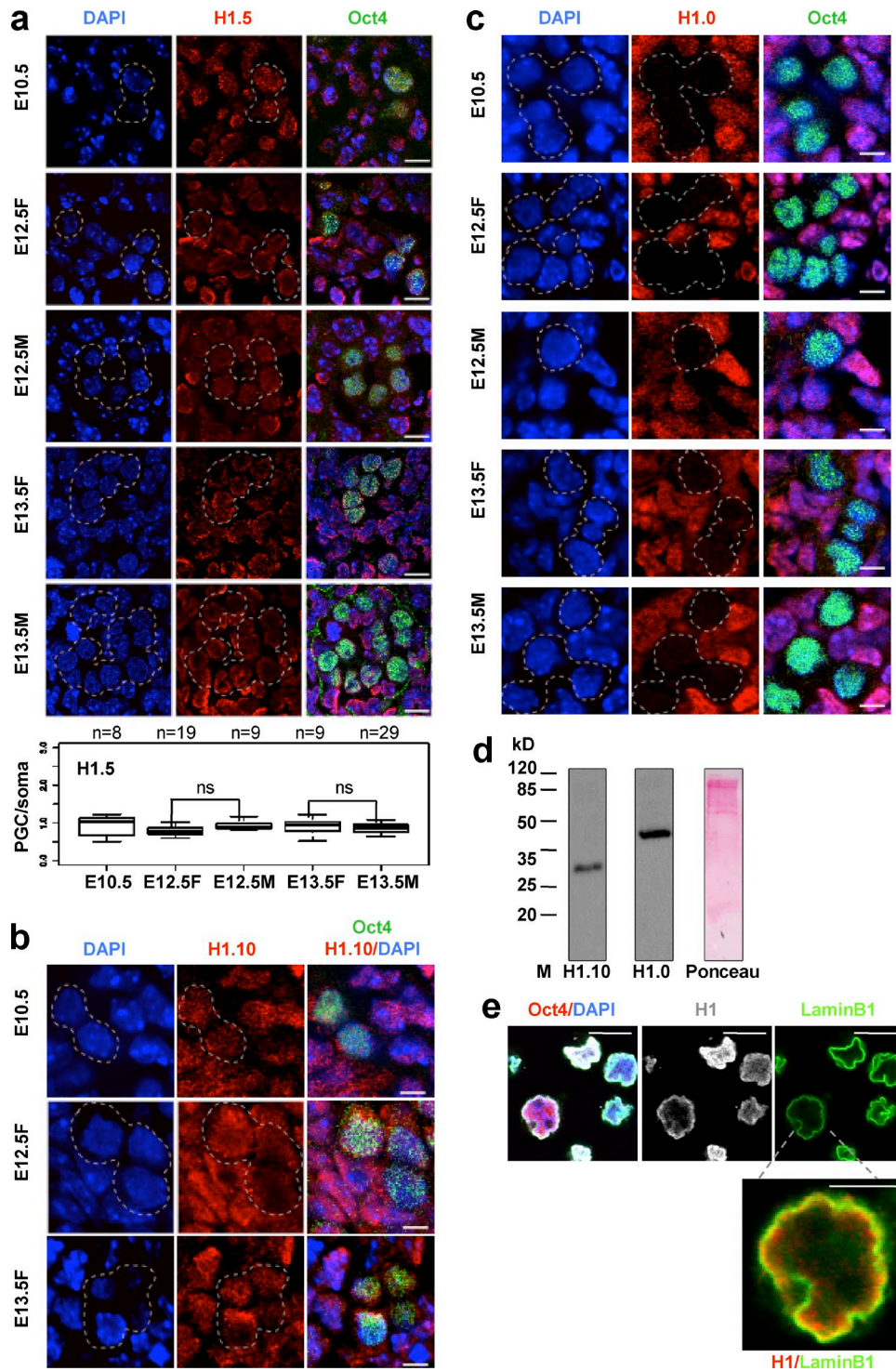


Figure S2. **H1 subtype (H1.5, H1.10, and H1.0) expression during PGC development.** (a) Immunofluorescence with anti-Flag antibodies (red) of cryosections of genital ridges from Flag-HA-H1.5 knockin male and female embryos at E10.5, E12.5, and E13.5. (b) Expression of H1.10 during PGC differentiation. Representative images of immunofluorescence using an anti-H1.10 specific antibody (red; see also Fig. S2 d) of cryosections of genital ridges from embryos at E10.5 and E12.5; female (F) and male (M). (c) Expression of H1.0 during PGC differentiation. The same as in Fig. S2 b, but an anti-H1.0 specific antibody was used. Genital ridges were embedded in paraffin. (d) Immunoblot analysis of whole-cell extract from MEFs with anti-H1.0 and anti-H1x antibodies. Note that these antibodies recognize a single band of the expected size. (e) Immunofluorescence staining of PGCs isolated from E11.25 embryos with anti-H1 and anti-lamin-B1 antibodies. Bars, 10 μ m. In the higher magnification on the right, the H1 signal is displayed in the red channel showing colocalization with the laminB1 signal. Colocalization was observed in all the cells analyzed ($n = 11$). A representative image is shown. Bars: (A–C) 10 μ m; (E) 5 μ m.

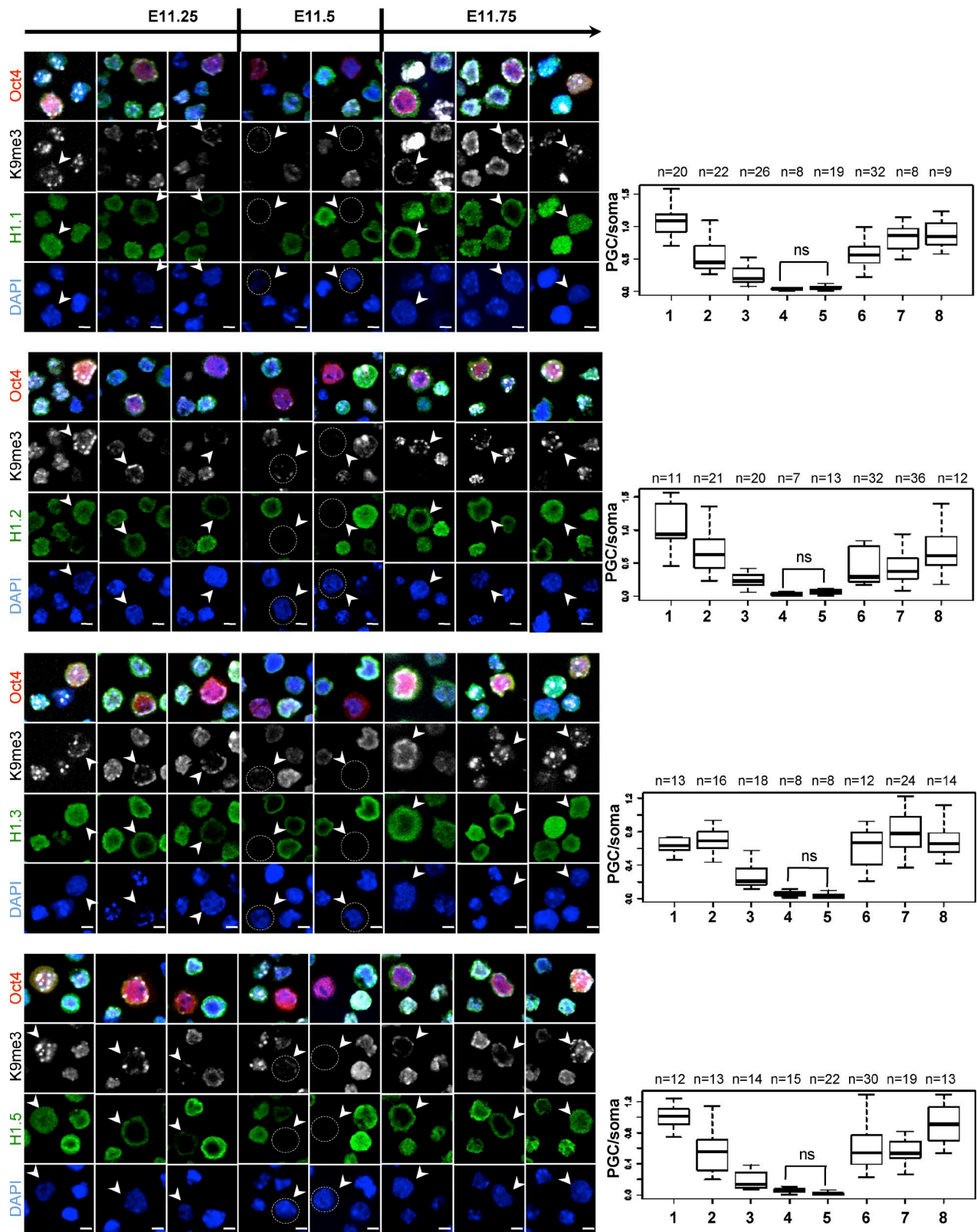


Figure S3. **Transient loss of somatic H1 subtypes at E11.5.** Kinetics of H1.1, H1.2, H1.3, and H1.5 disappearance from PGCs (arrowheads) isolated from genital ridges of embryos of the indicated Flag-HA-H1 knockin mice between early and late E11.5. OCT4 staining (red) was used as a germ cell-specific marker. H3K9me3 staining (gray) was used as internal control. The dotted line indicates the PGCs that have lost H1 signal. Bars, 10 μ m. The box plots (right) show the expression level of the indicated H1 subtypes during the different stages (1–8) of epigenetic reprogramming in OCT4-positive cells relative to OCT4-negative cells (PGC/somatic cells). The p-values were calculated using a pairwise *t* test with Bonferroni correction. Only the p-values for stages 4 and 5 are shown; ns, not significant. p-values <0.05 were considered statistically significant. The number (n) of cells analyzed is indicated. Samples from several embryos from at least three independent litters were analyzed.