

Supplemental_Figure_S2. Expression of mouse and human genes and varying ploidy of the orthologous regions in A9 cells carrying L-HACs.

A, B. Relative expression levels of human (A) and endogenous mouse (B) genes of the orthologous regions assessed by real-time PCR. Values are normalized to *mGadph*. *ARHGAP29/Arhgap29* are used for reference; the data are from biological triplicates \pm S.E.M. Expression of 9 out of 14 genes is presented, where probes did not reveal cross-species recognition. Note that expression of endogenous mouse genes was generally much higher in comparison to HAC genes, however, the same genes were relatively stronger expressed from both orthologous regions. **C - F.** Varying ploidy of L-HAC (C,D) and mouse orthology region (E,F) in A9 cells. Ploidy was estimated by scoring signals from the entire orthologous regions after FISH with pooled BAC probes (Supplemental_Table_S2). D and F show maximum intensity projections of stacks through A9 cell population with various number of loci; only signals for the gene deserts (green) within HAC (D) or endogenous mouse locus (F) are shown. Nuclei are counterstained with DAPI (red); scale bars: 5 μ m

