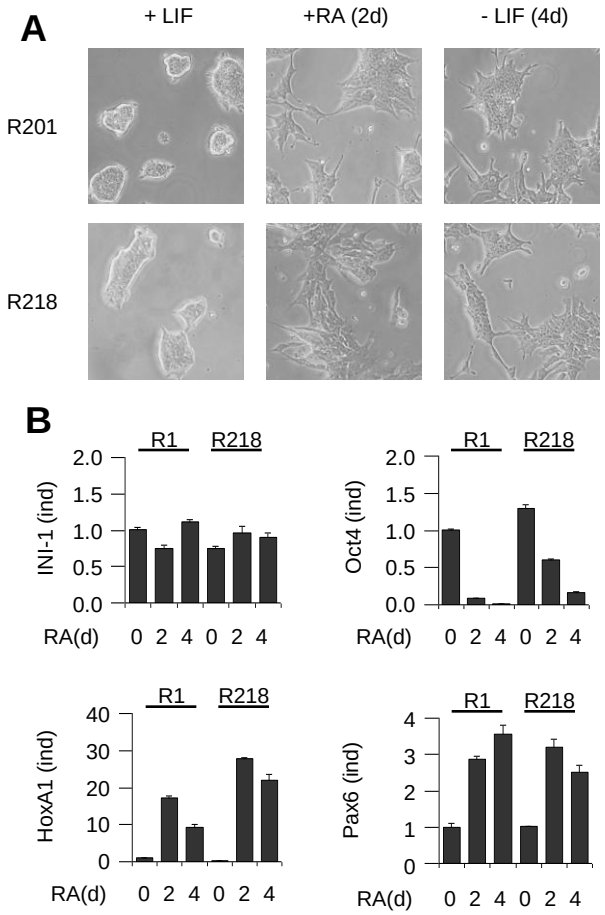
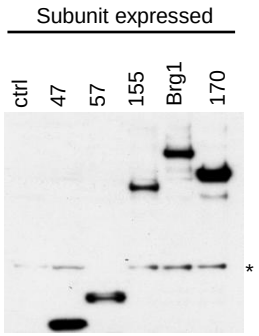
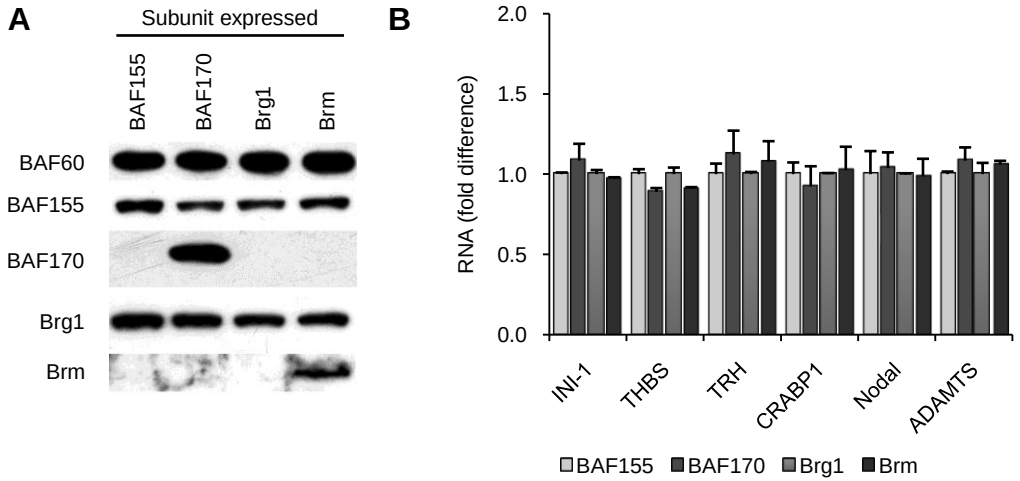


Supplementary Figure 1. Characterization of R201 and R218 cells (**A**) R1 ES cells were infected with lentiviruses expressing Nanog-HA or Nanog-Myc and single cell-cloned to give rise to the cell lines R201 or R218, respectively. Culturing both cell lines in presence of RA or absence of LIF leads to loss of morphology characteristic for mouse ES. (**B**) Changes in gene expression during differentiation RA-induced differentiation. Parental R1 and R218 cells were cultured in presence of RA, and gene expression was measured using RT-qPCR. Indicated messages were normalized using β-actin. Overall, R218 shows a similar, albeit slower repression of the pluripotency marker Oct4 as the parental cell line R1. Induction of differentiation markers HoxA1 and Pax6 is also comparable. R201 has very similar expression patterns compared to R218 (not shown).



Supplementary Figure 2. Flag Western Blot of SWI/SNF preparations.
SWI/SNF was purified and separated by SDS PAGE as described in figure 1C. Western Blot was performed using an antibody directed to the Flag epitope. The asterisk indicates a common contaminating band occurring on Flag Western Blots performed with Flag-immunopurified preparations.



Supplementary Figure 3. Forced expression of BAF170 and Brm in ESCs. (**A**) Protein expression in cell lines stably expressing specific subunits. R201 cells were infected with lentiviruses coding for indicated subunits, and selected with puromycin. Cell lysates were prepared, resolved by SDS-Page and Western Blotting was performed for the indicated subunits. (**B**) Quantification of target gene expression. RNA was extracted from cells and measured by quantitative RT-PCR and normalized using β-actin. Changes in RNA level were calculated by normalizing the values from the BAF170-overexpressing cell line to the BAF155-expressing, and values from Brm to Brg1.