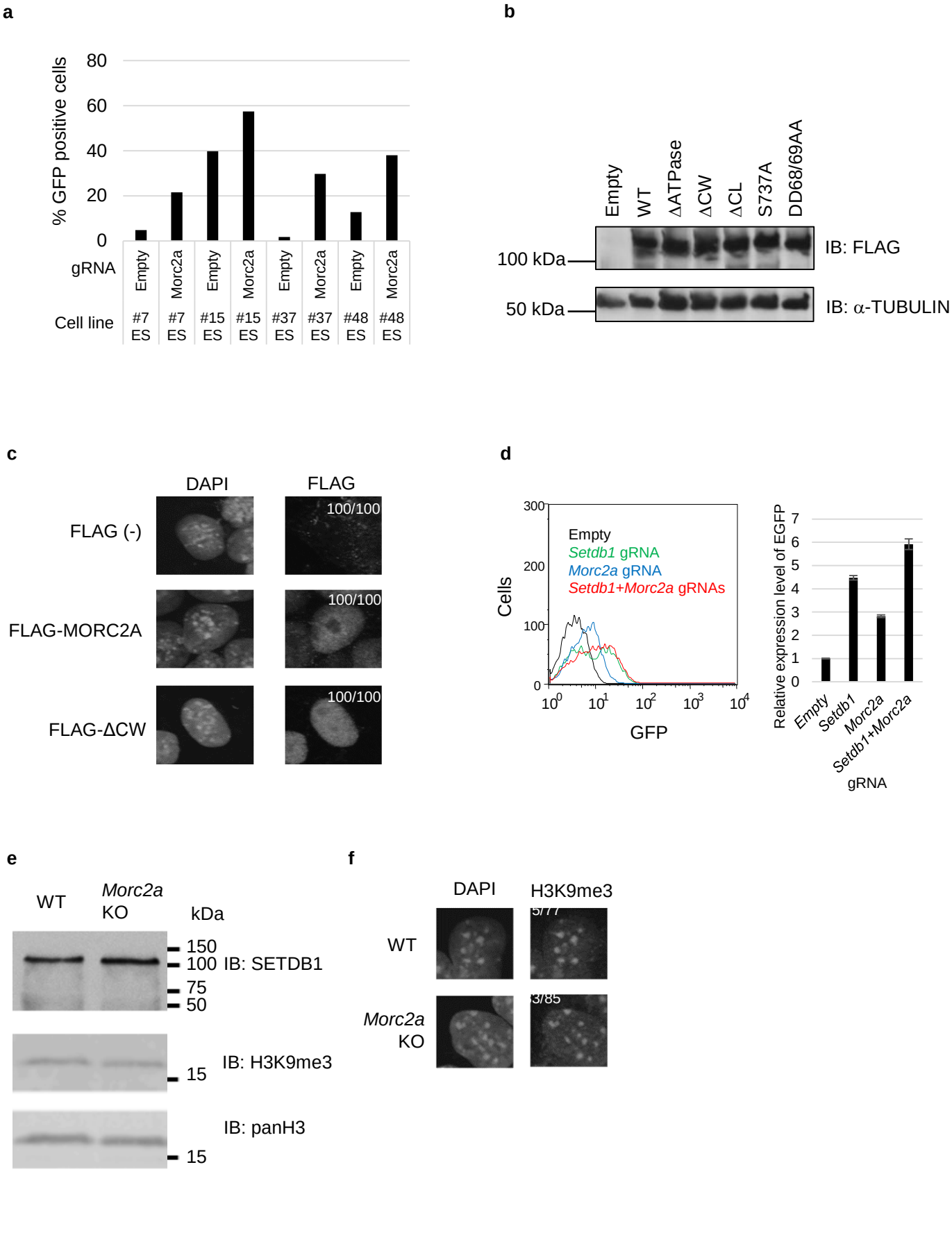
# Fukuda_Fig_S3



**Supplemental Figure 3. Characterization of *Morc2a* KO mESCs containing MSCV-GFP reporter provirus.** (a) Enhancement of proviral GFP expression by the transfection of *Morc2a* gRNA plasmid in different mES cell lines. Proviral GFP expression was analyzed by flow cytometry at day 5 after gRNA transfection. (b) Western blotting analysis of expression of *Morc2a* transgene. (c) Cellular localization of MORC2A analyzed by immunofluorescent using anti-FLAG antibody in mESCs stably expressing FLAG-tagged MORC2A. Localization of WT and DCW mutant MORC2A were analyzed in 100 interphase cells, and all cells showed nuclear localization of WT and DCW mutant MORC2A. (d) Co-transfection of *Setdb1* and *Morc2a* gRNA plamids in Clone 7. Proviral GFP expression was analyzed by flow cytometry (left) and RT-qPCR (right) at 5 days after the transfection. mRNA levels were normalized to *Hprt* and relative to control sample. Data represent mean ±SE (n = 3). (e) Western blotting analysis of SETDB1 and H3K9me3 in WT and *Morc2a* KO mESCs. (f) Distribution of H3K9me3 in nucleus from WT and *Morc2a* KO interphase cells analyzed by immunofluorescence. H3K9me3 foci was found in DAPI dense region in the majority of analyzed cells (75/77 of WT cells and 83/85 of *Morc2a* KO cells).