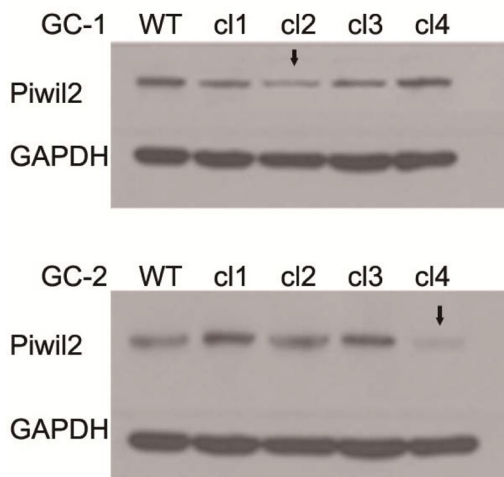
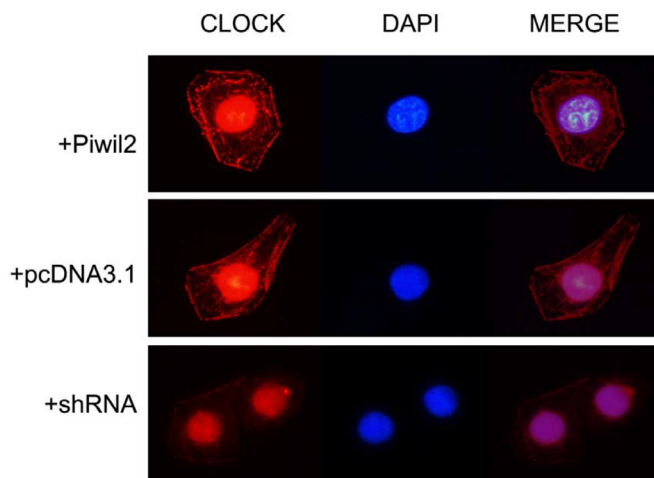


Cancer/testis antigen PIWIL2 suppresses circadian rhythms by regulating the stability and activity of BMAL1 and CLOCK

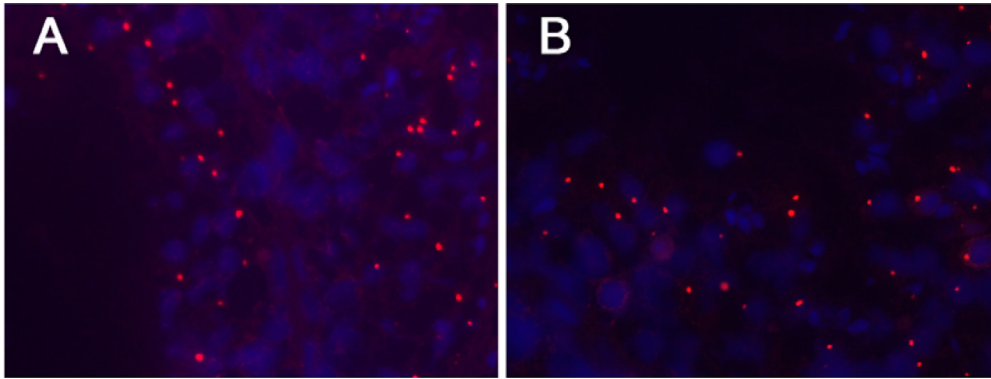
SUPPLEMENTARY MATERIALS



Supplementary Figure 1: Establishment of Piwil2 knocked-down stable cell lines. GC-1 and GC-2 cells were transfected with shPiwil2 plasmids and then selected with Hygromycin B (0.250 mg/ml for GC-1 and 0.350 mg/ml for GC-2, respectively). Hygromycin B resistant clones were appraised with western blotting analysis with anti-Piwil2 antibody. Black arrows indicate clones that expressed the lowest level of Piwil2 and were chosen for followed experiments.



Supplementary Figure 2: Knockdown of PIWIL2 down-regulates CLOCK expression mostly in the cytoplasm.



Supplementary Figure 3: Fluorescent immunohistochemistry (IHC) showed expression of MVH in mouse testis injected with *Piwil2*-specific shRNA vectors (A) or empty vectors (B).