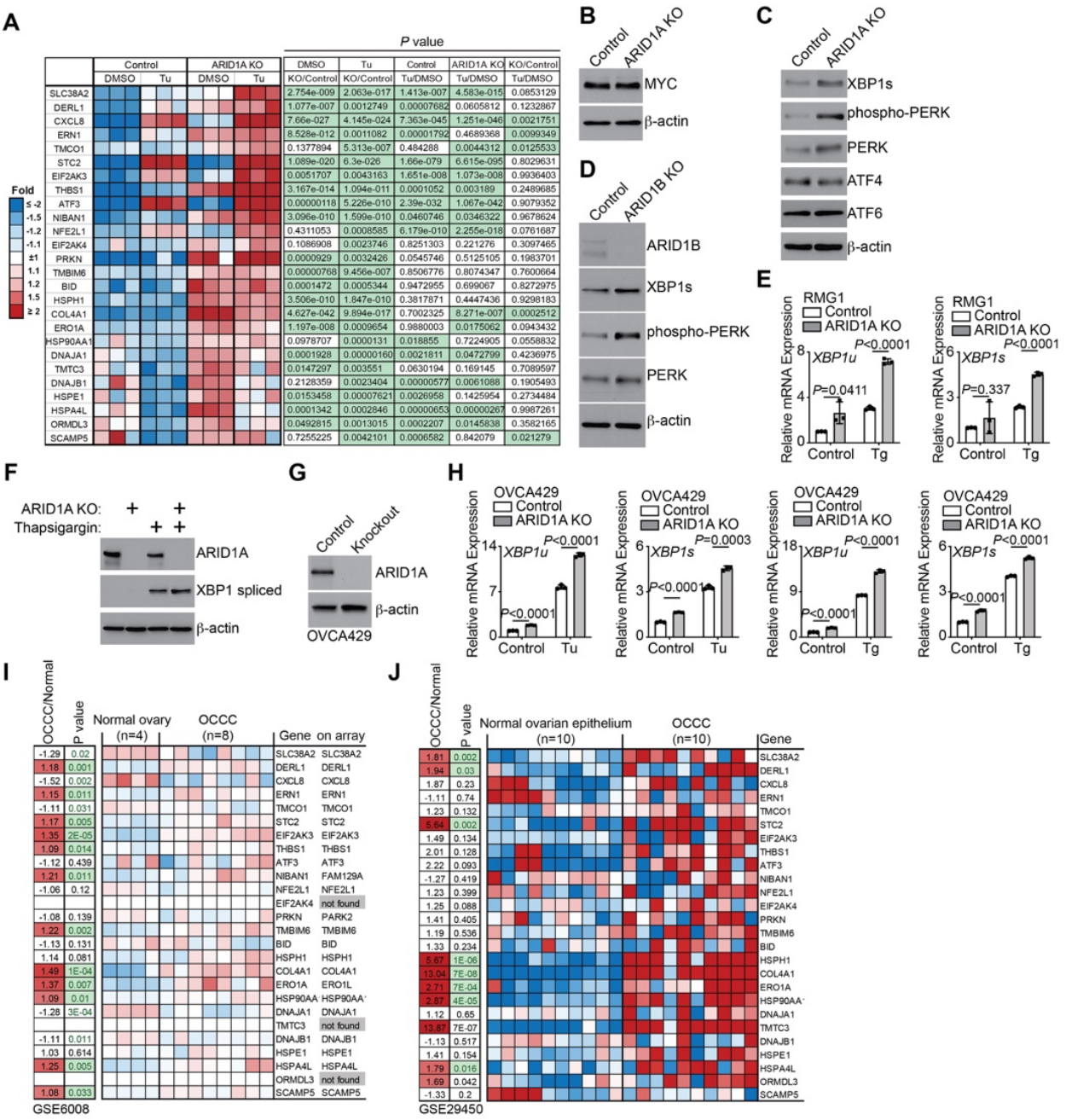

Supplementary Figure 1: ARID1A regulates the IRE1α/XBP1 pathway. (**A**) Heatmap of the list of 26 direct ARID1A target genes identified in the ER stress pathway as differentially expressed between ARID1A knockout and control RMG1 cells treated with Tunicamycin. Heatmap is shown for all conditions, including cells treated with vehicle control. (**B**) Expression of MYC and a loading control β-actin in control and *ARID1A* knockout RMG1 cells was determined by immunoblot. (**C**) Expression of the indicated markers of ER stress response pathways in control and ARID1A knockout RMG1 cells was determined by immunoblot. (**D**) Expression of the indicated markers of ER stress response pathways in control and ARID1B knockout RMG1 cells was determined by immunoblot. (**E**) Control and *ARID1A* knockout RMG1 cells were treated with 2.5 μM thapsigargin or vehicle controls for 4 hours. Expression of both unspliced *XBP1* (*XBP1u*) and spliced *XBP1* (*XBP1s*) was determined by RT-qPCR analysis. n = 3 biologically independent experiments. (**F**) Controls and *ARID1A* knockout RMG1 cells were

treated with 2.5 μM thapsigargin or vehicle controls for 4 hours. Expression of ARID1A, spliced XBP1 and a loading control β-actin were determined by immunoblot. (**H**) Expression of ARID1A and a loading control β-actin in control and *ARID1A* knockout OVCA429 cells were determined by immunoblot. (**H**) Control and ARID1A knockout OVCA429 cells were treated with vehicle control, 5 μg/mL tunicamycin, or 2.5 μM thapsigargin for 4 hours. Expression of both unspliced *XBP1* (*XBP1u*) and spliced *XBP1* (*XBP1s*) was determined by RT-qPCR analysis. n = 3 biologically independent experiments. (**I-J**) Heatmap of the list of 26 direct ARID1A target genes identified in the ER stress pathway in two public datasets with the indicated GEO access numbers. *P* values were calculated using two-tailed Student's *t*-test. Error bars represent mean with SD.