

5' RACE of Melanoma Cytoplasmic RNA

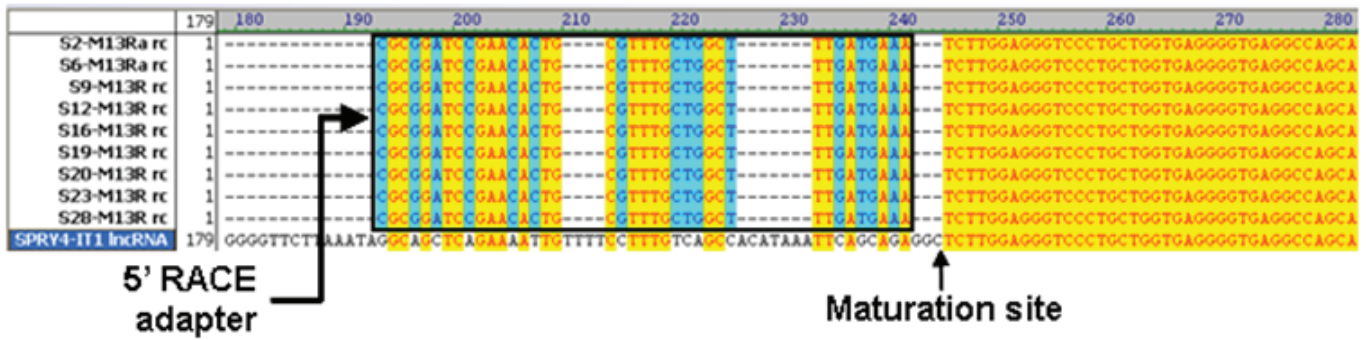


Figure S1. 5' RACE Analysis of SPRY4-IT1 in the Cytoplasm
The 5' RACE adapter and SPRY4-IT1 maturation site are indicated.

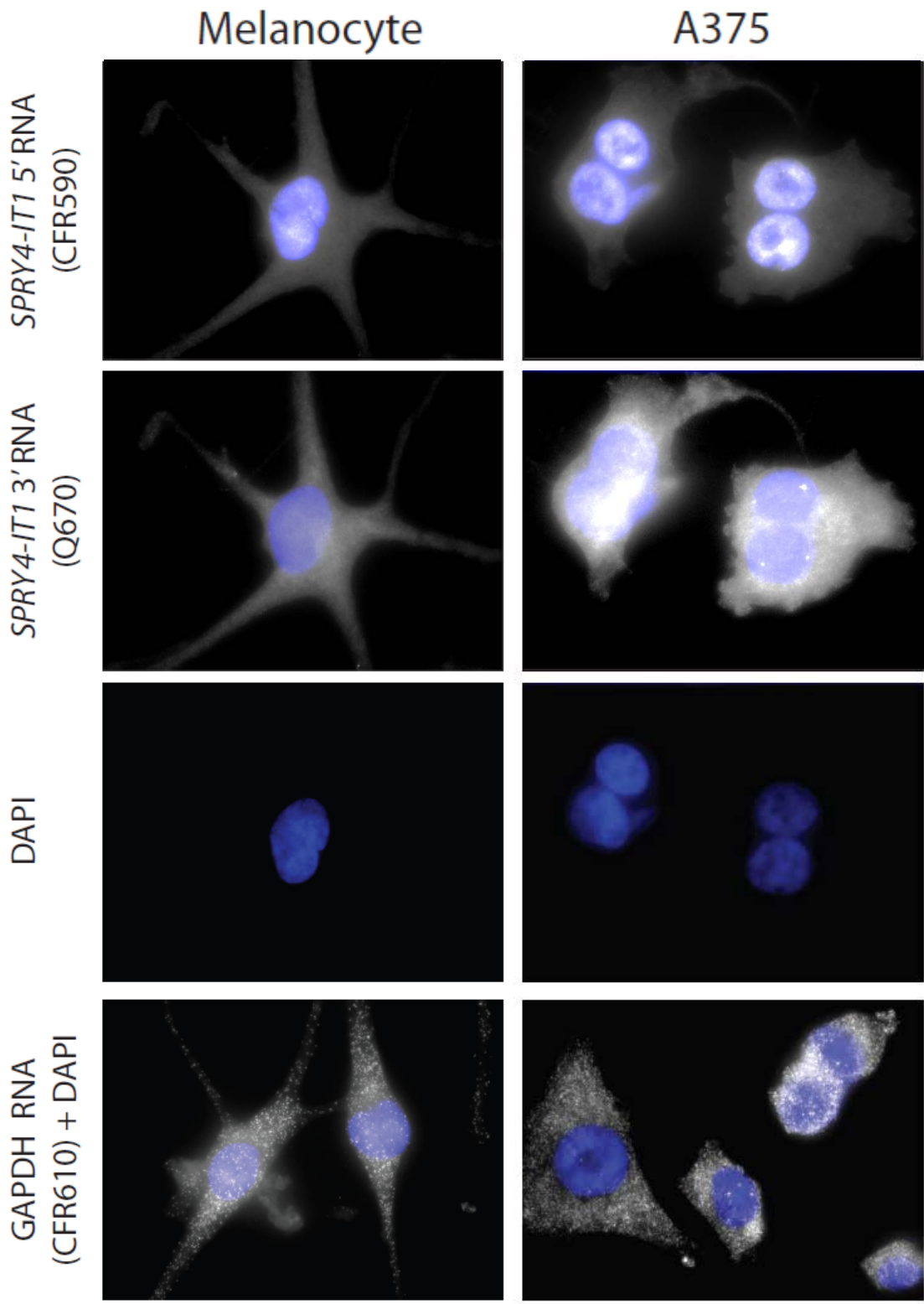


Figure S2. RNA-FISH Labeling Demonstrates the Existence of Nuclear and Cytoplasmic Forms of the SPRY4-IT1 Transcript
 5' and 3' probes reveal nuclear and cytoplasmic expression, respectively, in melanocyte and A375 melanoma cells. GAPDH was probed as a control.

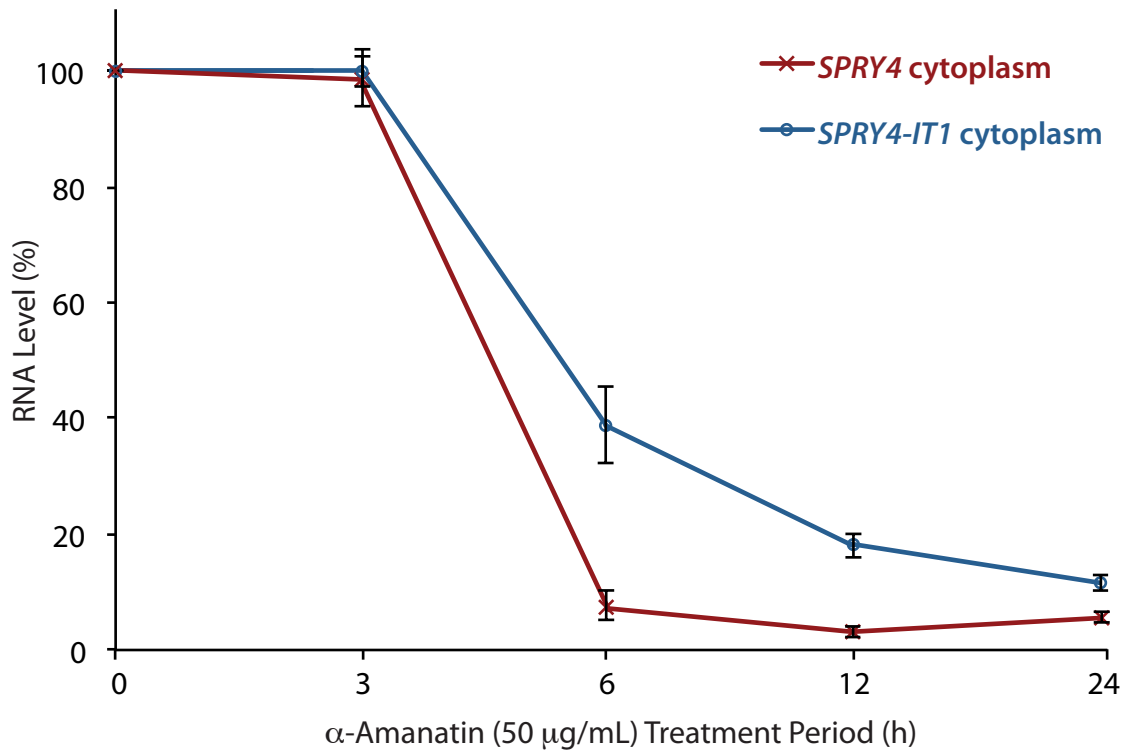
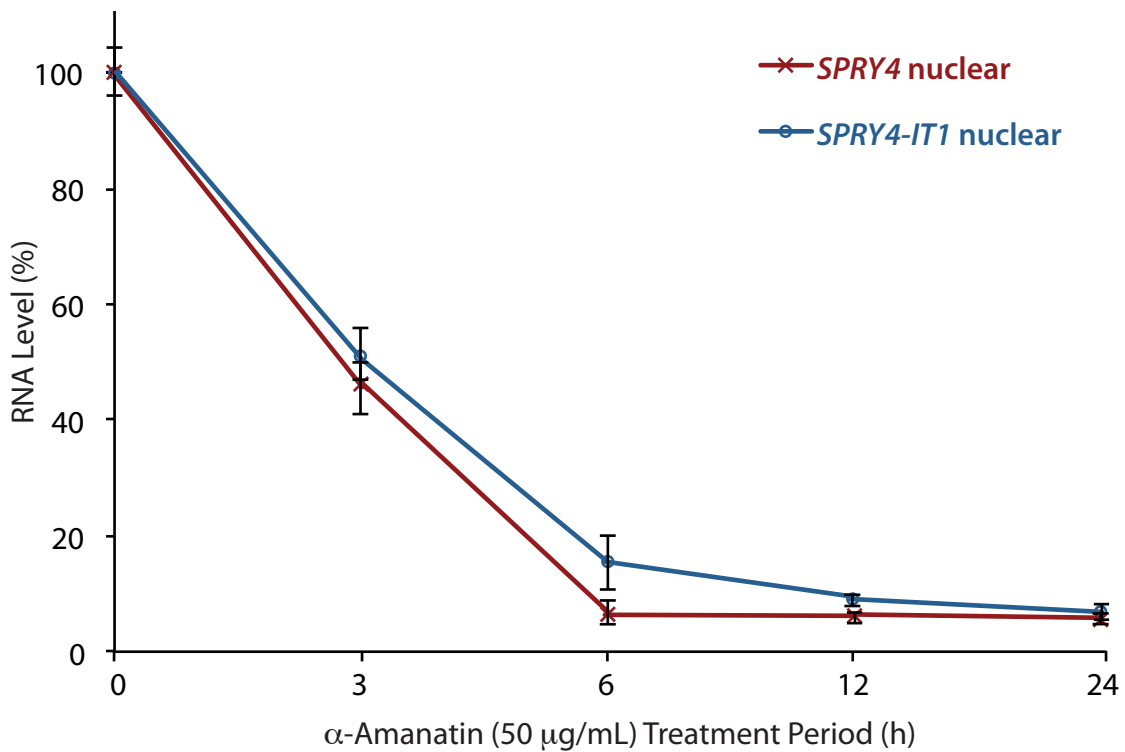
A**B**

Figure S3. Relative Stability of SPRY4 and SPRY4-IT1 in Melanocytes

qRT-PCR analysis of SPRY4-IT1 and SPRY4 levels in the (A) cytoplasm and (B) nucleus of A375 cells treated with the RNA polymerase II inhibitor α -amanitin for up to 24 h. SPRY4-IT1 decays more rapidly than its host gene SPRY4; at 6 h, ~80% of SPRY4-IT1 transcripts have decayed compared with ~40% of SPRY4 transcripts.

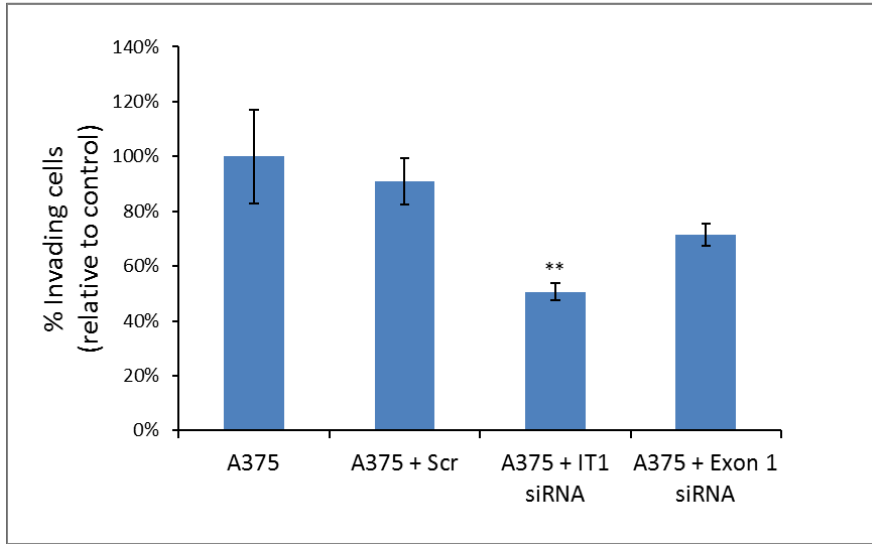
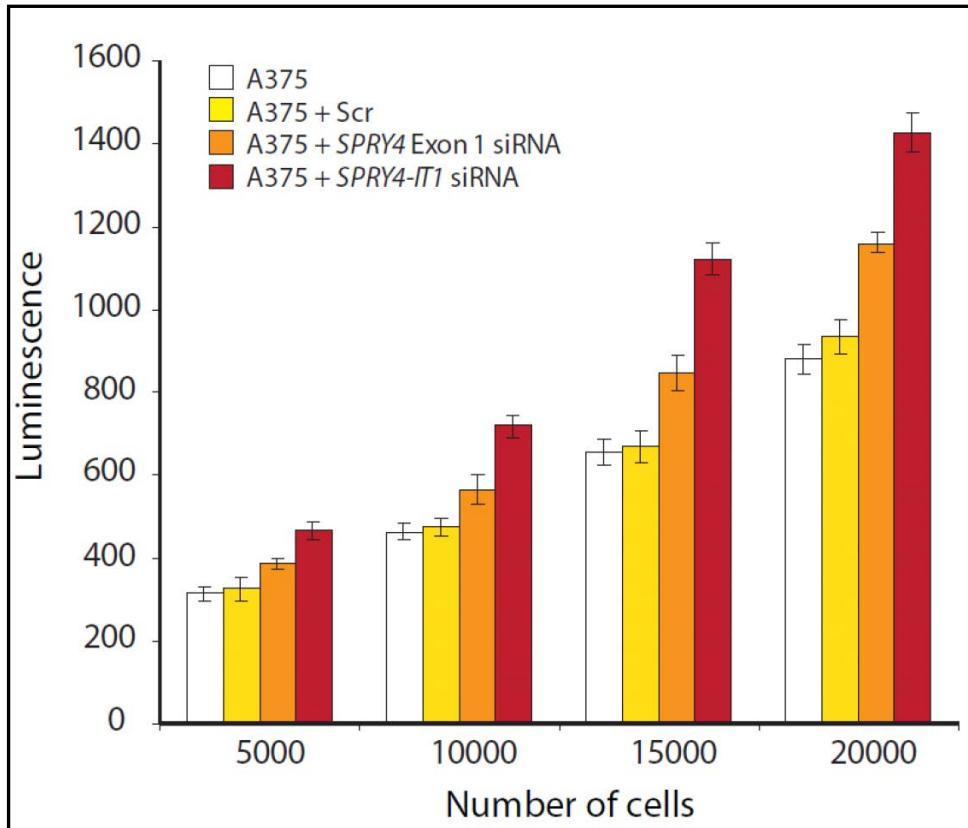
A**B**

Figure S4. Effects of siRNA Targeting *SPRY4-IT1* and *SPRY4* Exon 1 on Cell Invasion and Apoptosis in A375 Cells
(A) Invasion efficiency and (B) apoptosis of A375 cells subjected to *SPRY4-IT1* and *SPRY4* exon 1 knockdown. Apoptosis was measured as an increase in caspase 3 activity in a luminescence-based assay.

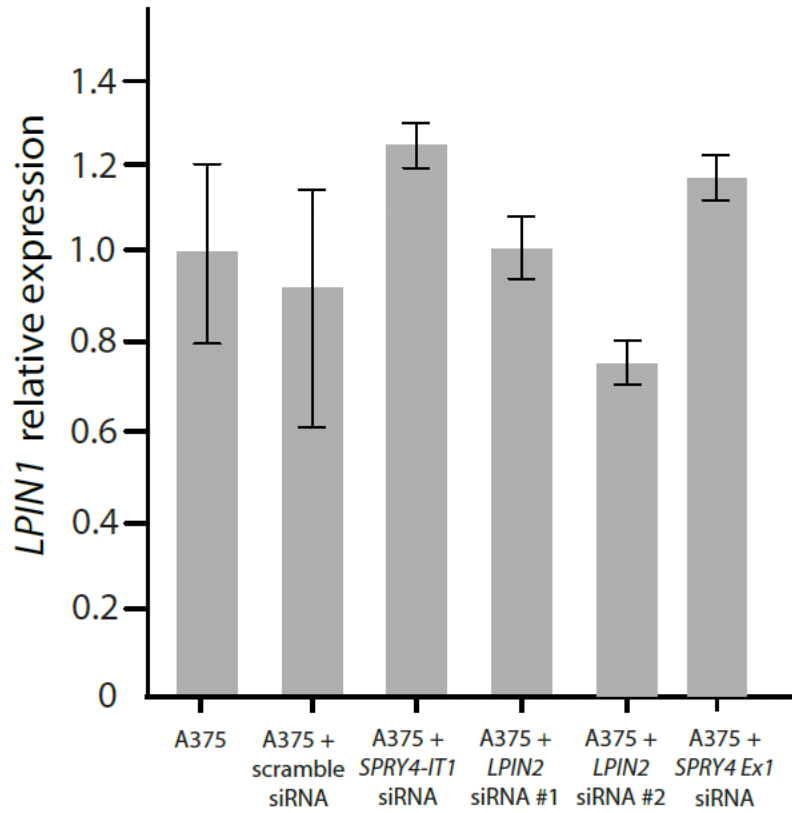


Figure S5. Lipin1 Relative Expression in SPRY4-IT1, SPRY4 Exon1, and Lipin2 Knockdown Cells
 Knock-down of SPRY4-IT1, SPRY4 Exon1, and Lipin2, does not show lipin1 expression changes.

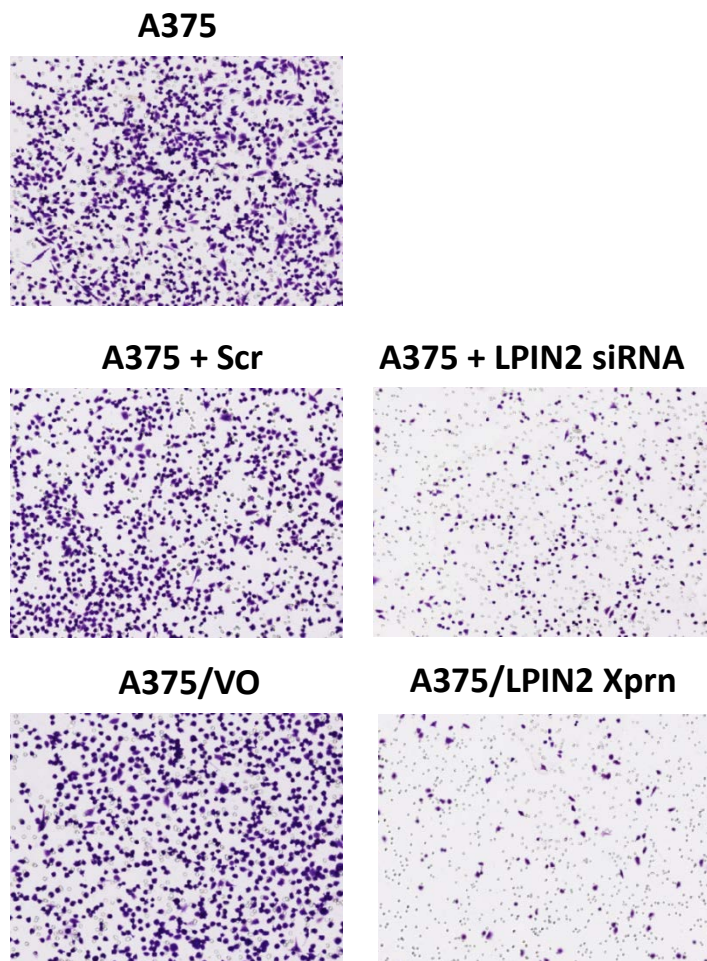
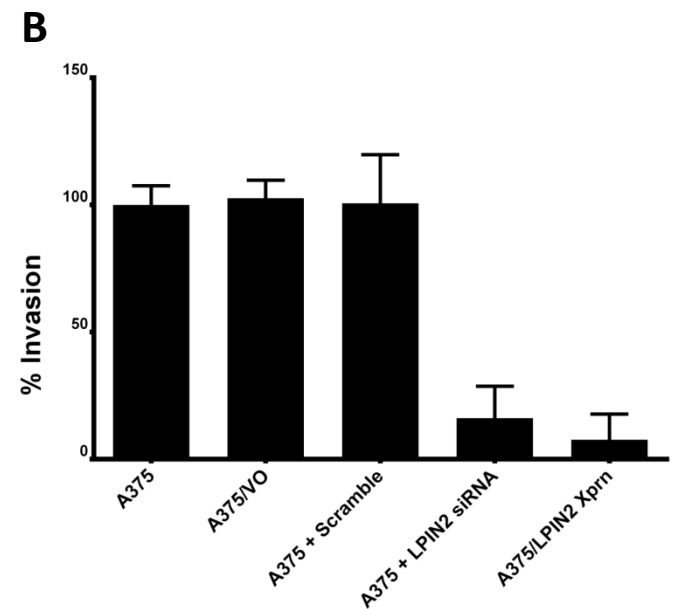
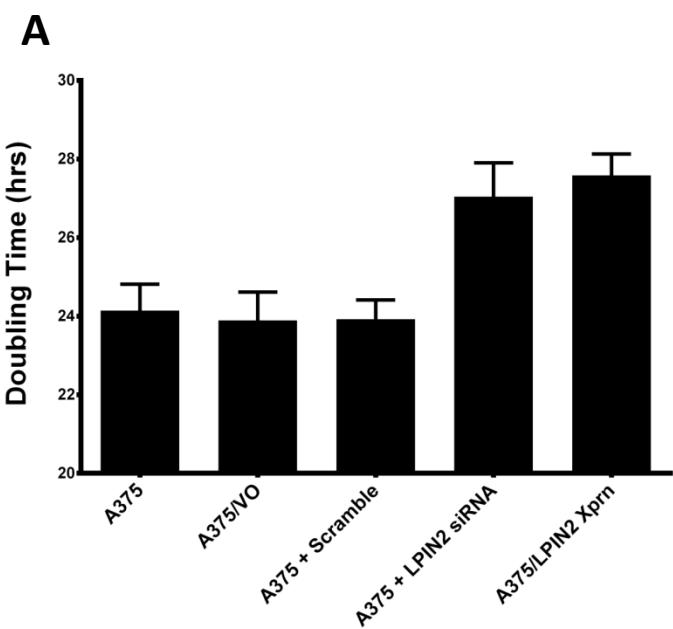


Figure S6. The effect of knock-down and over-expression of lipin 2 on cell growth and invasion in A375 cells

(A) The effect of SPRY4-IT1 knock-down or force-expression on cell growth

(B) The effect of SPRY4-IT1 knock-down or force-expression on cell invasion