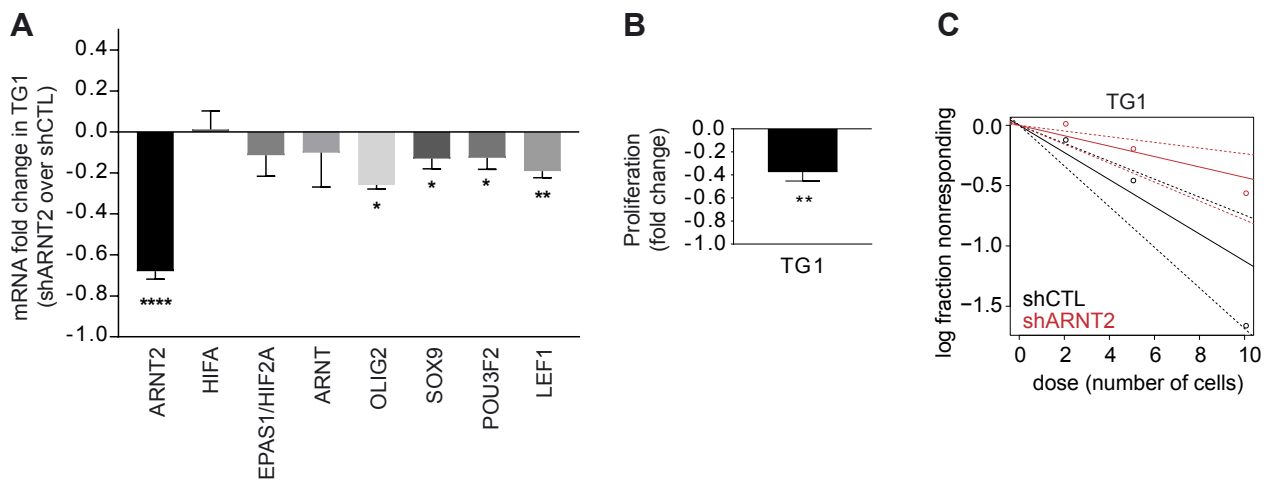




Online Resource 13. Responses of TG1 GBM stem-like cells to ARNT2 down-regulation.

A. Consequences of ARNT2 down-regulation on the expression of HIF family members (HIF1A, HIF2A, ARNT), on components of the tumorigenic signature of glioblastoma cells (OLIG2, SOX9, POU3F2), and on the effector of the Wnt-signaling pathway, LEF1. QPCR assay. Results are presented as fold changes in mRNA levels detected in cells expressing shARNT2 compared to shControl (shCTL). * $p < 0.05$, ** $p < 0.01$, **** $p < 0.0001$, unpaired t-test with Welch's correction, mean $\pm$ SD, $n = 3$.

B. Down-regulation of ARNT2 is accompanied with decreased cell proliferation. shARNT2 versus shControl. ** $p < 0.01$, unpaired t-test with Welch's correction, mean $\pm$ SD, $n = 3$ independent biological samples.

C. Knocking down ARNT2 impairs the sphere-forming capability of TG1. Extreme limiting dilution assays. Sphere formation was scored 7 days after seeding. Frequency of sphere-forming cells: TG1 shCTL = $1/8.88$ (lower 13.4, upper 5.93); TG1 shARNT2 $1/23.17$ (lower 42.5, upper 12.75), $n = 16$, $p = 8.12 \times 10^{-3}$.

Changes in chromatin state reveal ARNT2 at a node of a tumorigenic transcription factor signature driving glioblastoma cell aggressiveness.

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