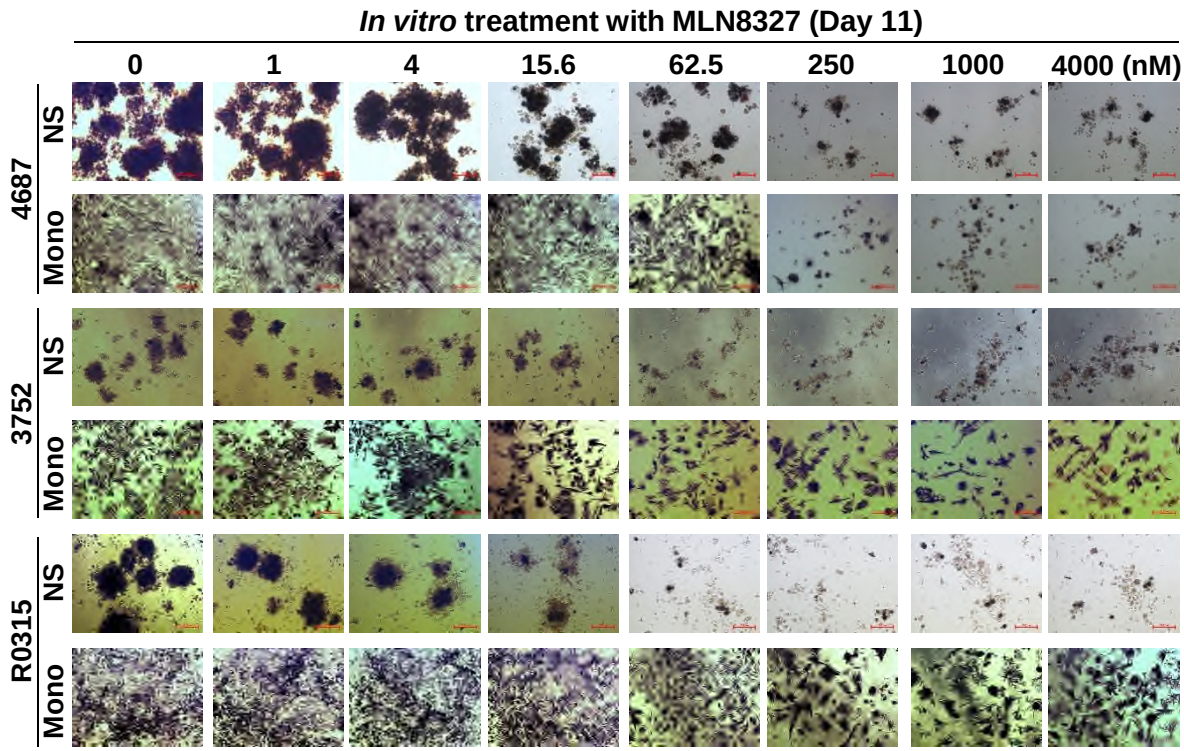

Figure S1. Anti-proliferative effects of MLN8237 on pGBM cell lines. Paired monolayer (***Mono***) and neurosphere (***NS***) of IC-4687GBM, IC-3752GBM and IC-R0315GBM were seeded at 2,000 cells/well and exposed to MLN8237 (1 - 4,000 nM) and anti-proliferative effect was assessed by staining with 250 µg/mL of MTT for 4 hrs at day 11. Viable cells were stained with dark colored intracellular crystal. (Bar=100 µm)

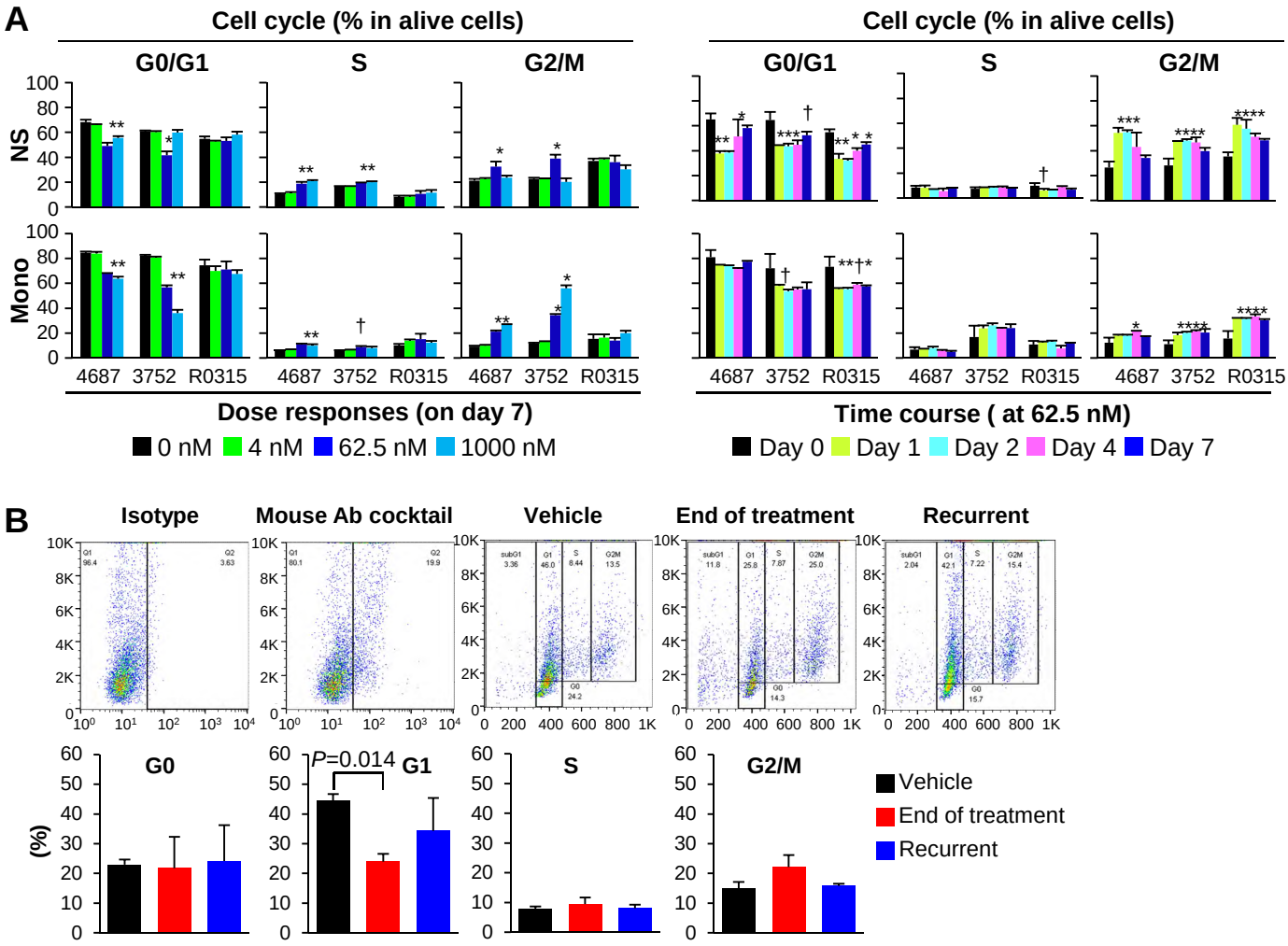

Figure S2. FCM analysis of cell cycle distribution *in vitro* and *in vivo*.

A. *In vitro* analysis was performed in paired monolayer (***Mono***) and neurosphere (***NS***) cells of IC-4687GBM, IC-3752GBM and IC-R0315GBM. Both dose-responses (on day 7) (*left panel*) and time-course change (at 62.5 nM) (*right panel*) were examined and presented as percentages of G_0/G_1, S and G_2/M phase in alive cells. $^{\dagger}P<0.05$, $^{*}P<0.01$ compared to the untreated (0 nM) cells.

B. *In vivo* changes of cell cycle distribution were analyzed in IC-4687GBM cells treated by MLN8237 (30 mg/kg/day for 12 days by gavage). In addition to the recurrent tumors (***Recurrent)*** harvested when the mice became moribund in the survival group, a separate group of tumors harvested 1 hr post the last treatment of MLN8237 (30 mg/kg/day for 12 days by gavage) (***End of Treatment*** samples) were also included. DNA/RNA were stained with Hoechst 33342/Pyronin Y followed by mouse antibody cocktail staining (to gate out mouse cells) and analyzed by FCM. Representative DNA/RNA profiles (*upper panel*) and percentage of G_0, G_1, S and G_2/M phase in cell cycle (*lower panel*) were presented.

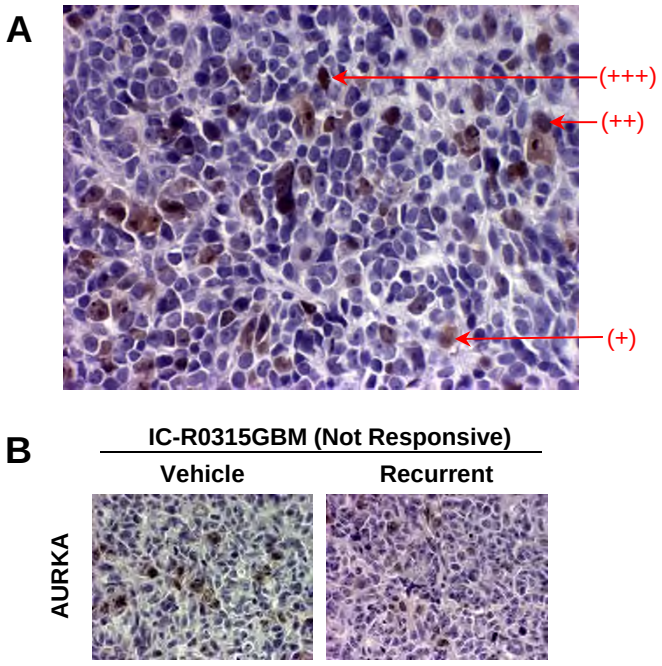

Figure S3. Representative images of IHC of ARUKA. A. Representative images of AURKA in IC-4687GBM xenograft showing the cells with different staining intensity (*arrow*) (Magnification: x40). **B.** AURKA protein expression in IC-R0315GBM in the vehicle treated control and in the recurrent tumor (magnification: x40).