

Supplementary Materials: Glioblastoma-Targeted Exosome as Drug-Carrier for Enhanced Theranostic Agent by Exosome Targeting Effect

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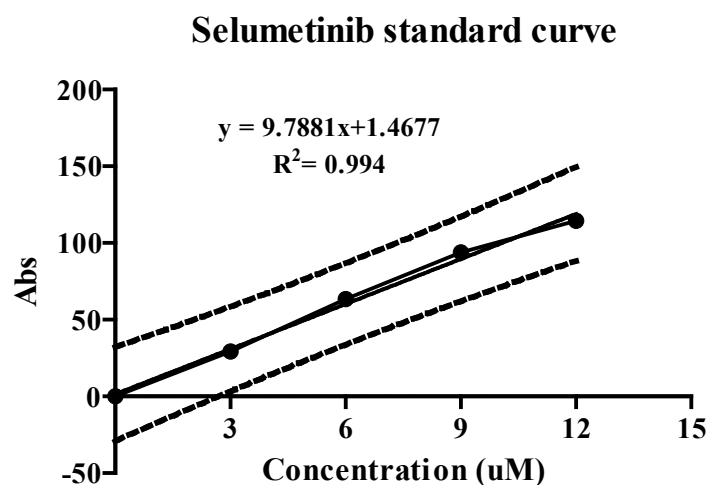


Figure S1. Selumetinib standard curve. To calculate the loading efficiency of selumetinib into the exosomes, we observed selumetinib standard curve using UV-vis spectrometer.

Fluorescent dye (DiI) labeling efficiency

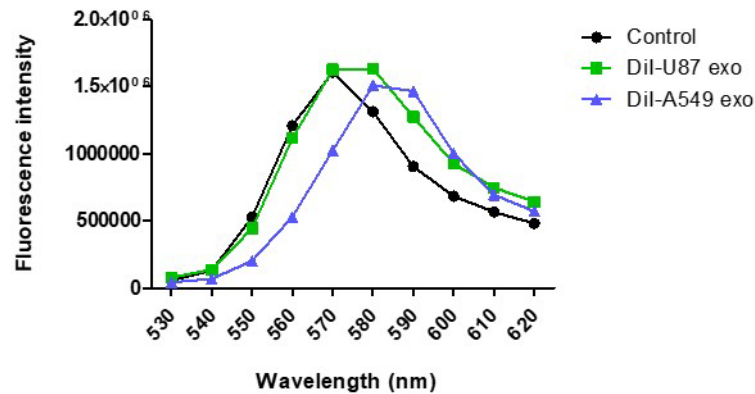


Figure S2. Fluorescent dye (DiI) labeling efficiency to U87 exo and A549 exo. The fluorescent dye was labeled to exosome to tracking the homing effect of exosomes and an excess of the dye was eliminated by exosome spin column (MW 3000). The fluorescent dye labeling efficiency was measured by UV-Spectrometer. Control was DiI in methanol following the protocol of manufacture.

U87-Selu exo stability

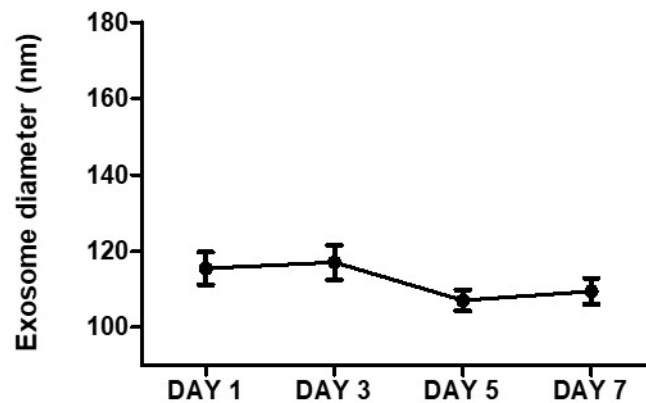


Figure S3. Stability of U87-Selu exo in physiological pH (pH = 7.4) via exosome diameter. U87-Selu exo were incubated with PBS (pH=7.4) and 37 °C for 1, 3, 5 and 7 days. Through the NTA results, the diameter of exosomes were stable during 7 days ranging from 108nm to 122nm.

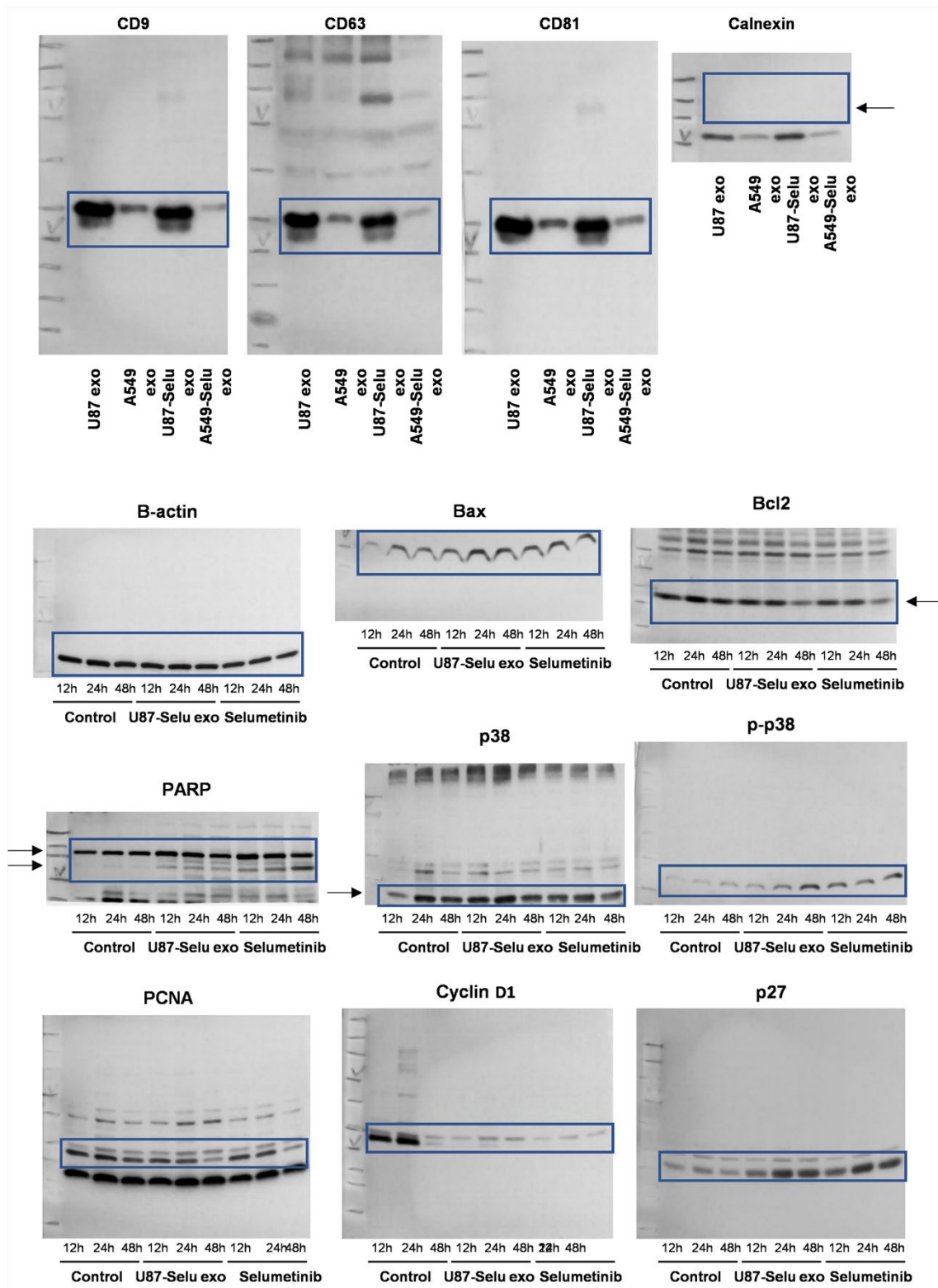


Figure S4. Western Blot full band of exosomal markers, non-exosomal marker for U87 exo, A549 exo, U87-Selu exo and A549-Selu exo and apoptosis, proliferation markers treated with non-treat control, U87-Selu exo (100 μ g/ μ l) and Selumetinib (100 μ g/ μ l) for 12hr, 24hr, 48hr.

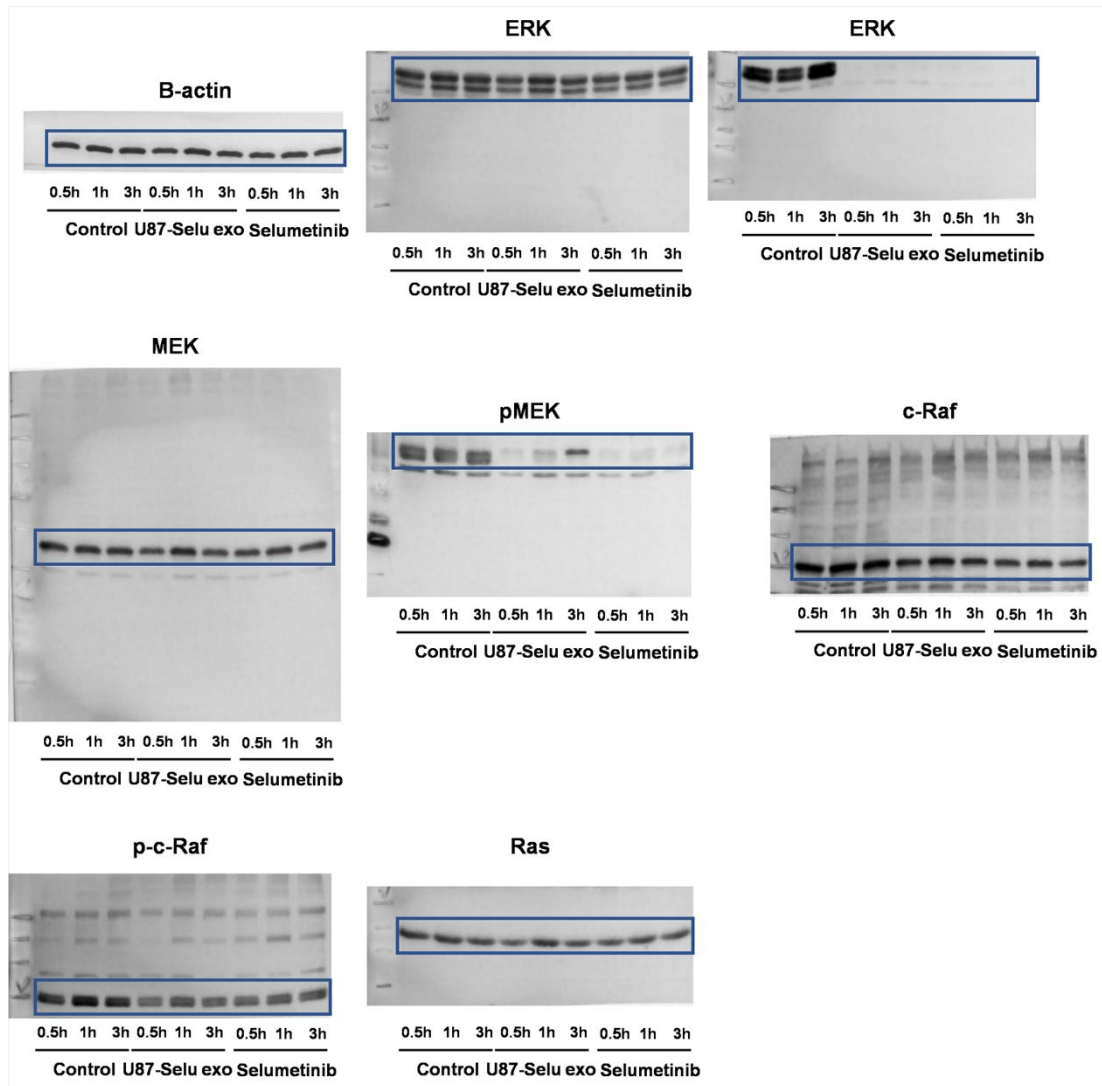


Figure S5. Western blot full band of mechanism markers treated with non-treated control, U87-Selu exo (100 μ g/ μ l) and Selumetinib (100 μ g/ μ l) for 12hr, 24hr, 48hr.