Artemisinin Improved Neuronal Functions in Alzheimer's Disease Animal Model 3xtg Mice and Neuronal Cells via Stimulating the ERK/CREB Signaling Pathway

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Supplementary Figure 1. ERK inhibitor PD98059 reverses the protective effect of Artemisinin on ROS and mitochondrial membrane potential (Δψm) in SH-SY5Y cells. (A) Cells pretreated with 25 μM PD98059 (ERK inhibitor) for 60 min were incubated with 4 μM Aβ1-42 in the presence or absence of 12.5μM ART. The mitochondrial membrane potential was reflected by the shift of fluorescence from red to green indicated by JC-1. The fluorescent images represent the intracellular ROS level as determined by the DCFH-DA Reagent. (B) Red to green fluorescence intensity ratio (increase of mitochondrial membrane potential). (C) Quantitation of the percentage of intracellular ROS level. *: Difference between the Aβ1-42 group and WT groups; #: Difference between the Aβ1-42 and other groups; &: Difference between the ART+Aβ1-42 and other groups; ***P<0.001, **P<0.01, ###P<0.001, &P<0.05, &&P<0.01.