

Figure S1. (A) A cresyl violet-stained brain section showing pyramidal neurons in the CA3 region of KA mice. Scale bar = 200 μ m. (B) The number of NeuN-positive cells in the CA3 regions of CTL, KA, KA+M, and M mice (shown as percentage, CTL as 100%). Data are shown as mean \pm SEM. * P < 0.05 versus CTL. # P < 0.05 versus KA.

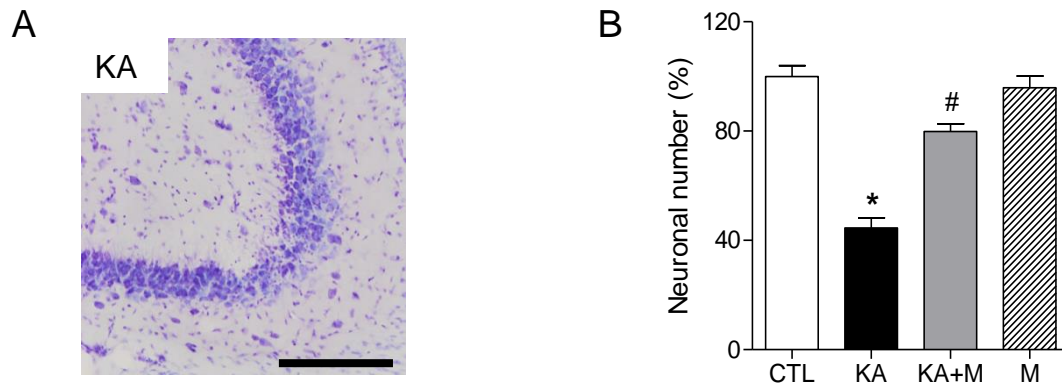


Figure S2. Morphological properties of mitochondria in the CA3 regions of CTL, KA, KA+M, and M mice. (A) Mitochondrial area and perimeter. (B) Mitochondrial number/field and percentage of deformed mitochondria out of total mitochondria analyzed. Data are shown as mean \pm SEM. * $P < 0.05$ versus CTL. # $P < 0.05$ versus KA.

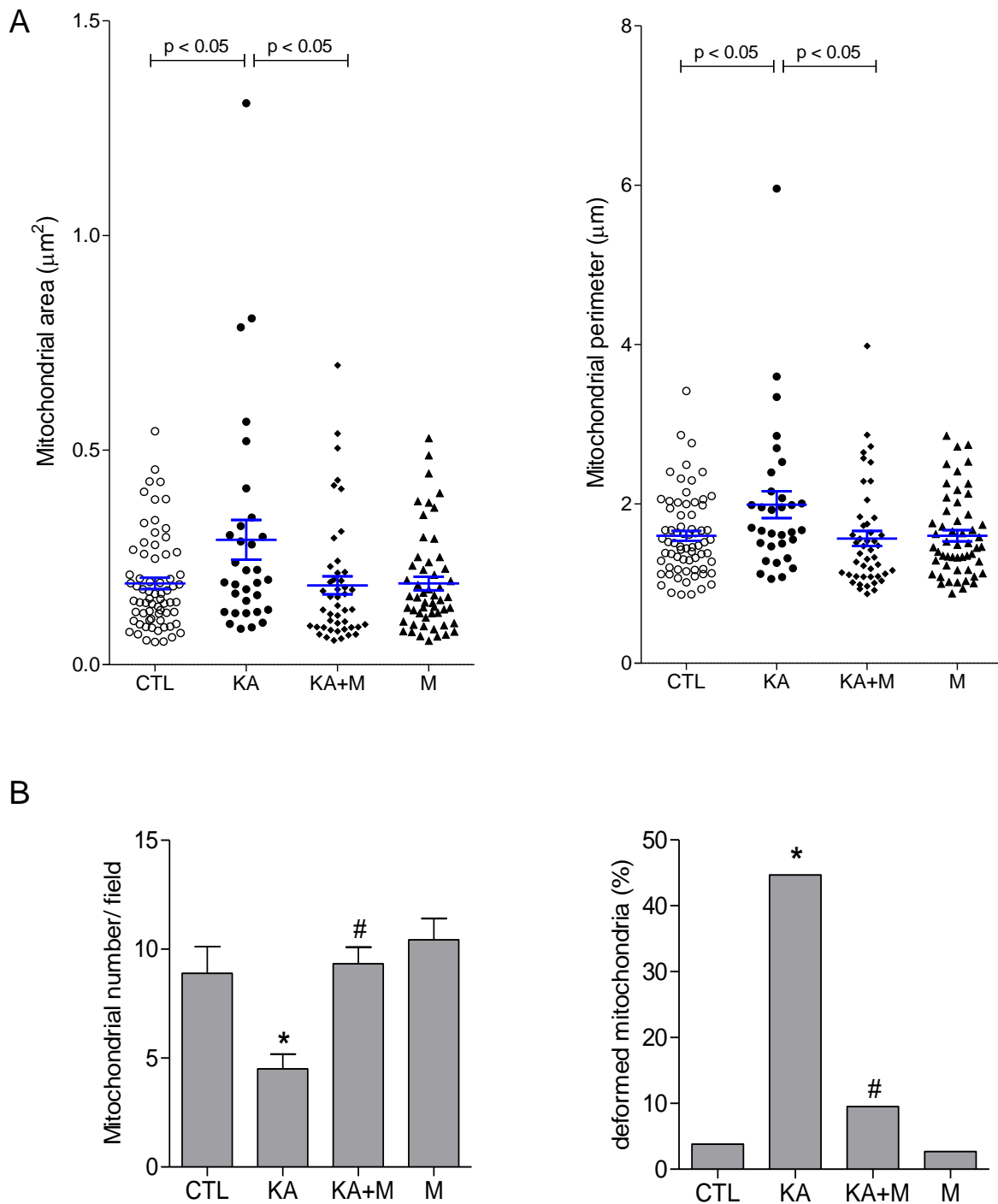


Figure S3. (A) Immunofluorescence images showing the stained cells by antibodies of GABA receptor $\alpha 1$ (red) and p-Drp1 (green) in the CA3 regions of CTL, KA, KA+M, and M mice. Scale bar = 100 μ m. (B) The percentage of p-Drp1 and GABA-positive cells. Data are shown as mean \pm SEM. * P < 0.05 versus CTL. # P < 0.05 versus KA.

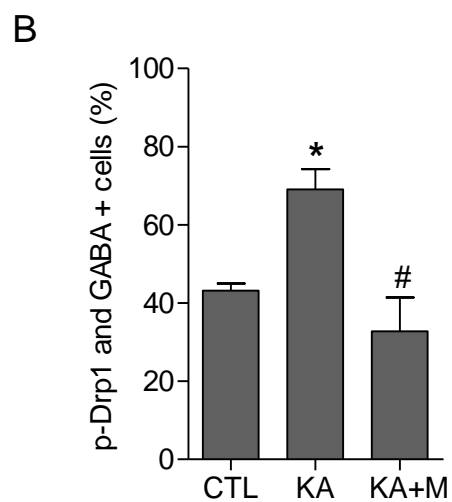
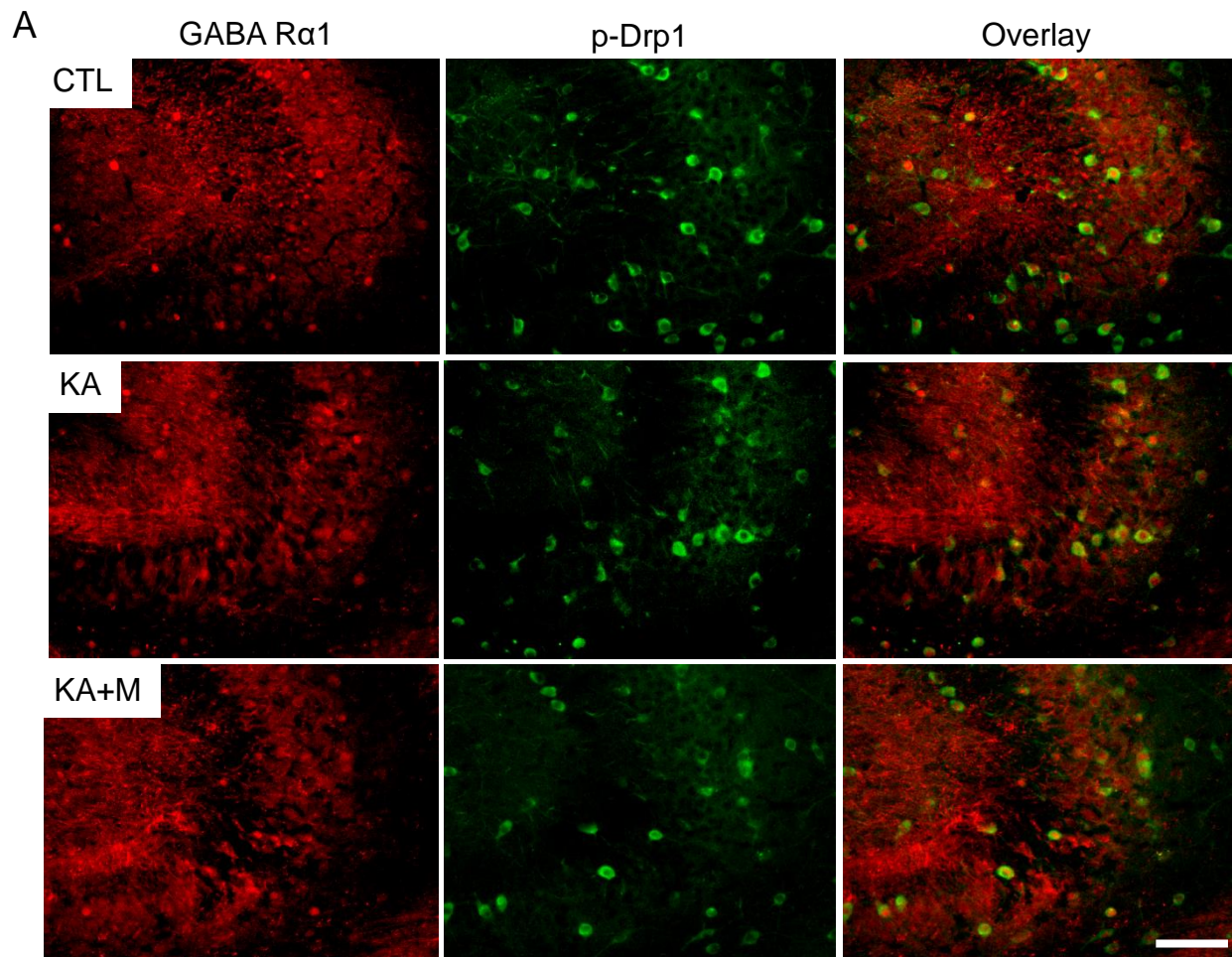


Figure S4. Mdivi-1 effects on mitochondrial OPA1, Mfn2, and CypD expression in the mouse hippocampus 24 h after KA injection. Western blots and quantification of OPA1 (A), Mfn2 (B), and CypD (C) in the hippocampal mitochondrial fractions from CTL, KA, and KA+M mice. Densitometry values were normalized to VDAC1 and expressed as arbitrary units. Data are shown as mean \pm SEM. * $P < 0.05$ versus CTL. # $P < 0.05$ versus KA.

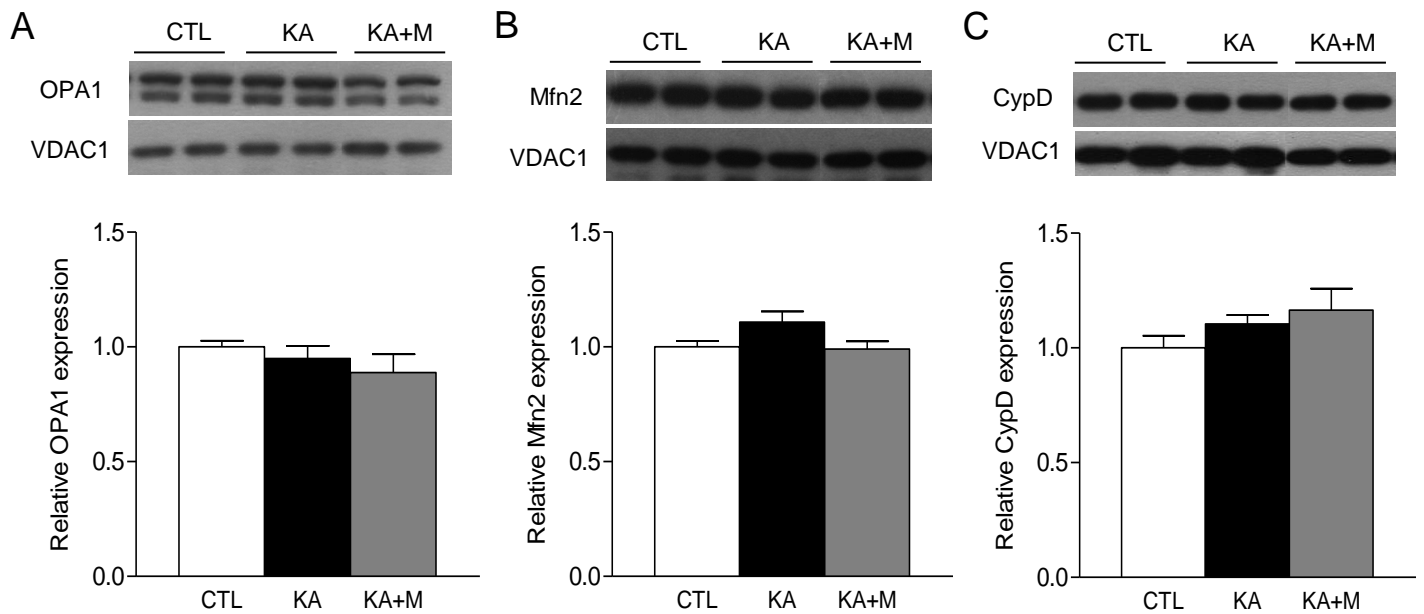


Figure S5. (A) Iba-1 expression levels in the CA3 regions of CTL, KA, KA+M, and M mice. (B) The number of activated microglial cells in the CA3 regions of CTL, KA, KA+M, and M mice (4~5 fields per each brain section). Data are shown as mean \pm SEM. * $P < 0.05$ versus CTL. # $P < 0.05$ versus KA.

