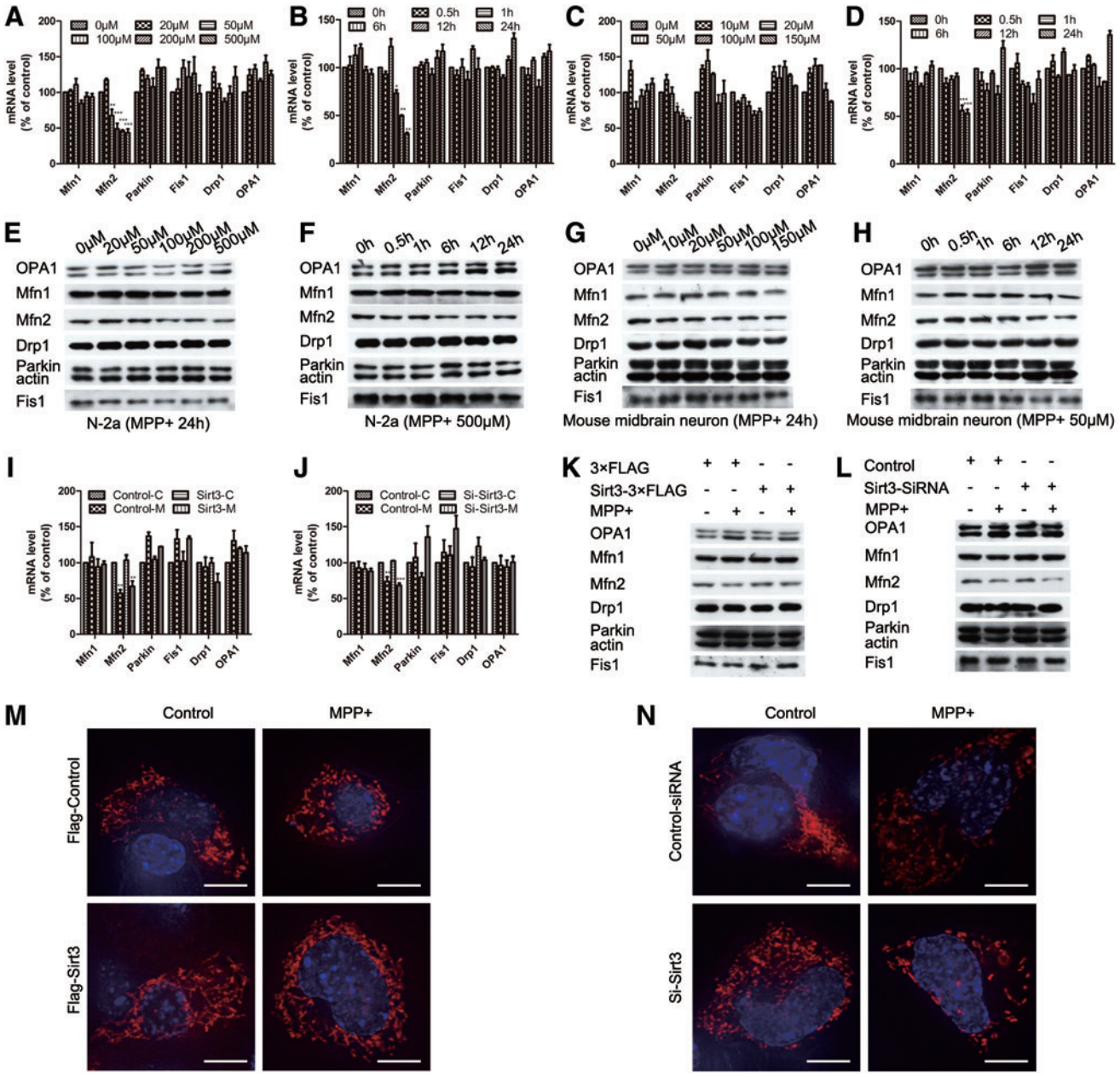

SUPPLEMENTARY FIG. S3. Sirt3 protects against MPP+-induced mitochondrial fusion process inhibition. The mRNA levels of mitochondrial fusion/fission proteins (Mfn1, Mfn2, Parkin, Drp1, Fis1, OPA1) were measured by qPCR in N-2a cells under different concentrations of MPP+ for 24 h **(A)** and with 500 μM MPP+ for different times **(B)**, and in mouse primary midbrain neurons under different concentrations of MPP+ for 24 h **(C)** and with 50 μM MPP+ for different times **(D)**. Quantitative data = mean ± SEM, $n = 3$, $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$, ANOVA with Dunnett test. The protein levels of mitochondrial fusion/fission proteins (Mfn1, Mfn2, Parkin, Drp1, Fis1, OPA1) were measured by Western blotting in N-2a cells under different concentrations of MPP+ for 24 h **(E)** and with 500 μM MPP+ for different times **(F)**, and in mouse primary midbrain neurons under different concentrations of MPP+ for 24 h **(G)** and with 50 μM MPP+ for different times **(H)**. The mRNA levels of mitochondrial fusion/fission proteins (Mfn1, Mfn2, Parkin, Drp1, Fis1, OPA1) were measured in N-2a cells with Sirt3 overexpression **(I)** or knockdown **(J)**. Quantitative data = mean ± SEM, $n = 3$, $^{**}p < 0.01$; $^{***}p < 0.001$, ANOVA with Newman-Keuls test. The protein levels of mitochondrial fusion/fission proteins (Mfn1, Mfn2, Parkin, Drp1, Fis1, OPA1) were measured in N-2a cells with Sirt3 overexpression **(K)** or knockdown **(L)**. The mitochondrial fusion/fission process was measured by live cell imaging in N-2a cells transfected with pDsRed-mito under MPP+ treatment with Sirt3 overexpression **(M)** or knockdown **(N)**. qPCR, quantitative real-time polymerase chain reaction.