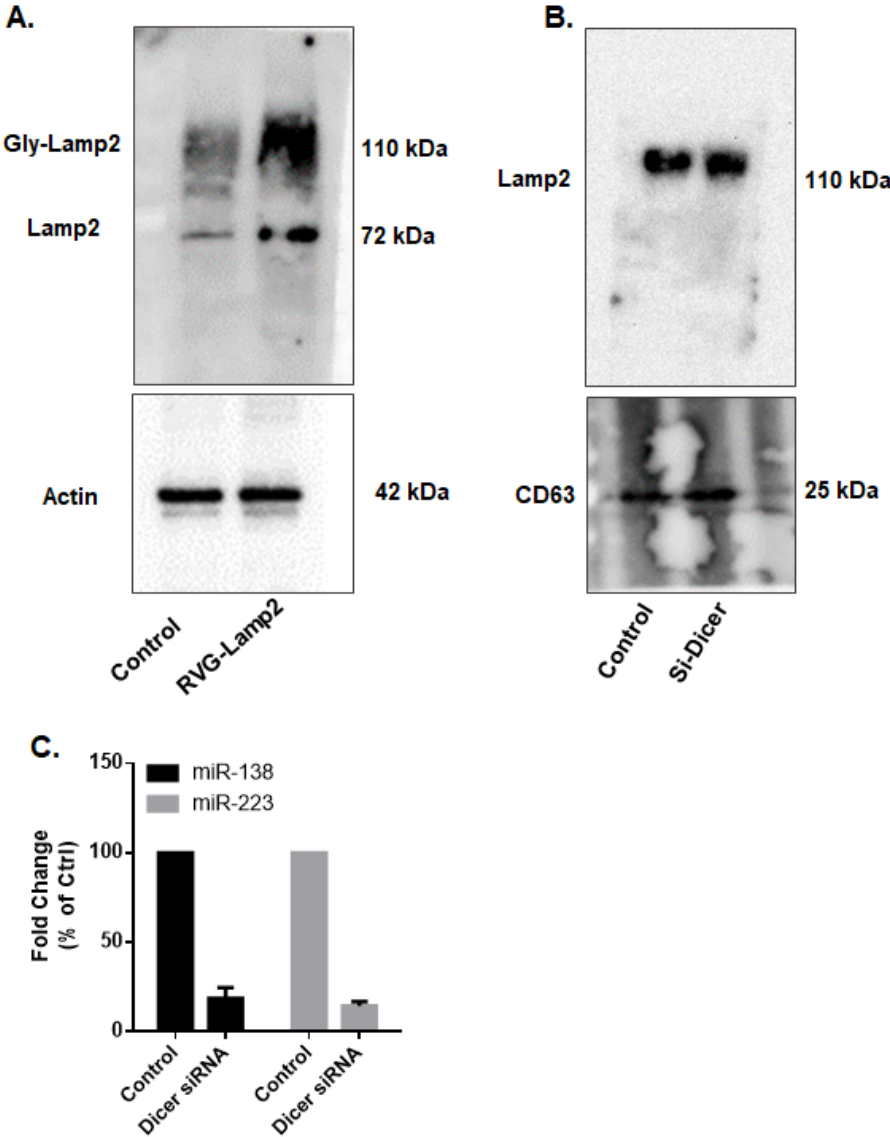
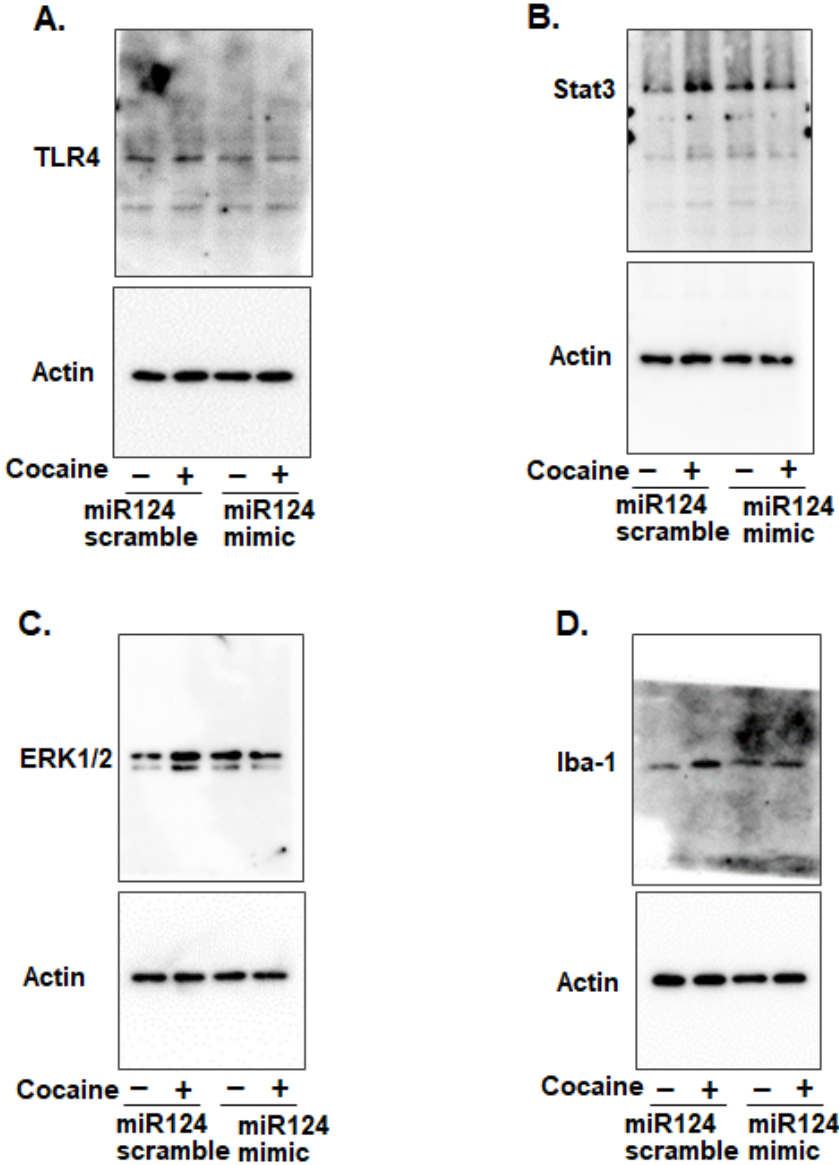


**Supplementary Figure 1**



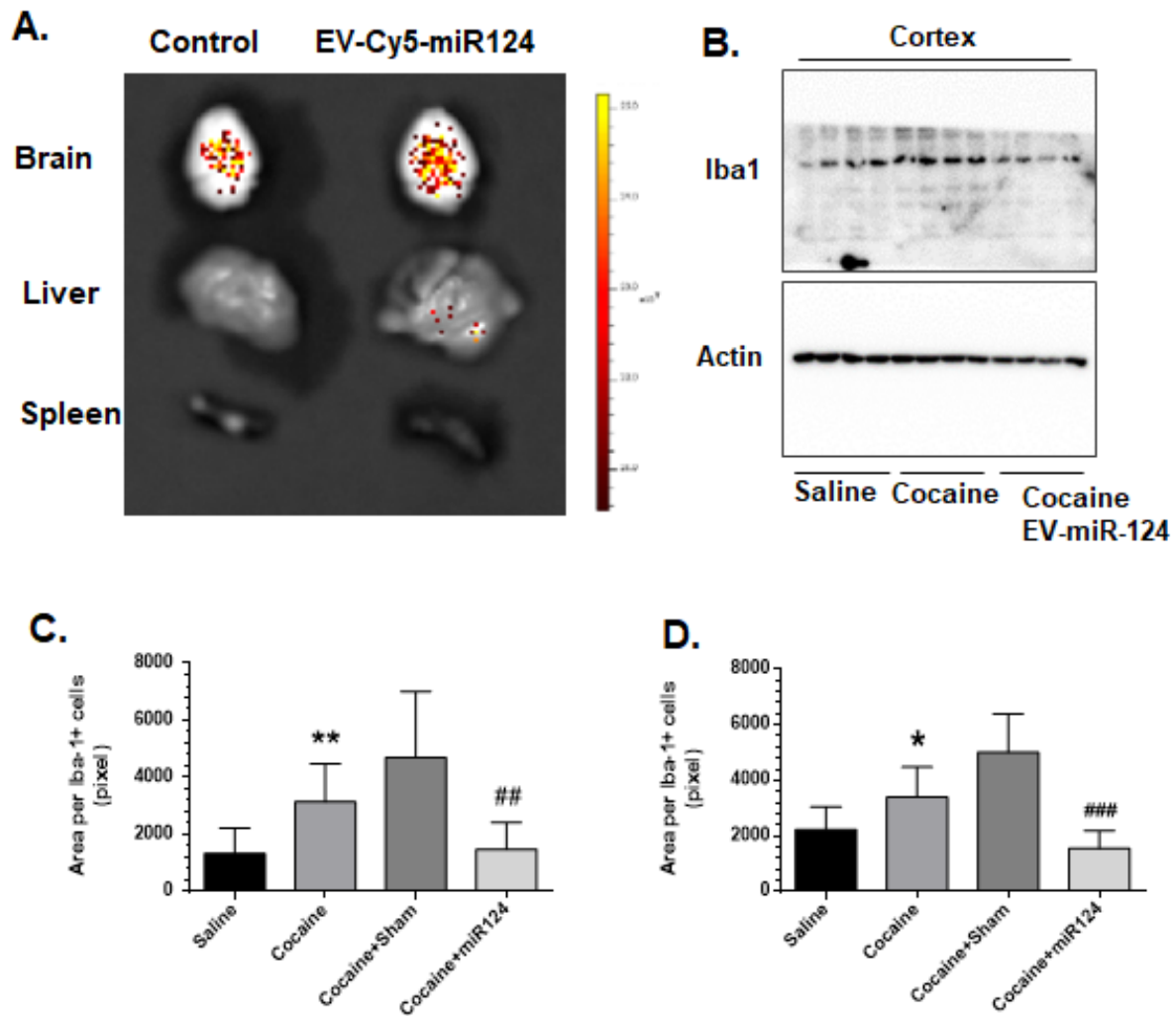
**Supplementary Figure 1.** Full western blot images for the expression of **(A)** Lamp2 and actin in DC 2.4 dendritic cells, **(B)** Lamp2 and CD63 in purified EVs. **(C)** Cells were transfected with either siRNA-control or Dicer-siRNA for 24h followed by EV isolation and detection of indicated miRs by qPCR. Data show fold change with Ct values normalized to U6.

**Supplementary Figure 2**



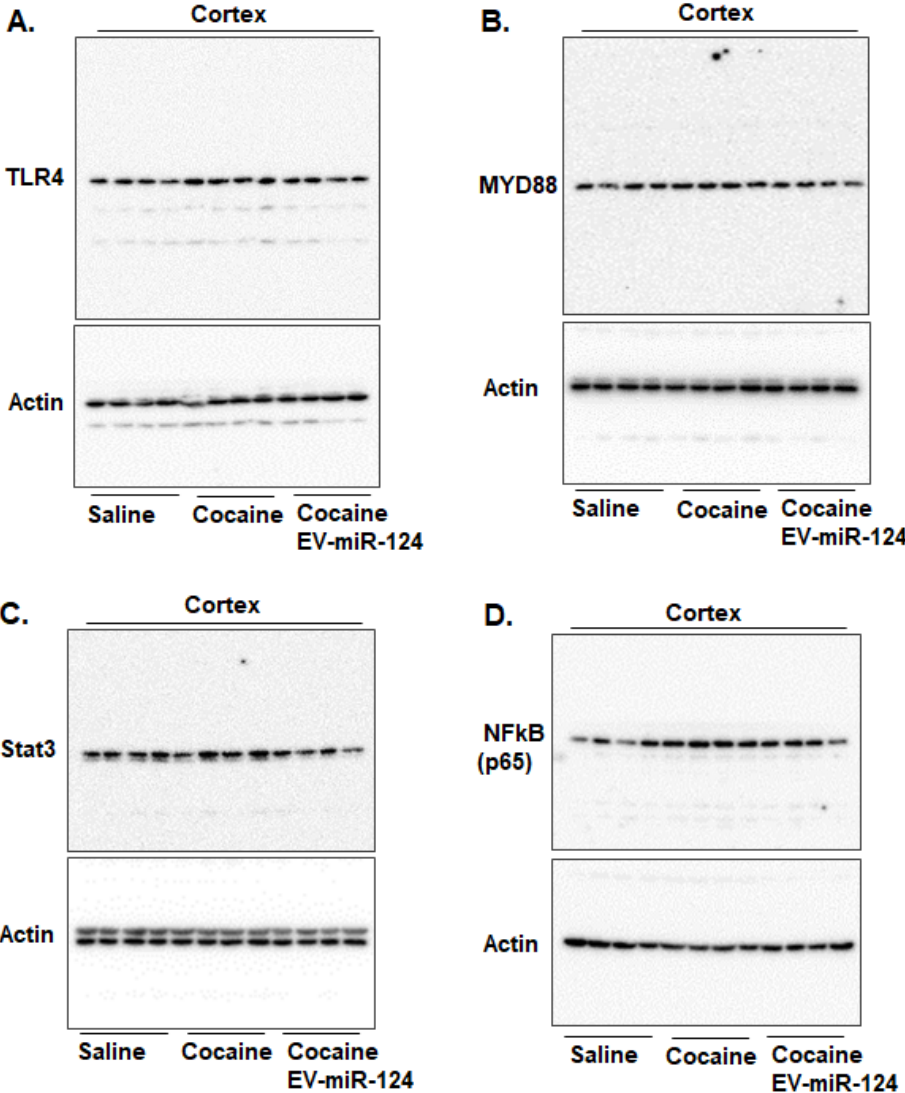
**Supplementary Figure 2.** Full western blot images for the expression of TLR4 (A), Stat3 (B), ERK (C) and Iba-1 (D) in mouse primary microglial cells pre-treated with EVs loaded with miR-124 mimic or scrambled miR-124 followed by exposure to cocaine (10 μM).

Supplementary Figure 3



**Supplementary Figure 3.** IVIS imaging of brain, liver and spleen (A). Full western blot for Iba1 in the cortex (B). Quantification of Iba1 surface area normalized per Iba1 positive cells in the cortex (C) and striatum (D). (n = 4/group, \* p < 0.05 vs. control, # p < 0.05 vs. cocaine group).

Supplementary Figure 4



**Supplementary Figure 4.** Full western blot images showing the effect of EV-miR-124 on the expression of TLR4 (A), MYD88 (B), Stat3 (C) and NFkB p65 (D).