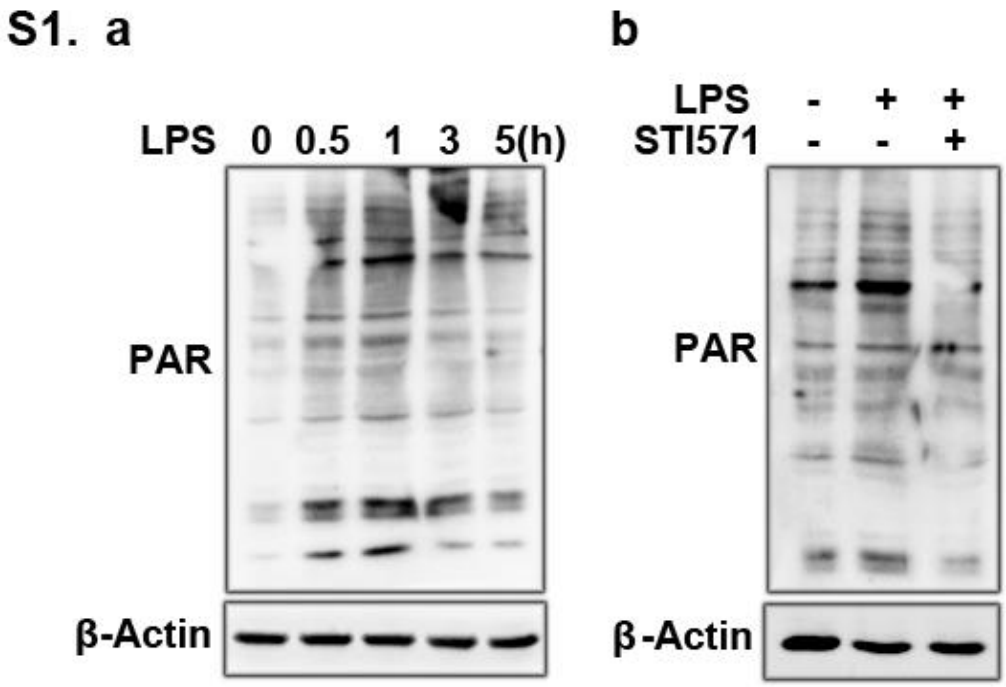
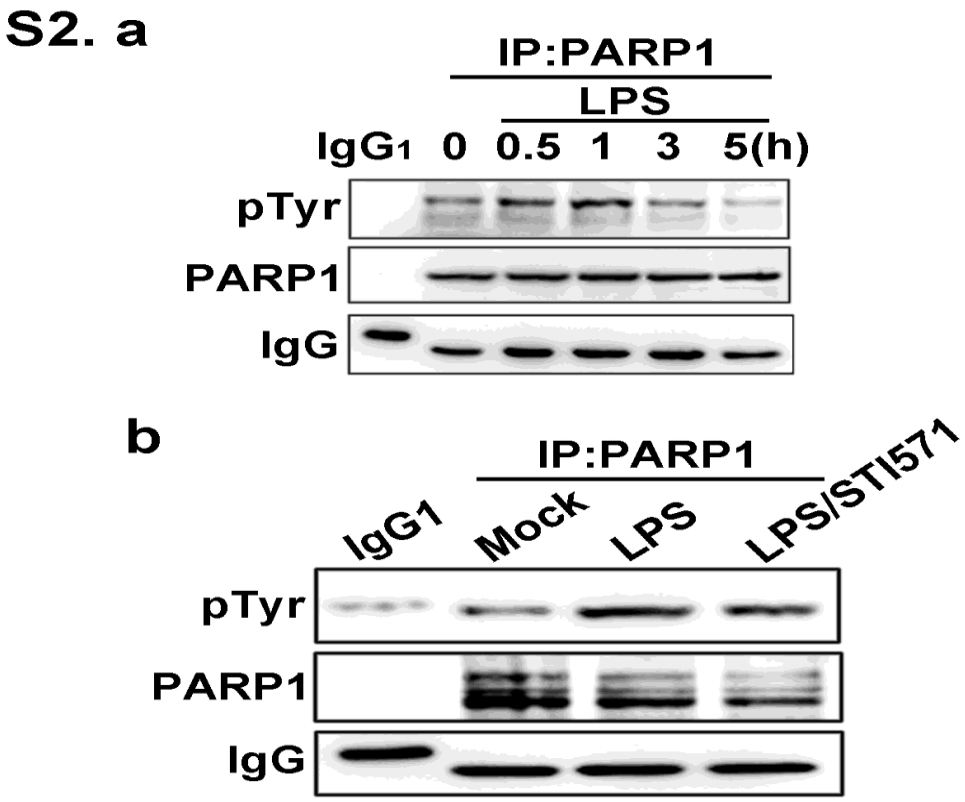


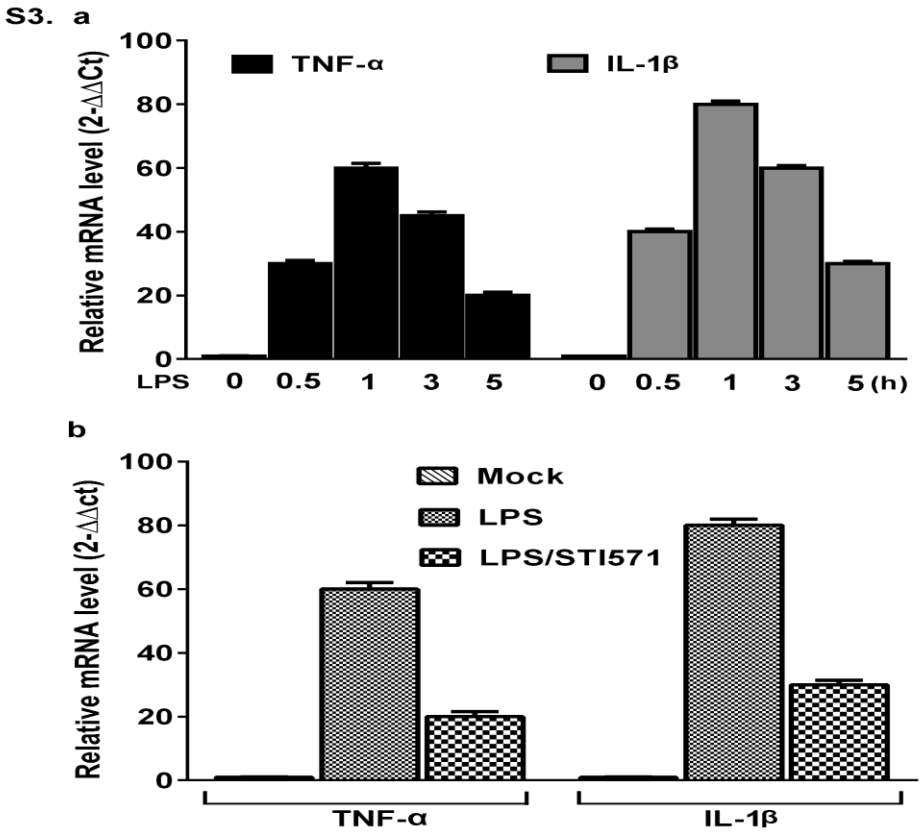
Supplementary Figure 1 (S1): Inflammatory agent LPS-stimulated protein PARylation is regulated by c-Abl

(a) Inflammatory agent LPS stimulation promotes protein PARylation.THP1 cells were challenged with LPS for various lengths of time. Western blotting was performed to detect protein PARylation levels in whole-cell lysates. **(b)** c-Abl activity is required for LPS-stimulated protein PARylation. THP1 cells were incubated with or without LPS for 1 h in the presence or absence of c-Abl inhibitor STI571. Cell extracts were subjected to western blotting to detect the level of protein PARylation. Similar results were obtained from at least three independent experiments.



Supplementary Figure 2 (S2): c-Abl is required for tyrosine phosphorylation of PARP1 in response to inflammatory agent LPS.

(a) Exposure of inflammatory agent LPS increases the levels of tyrosine phosphorylation (pTyr) of PARP1. THP1 cells were exposed to LPS for various lengths of time. Whole-cell extracts (WEs) were prepared and immuno-precipitates were obtained using Ab recognizing PARP1. The levels of pTyr of PARP1 were detected by western blotting. **(b)** Inhibition of c-Abl activity eliminates LPS-induced increase in pTyr of PARP1. THP1 cells were mock-treated or exposed to LPS (±STI571) for 1 h. WEs were prepared and immuno-precipitates were obtained using Ab recognizing PARP1. The levels of pTyr of PARP1 were detected by western blotting. Similar results were obtained from at least three independent experiments.



Supplementary Figure 3 (S3): LPS-induced pro-inflammatory gene expression is enhanced by c-Abl.

(a) Inflammatory agent LPS stimulates inflammatory gene expression in THP1 cells. Cells were incubated with LPS for various lengths of time. Real-time PCR was performed to detect the mRNA expression of TNF-α and IL-1β. **(b)** c-Abl inhibition blocks up-regulation of inflammatory genes. THP1cells were mock-treated or exposed to LPS (±STI571) for 1 h. Real-time PCR was performed to detect the mRNA expression of TNF-α and IL-1β (n = 5). Data were expressed as mean ± SD and analyzed by one-way ANOVA. ** $p < 0.01$.