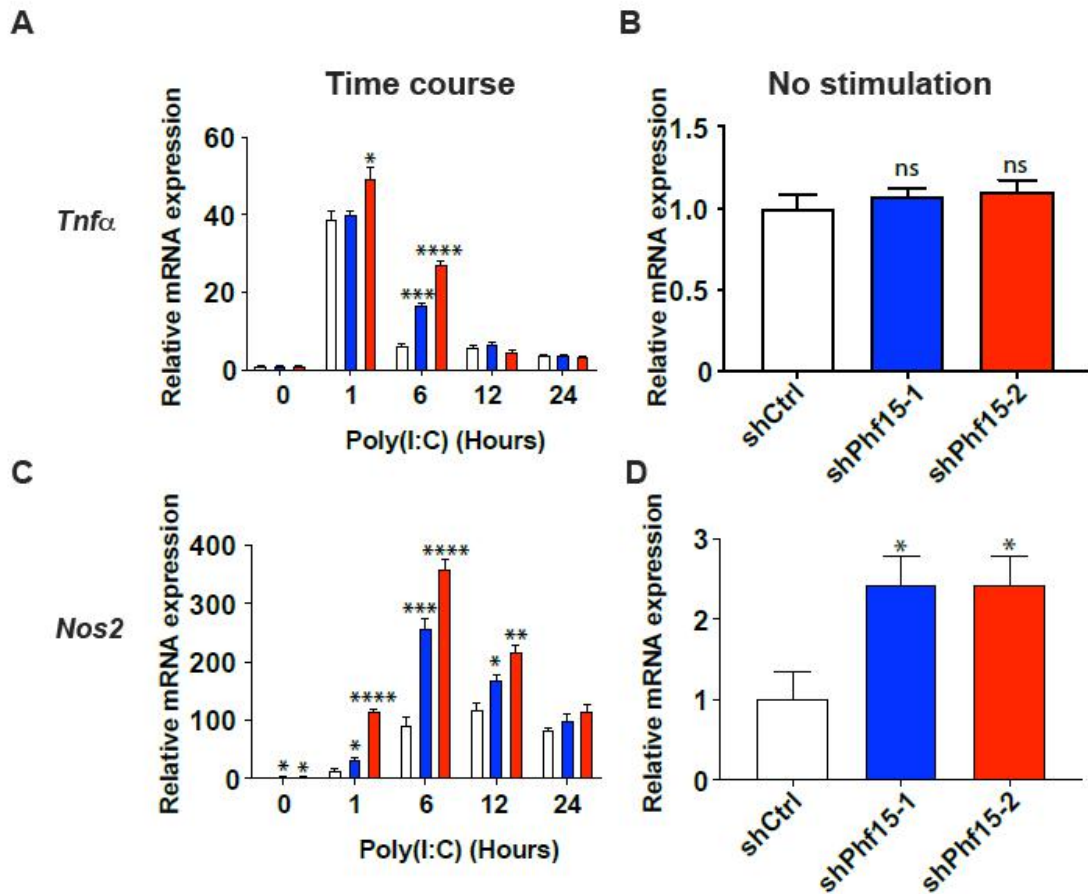


**Supplementary Figure 2.** Knockdown of *Phf15* increases the magnitude of the microglial inflammatory response after TLR9 stimulation. Time course experiments showing relative mRNA expression levels of *Tnfa* (A) and *Nos2* (C) after CpG ODN stimulation of *Phf15* knockdown microglial SIM-A9 cells compared to shCtrl (control scrambled shRNA). *Tnfa* and *Nos2* expression at time point 0 from the time course experiments are displayed separately in (B) and (D), respectively. Data are mean  $\pm$  SEM ( $n = 3$  per condition). One-way ANOVA with Dunnett's multiple comparisons between sh*Phf15-1* or sh*Phf15-2* and shCtrl cells for individual timepoints: asterisks indicate  $*P < 0.05$ ,  $**P < 0.01$ ,  $***P < 0.001$ ,  $****P < 0.0001$ . Knockdown efficiency for cell lines sh*Phf15-1* and sh*Phf15-2* compared to shCtrl is shown in Figure 2A. CpG ODN: CpG Oligodeoxynucleotide; *Tnfa*: tumor necrosis factor alpha; *Nos2*: nitric oxide synthase, inducible



**Supplementary Figure 3.** Knockdown of *Phf15* increases the magnitude of the microglial inflammatory response after TLR3 activation. 24-hour time course experiments showing relative mRNA expression levels of *Tnfa* (A) and *Nos2* (C) after Poly(I:C) stimulation of *Phf15* knockdown microglial SIM-A9 cells compared to shCtrl (control scrambled shRNA). *Tnfa* and *Nos2* expression at time point 0 from the time course experiments are displayed separately in (B) and (D), respectively. Data are mean  $\pm$  SEM ( $n = 3$  per condition). One-way ANOVA with Dunnett's multiple comparisons between *shPhf15-1* or *shPhf15-2* and shCtrl cells for individual timepoints: asterisks indicate \* $P < 0.05$ , \*\* $P < 0.01$ , \*\*\* $P < 0.001$ , \*\*\*\* $P < 0.0001$ . Knockdown efficiency for cell lines *shPhf15-1* and *shPhf15-2* compared to shCtrl is shown in Figure 2A. Poly(I:C), polyinosinic:polycytidylic acid; *Tnfa*: tumor necrosis factor alpha; *Nos2*: nitric oxide synthase, inducible