

Supplementary Figure S1. Supplemental data on the characterization of miRNA expression and TNF- $\alpha$  production during TLR-ligand stimulation of THP1 monocytes. (A) Time-course analysis of copy number of miR-132 and miR-146a in PGN-stimulated THP-1 monocytes. Copy number of miR-132 and miR-146a in THP-1 cells stimulated for 0-24 h (horizontal axis) with PGN (2500 ng/ml). (B) Induction of miR-132 and miR-212 by LPS treatment in THP-1 monocytes. gRT-PCR analysis of dose- and time-dependent expression of miR-132 and miR-212 in THP-1 monocytes stimulated for 2-24 h with 0-1000 ng/ml LPS. (C) TNF- $\alpha$  production by THP-1 cells stimulated with Pam. THP-1 monocytes were incubated for 2-48 h with 0-1000 ng/ml Pam and TNF- $\alpha$  in culture supernatant was measured by ELISA. (**D-E**) qRT-PCR analysis of miR-146a, miR-132, miR-212, and miR-155 expression kinetics in Pamtreated THP-1 cell. (F) TNF- $\alpha$  production by THP-1 monocytes stimulated for 0-24 h with 300 ng/ml flagellin. (G) qRT-PCR analysis of miR-146a, miR-132, and miR-212 expression in the same THP-1 cells stimulated with 300 ng/ml flagellin. All miRNA expressions were normalized to RNU44. Data are from three independent experiments (mean ± s.d.). \*P < 0.05; \*\*P < 0.01 (two-tailed unpaired *t*-test) compared with time 0 controls (A,F-G) or untreated controls (B-D).



Supplementary Figure S2. Supplemental data on cytokine production in THP-1 cells, human PBMCs, and mouse RAW264.7 cells primed with PGN or Pam and challenged by other TLR-ligands. (A-C) Diminished proinflammatory cytokine secretions by PGN- and Pam-primed THP-1 monocytes. ELISA of IL-1 $\beta$  (**A**), IL-6 (**B**), and IL-8 (C) production by THP-1 monocytes primed with or without PGN or Pam (500 ng/ml) for 18 h and then challenged with various ligands (horizontal axis) for 3 h (IL-1 $\beta$ ) or 24 h (IL-6 and IL-8). (D-F) High levels of miR-132 may account for Pam-induced tolerance in human PBMCs. TNF- $\alpha$  (**D**) and IL-6 (**E**) production by human PBMCs primed with or without Pam (1000 ng/ml) for 18 h and then challenged with various ligands (horizontal axis) for 3 h (TNF- $\alpha$ ) or 24 h (IL-6). (F) gRT-PCR analysis of miR-132 in the PBMC treated as in **D**. (**G-I**) High levels of miR-132 may promote PGNinduced tolerance in mouse RAW264.7 cells. (G) TNF-α production by RAW264.7 cells primed with or without PGN (1000 ng/ml) for 18 h and then challenged with various ligands (horizontal axis) for 3 h. (H) gRT-PCR analysis of miR-132 in the purified total RNA obtained from cells described in G. (I) Immunoblot analysis of IRAK4 in RAW264.7 cells stimulated for 4 and 8 h with PGN (2000 ng/ml). Tubulin serves as a loading control. Data and error bars (mean ± s.d.) are from either from two (A-C and G-**H)** or three (**D-F**) independent experiments. \*P < 0.05; \*\*P < 0.01 (two-tailed unpaired *t*-test) compared with unprimed control.



Supplementary Figure S3. p300 expression in THP-1 cells stimulated by LPS, PGN, Pam, and flagellin. (A) Little or no expression of p300 mRNA detected in THP-1 cells untreated (UTX) or treated with 1  $\mu$ g/ml of LPS, PGN, or Pam for different time points as indicated up to 24 h. Positive control RNA from HeLa cells was included for the qRT-PCR analysis. (B) Immunoblot analysis of p300 in THP-1 cells stimulated for 2 or 8 h with 1  $\mu$ g/ml of LPS, PGN, or flagellin. Cell lysate from HeLa cells was included as a positive control and tubulin analyzed as a loading control.