

Supplemental Figure 1

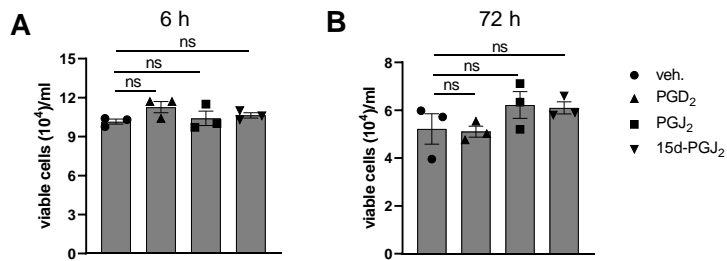


Fig S1. PGD_2 , PGJ_2 and 15d- PGJ_2 have no significant cytotoxic effect on *M.tb*-infected macrophage. THP-1 macrophages were pretreated with 10 μ M PGD_2 , PGJ_2 and 15d- PGJ_2 for 1 h, then infected with H37Ra (MOI of 10:1). Number of viable cells was calculated 6 h (A) and 72 h (B) post infection. Data are shown as means \pm SEM, unpaired *t*-test. ns, not significant.

Supplemental Figure 2

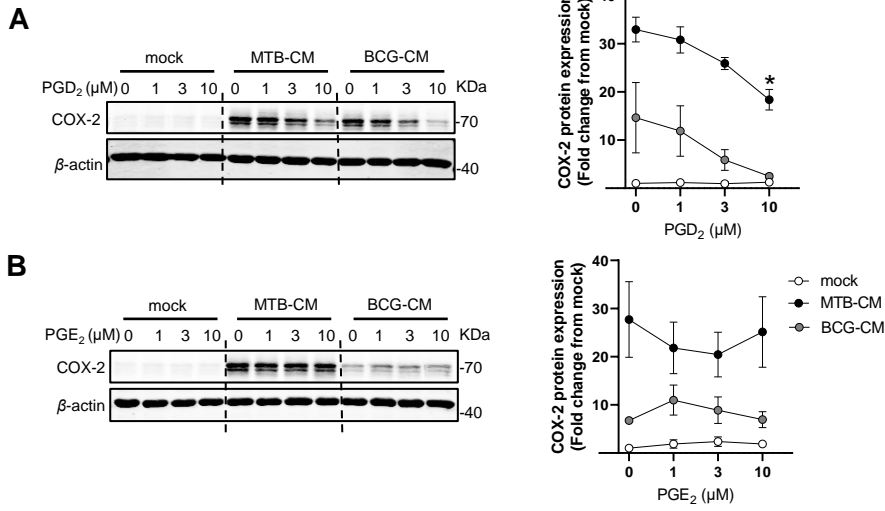


Fig S2. PGD₂ decreases COX-2 expression, but PGE₂ has no effect on COX-2 expression. (A-B) Polarized M1-MDM were pre-treated for 1 h with PGD₂ and PGE₂ at indicated concentration, methyl acetate as a vehicle (veh.) control (v/v), followed by 24 h incubation with 10% MTB-CM or 10% BCG-CM. Cells were lysed and released proteins were analyzed by WB. COX-2 and mPGES-1 expression was detected, β -actin was used as a loading control. For densitometric analysis, β -actin was used to normalize protein expression. Data are means \pm SEM ($n = 3$ separate donors), * $P < 0.05$ vs. MTB-CM (veh.) treated cells, paired t -test.

Supplemental Figure 3

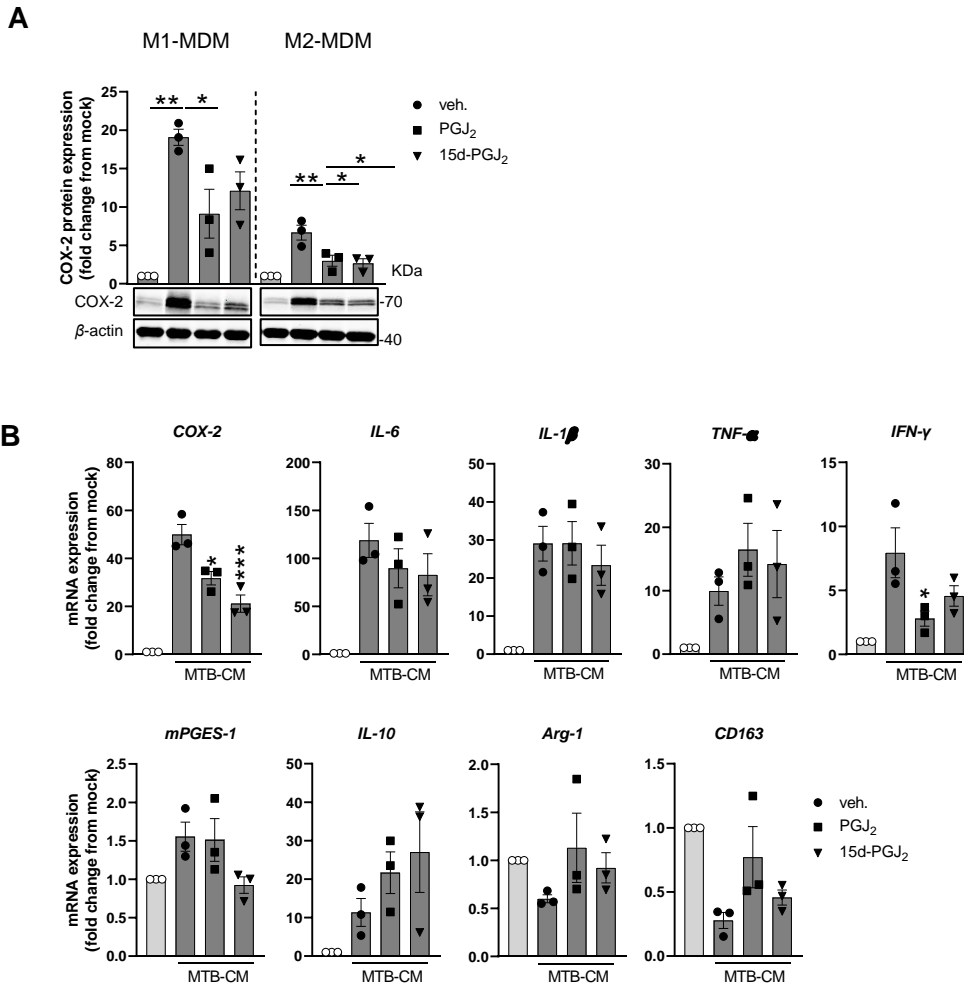


Fig S3. PGJ₂- and 15-PGJ₂-driven modulation of inflammatory responses in MTB-CM stimulated M1/M2-MDM after 12 h incubation. (A) Polarized M1/M2-MDM were pretreated with 10 μ M PGJ₂ or 10 μ M 15d-PGJ₂ for 1 h, methyl acetate was used as veh. control, followed by 12 h incubation with 10% MTB-CM. Cells were lysed and COX-2 protein and β -actin were analyzed by WB. Data are means \pm SEM (n = 3 separate donors). *P<0.05; **P < 0.01, one-way ANOVA with Tukey's multiple comparisons test. **(B)** Polarized M1-MDM were pretreated with 10 μ M PGJ₂ or 10 μ M 15d-PGJ₂ for 1 h, methyl acetate was used as veh. control, followed by 12 h incubation with 10% MTB-CM. mRNA levels of indicated genes were analyzed by real-time PCR. Data are means \pm SEM (n = 3 separate donors). The data were analyzed by one-way ANOVA with Tukey's multiple comparisons test. *P<0.05; **P < 0.01 vs MTB-CM group.

Supplemental Figure 4

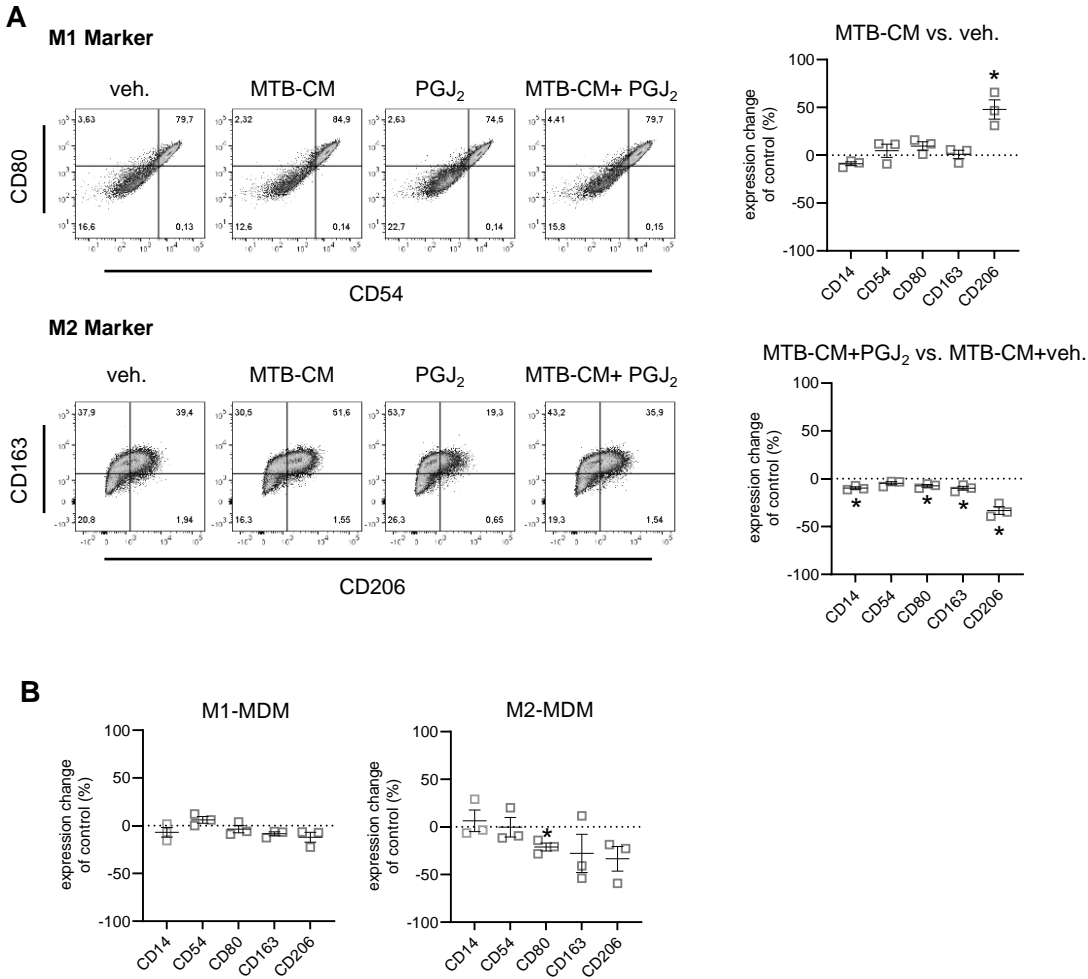


Fig S4. Impact of PGJ₂ on M1-/M2-like surface marker expression in MDM. (A) Polarized M1-MDM were pretreated with 10 μ M PGJ₂ or methyl acetate as vehicle (veh.) control (v/v) for 1 h and incubated with MTB-CM for 24 h. Expression of M1-like surface markers CD54 and CD80 and of M2-like surface markers CD163 and CD206 were analyzed by flow cytometry among living CD14⁺ cells. Data are shown as representative pseudo color dot plots (left). Mean fluorescence intensity (MFI) of each marker was determined (right). The change of the MFI from MTB-CM-stimulated group against mock group and MTB-CM plus PGJ₂ group against MTB-CM group was calculated and is given in % in scatter dot plots as single values and means \pm SEM, n=3. **P*<0.05, ratio paired *t*-test. **(B)** M0_{GM-CSF} and M0_{M-CSF} (2×10^6 cells/ml, each) were preincubated with 10 μ M PGJ₂ or vehicle (v/v methyl acetate) for 30 min and then polarized at 37 °C for 24 h towards M1 and for 48 h towards M2 phenotypes. The surface markers CD54 and CD80 (M1-like) as well as CD163 and CD206 (M2-like) among living CD14⁺ cells were analyzed, the mean fluorescence intensity (MFI) of each marker was determined and is given as mean \pm SEM as % of vehicle control in scatter dot plots with individual values, n=3, ratio paired *t*-test vs. vehicle control, **P*< 0.05.