



**Figure S2.**

**A-C)** WT, IL-18<sup>-/-</sup>/IL-1R<sup>-/-</sup>, AIM2<sup>-/-</sup>, and Casp11<sup>-/-</sup> mice (n=4-8/group) were treated with anti-IFN- $\gamma$  or a vehicle control and infected in the footpads with 10<sup>5</sup> CFUs of *B. melitensis*. Joint swelling was measured over time. \*P<0.05 as compared to WT, anti-IFN- $\gamma$  treated mice in **A,B**), while means with the same letter are not statistically different from each other as determined by ANOVA followed by Tukey's test in **C**).

**D)** WT mice with treated with anti-IFN- $\gamma$  and infected in the footpads with 10<sup>5</sup> CFUs of *B. melitensis*. Beginning on the day of infection, mice (n=5/group) were treated i.p. daily with PBS or with 250  $\mu$ g of MCC950 (Adipogen). Joint swelling was measured over time. \*P<0.05 as compared to PBS-treated mice.

**E)** BMDMs (n=4 wells/group) were infected with *B. melitensis* as described in materials and methods. When gentamicin was added to the macrophages, some wells also received 1000 U/ml recombinant IFN- $\gamma$  (Shenandoah Biotech), or 1000 U/ml IFN- $\gamma$  +0.5 mM AGHS. Nitrite levels were determined in supernatants 24 hours after infection via the Griess reaction. Means with the same letter are not statistically different from each other as determined by ANOVA followed by Tukey's test.

**F-H)** WT mice were given regular drinking water, or water with 2.5% AGHS beginning 14 days prior to footpad infection with 1x10<sup>5</sup> *B. melitensis*. Animals were euthanized at day 18 post-infection and H&E staining was conducted. Representative images (100x) from mice receiving normal drinking water or AGHS are depicted **F**). *Brucella* burdens **G**) and IL-1 $\beta$  **H**) were also evaluated in joints (n=4-5 mice/group). \* P<0.05 compared to mice receiving normal drinking water.

**I)** BMDMs (n=4 wells/group) were infected with *B. melitensis*. When gentamicin was added to the macrophages, some wells also received the nitric oxide donor SNAP. Nitrite levels were determined in supernatants 24 hours after infection. Means with the same letter are not statistically different from each other as determined by ANOVA followed by Tukey's test. All error bars depict S.D. of the mean.