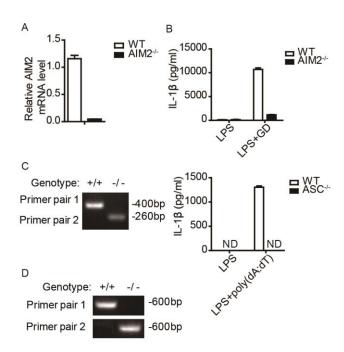
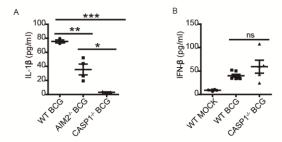
## Supplemental Data



3 Supplementary Figure S1. Identification of AIM2-, ASC- and Caspase1-deficient

4 mice.

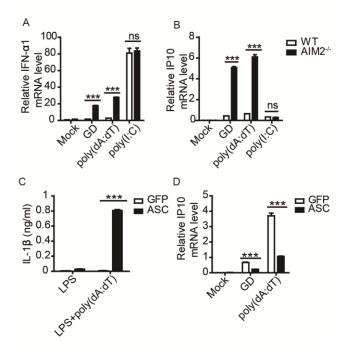
(A) Quantitative PCR analysis of the relative AIM2 mRNA levels between the AIM2<sup>-/-</sup> and WT mice. (B) Production of IL-1β in LPS-primed BMDCs transfected with 1.5 μg/ml genomic DNA for 6 h. (C) Genotyping of ASC knockout mice was carried out by PCR of tail biopsy samples, and production of IL-1β was measured in LPS-primed BMDCs transfected with 1.5 μg/ml poly(dA:dT) for 6 h. (D) Genotyping of Caspase-1 knockout mice was carried out by PCR of the tail biopsy samples.



## Supplementary Figure S2. Production of IL-1β and IFN-β in Caspase-1-deficient

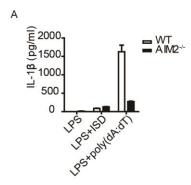
## mice upon BCG infection.

(A) Levels of IL-1 $\beta$  in the sera of WT, AIM2<sup>-/-</sup> and Caspase-1<sup>-/-</sup> mice upon BCG infection. (B) Levels of IFN- $\beta$  in the sera of WT and Caspase-1<sup>-/-</sup> mice with or without the BCG infection. The results are shown as the mean  $\pm$ SEM. \*p < 0.05, \*\*p < 0.01, \*\*\*p<0.001 by Student's t-test.



Supplementary Figure S3. Induction of related ISG upon stimulation with B-form DNA in the AIM2 knockout or ASC overexpression background.

(A) BMDCs that were isolated from WT and AIM2<sup>-/-</sup> mice were stimulated with poly(dA:dT) (1.5 μg/ml), genomic DNA (1.5 μg/ml) and poly(I:C) (2 μg/ml), and IFN-α1 was measured by RT-qPCR 8 h after transfection. (B) BMDCs that were isolated from WT and AIM2<sup>-/-</sup> mice were stimulated with poly(dA:dT) (1.5 μg/ml), genomic DNA (1.5 μg/ml) and poly(I:C) (2 μg/ml), and IP10 was measured by RT-qPCR 8 h after transfection.(C) Production of IL-1β in LPS-primed RAW-GFP and RAW-ASC cells that were transfected with 1.5 μg/ml poly(dA:dT) for 6 h. (D) RAW-GFP and RAW-ASC cells were stimulated with genomic DNA (1.5 μg/ml) and poly(dA:dT) (1.5 μg/ml), and IP10 was measured by RT-qPCR 8 h after transfection. The results are shown as the mean ±SEM. \*\*\*p<0.001 by Student's t-test.



- 64 Supplementary Figure S4. ISD can not activate the AIM2 inflammasome
- 65 signaling pathway.
- 66 (A) Production of IL-1 $\beta$  in LPS-primed BMDMs that were transfected with 1.5
- $\mu$ g/ml poly(dA:dT) and ISD for 6 h.