## SUPPLEMENTAL MATERIAL





Figure S1. **cGAMP induces K<sup>+</sup>/Ca<sup>2+</sup>- and ROS-dependent inflammasomes.** (a and b) IL-1 $\beta$  ELISAs from supernatants of BMDMs primed with LPS and treated with vehicle or 2-APB (a) or *n*-acetyl-cysteine (NAC; b) at the indicated concentrations followed by transfection with 2'3'-cGAMP for 6 h. (c) IL-1 $\beta$  ELISAs from BMDMs primed with LPS, followed by transfection with 2'3'-cGAMP. Extracellular KCl added for the last 1, 2, or 3 h of induction. *n* = 3 independent experiments. Error bars, SD; \*\*\*\*, P < 0.0001.

## **JEM**



Figure S2. **cGAMP induces complexes containing both NLRP3 and AIM2.** Confocal microscopy of JAWSII cells expressing AIM2-Flag pulsed with doxycycline during LPS priming. (a–c) Cells were transfected with 2'3'-cGAMP (a), a 30:1 mixture of 2'3'-cGAMP and fluorescein-labeled 2'3'-cGAMP (b), or rhodamine-dAdT followed by FLICA-660 (c). Cells were labeled with primary antibodies to Asc, NIrp3, and Flag (for AIM2-Flag) followed by Alexa Fluor-labeled secondary antibodies. Shown are pseudocolored images. Bars, 5 µm.



Figure S3. **Bronchiolar macrophage cell count after cGAMP administration.** WT,  $Aim2^{-l-}$ ,  $NIrp3^{-l-}$ , and  $Aim2^{-l-}$  NIr $p3^{-l-}$  DKO mice were intranasally dosed with 2'3'-cGAMP followed by a second dose 24 h later. 4 h after the second dose, BALF was collected, and cells were cytospun onto slides and stained with Diff-Quick solution for cell differentiation. Shown are total counts of bronchial macrophages. WT, n = 17;  $Aim2^{-l-}$ , n = 10;  $NIrp3^{-l-}$ , n = 8;  $Aim2^{-l-}$  NIr $p3^{-l-}$  DKO, n = 8. Results are presented as the mean  $\pm$  SEM.