

Supplementary Figure S1. Culture supernatants from *S. typhimurium* promotes ASC-dependent inflammasome activation. (A) Immunoblots from *Asc* +/+ or *Asc* -/- immortalized BMDMs treated with WT or *Aflic-fljB S. typhimurium* CS (1/10 vol of medium) for 6 h. Culture supernatants (Sup) or cellular lysates (Lys) were immunoblotted with the indicated antibodies. Unt, untreated. (B, C) Immunoblots (upper panel) by anti-ST-FliC antibody and coomassie stained gels (lower panel) of *S. typhimurium* culture supernatants (B) or lysates (C) after heat treatment (97°C, 30 min) or proteinase K treatment (10 μ g/ml, 30 min).



Supplementary Figure S2. Culture supernatants from *S. typhimurium* promotes macrophage cell death. Quantification of LDH release into culture supernatants of mouse BMDMs treated with WT or $\Delta flic-fljB$ or $\Delta flic-fljB-prgJ$ *S. typhimurium* (SL1344) CS (1/20 vol of medium) for 6 h. (n = 3) Unt, untreated. Asterisk indicates significant difference. (**P<0.005, n.s. not significant, one-way ANOVA)



Supplementary Figure S3. Recombinant flagellin from *S. typhimurium* induces NLRC4 inflammasome activation. (A, B) Immunoblots from *Nlrc4* ^{+/+} or *Nlrc4* ^{-/-} (A) and *Nlrp3* ^{+/+} or *Nlrp3* ^{-/-} (B) mice BMDMs treated with LPS (0.25 µg/ml, 3 h), followed by the treatment with *S. typhimurium* flagellin (250 ng/ml, 6 h) with or without DOTAP (DT) premixing. (C) Immunoblots from *Asc* ^{+/+} or *Asc* ^{-/-} immortalized BMDMs treated with LPS (0.25 µg/ml, 3 h), followed by the treatment with *S. typhimurium* flagellin (250 ng/ml, 6 h) with or without DT premixing. Culture supernatants (Sup) or cellular lysates (Lys) were immunoblotted with the indicated antibodies. Unt, untreated.

Α



Supplementary Figure S4. Isolation of *S. typhimurium*-released OMVs. (A) Illustration of experimental scheme to isolate bacterial outer membrane vesicles (OMVs). (B) Transmission electron microscopy of OMVs isolated from wild-type *S. typhimurium*. Scale bar, 0.5 µm. (C) LB agar plate inoculated with *S. typhimurium* SL1344, SL1344 CS and SL1344 OMV.



Supplementary Figure S5. OMV-associated flagellin is critical for the inflammasome activation by *S. typhimurium*-released OMVs. (A) Immunoblots from mouse BMDMs treated with WT, $\Delta flic-fljB$, or $\Delta flic-fljB$ -prgJ S. typhimurium (14028s) OMVs (5 µg/ml, 8 h). Culture supernatants (Sup) or cellular lysates (Lys) were immunoblotted with the indicated antibodies. (B) Quantification of IL-1 β in the culture supernatants of mouse BMDMs treated with WT, $\Delta flic-fljB$, or $\Delta flic-fljB$ -prgJ S. typhimurium (14028s) OMVs (5 µg/ml, 8 h). (C) Quantification of IL-6 in the culture supernatants of mouse BMDMs treated with WT, $\Delta flic-fljB$, or $\Delta flic-fljB$ -prgJ S. typhimurium (14028s) OMVs (5 µg/ml, 8 h). (C) Quantification of IL-6 in the culture supernatants of mouse BMDMs treated with WT, $\Delta flic-fljB$, or $\Delta flic-fljB$ -prgJ S. typhimurium (14028s) OMVs (5 µg/ml, 8 h). (D) Quantification of IL-1 β in the culture supernatants of Nlrp3 ^{+/+} or Nlrp3 ^{-/-} mice BMDMs treated with $\Delta flic-fljB$ S. typhimurium (SL1344) OMV (5 µg/ml, 8 h) (n = 5). Asterisks indicate significant difference. (**P<0.005, ***P<0.001)



Supplementary Figure S6. *E. coli*-derived OMVs caused a NLRP3-dependent caspase-1 processing. Immunoblots from mouse BMDMs treated with *S. typhimurium* (SL1344) OMVs (5 µg/ml, 8 h) or *E. coli* (BL21) OMVs (5 µg/ml, 8 h) in the presence of MCC950 (100 nM). Culture supernatants (Sup) or cellular lysates (Lys) were immunoblotted with the indicated antibodies.



Supplementary Figure S7. Flagellin-deficient *S. typhimurium*-derived OMVs caused NLRP3-dependent IL-1 β production. Quantification of IL-1 β in the culture supernatants of *Gbp2* ^{+/+} or *Gbp2* ^{-/-} mice BMDMs treated with *Aflic-fljB S. typhimurium* (SL1344) OMV (5 µg/ml, 8 h). (*n* = 5). Asterisk indicates significant difference. (****P*<0.001)