

## SUPPLEMENTARY FIGURES

### The STING ligand cGAMP potentiates the efficacy of vaccine-induced CD8<sup>+</sup> T-cells

**Gutjahr et al.**

**Figure S1.** Effector profile of tetramer<sup>-</sup> CD8<sup>+</sup> T-cells.

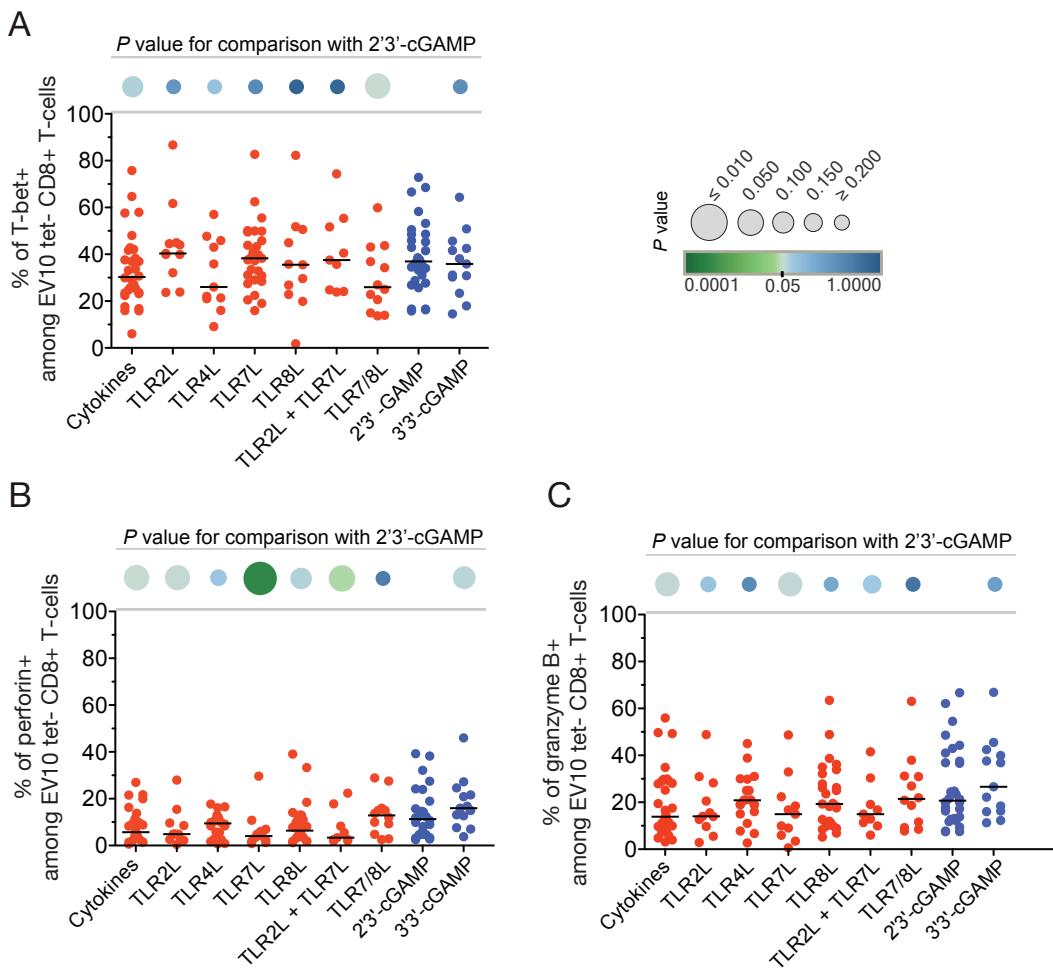
**Figure S2.** Direct impact of 2'3'-cGAMP on the proliferation of CD8<sup>+</sup> T-cells.

**Figure S3.** Gene expression profile of moDCs after stimulation with STING ligands.

**Figure S4.** Secretion of inflammatory cytokines by PBMCs after stimulation with PRR ligands.

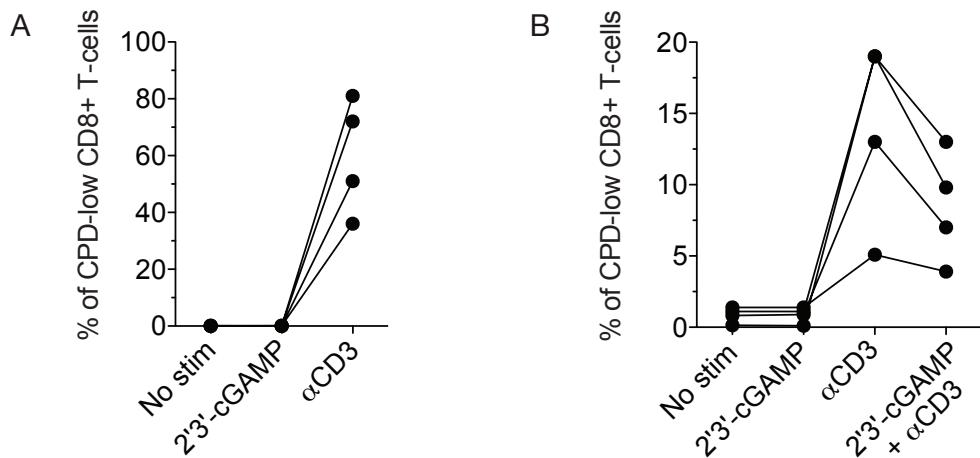
**Figure S5.** Specific IgA and IgG titers in mice vaccinated with NP-p24.

**Figure S1. Effector profile of tetramer<sup>-</sup> CD8<sup>+</sup> T-cells.**



Intracellular expression of T-bet (**A**), perforin (**B**), and granzyme B (**C**) among tetramer<sup>-</sup> CD8<sup>+</sup> T-cells after stimulation with various adjuvants. Each dot represents one HLA-A2<sup>+</sup> donor per condition. Horizontal bars indicate median values. P values are depicted as circles with variable size and color intensity (Mann-Whitney U test).

**Figure S2. Direct impact of 2'3'-cGAMP on the proliferation of CD8<sup>+</sup> T-cells.**



(A) Total human PBMCs or (B) CD8<sup>+</sup> T-cells (enriched to > 94% using magnetic bead purification) were loaded with a cell proliferation dye (CPD), and stimulated with the CD3-specific antibody OKT3 in the absence or presence of 2'3'-cGAMP. Proliferation was quantified on day 4 via dilution of CPD.

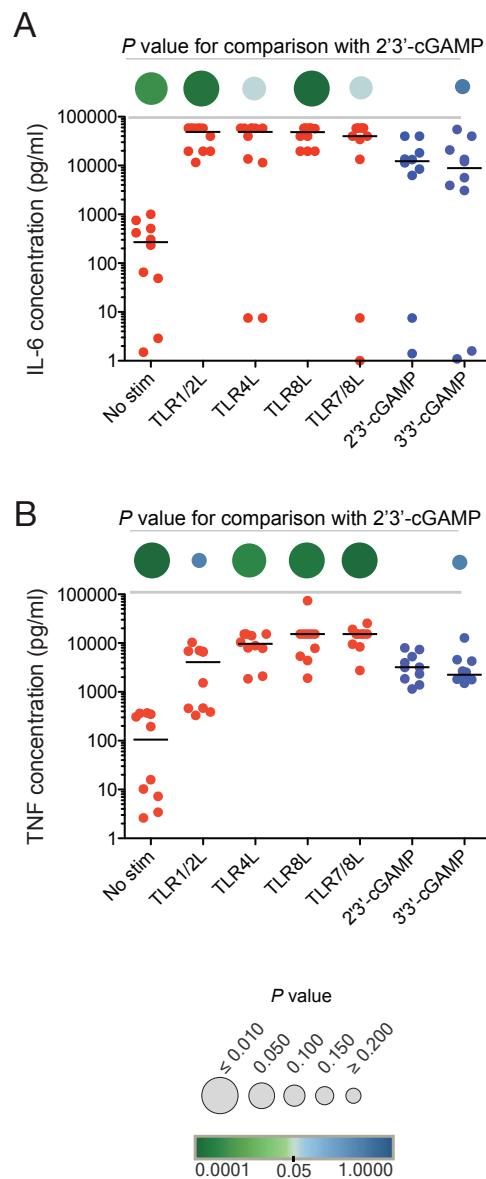
**Figure S3. Gene expression profile of moDCs after stimulation with STING ligands.**

Gene expression profile of CD1a<sup>+</sup> CD14<sup>-</sup> moDCs after stimulation for 24 hr with 2'3'-cGAMP or 3'3'-cGAMP at concentrations of 10 µg/mL. Data are shown relative to unstimulated moDCs from the same donor.



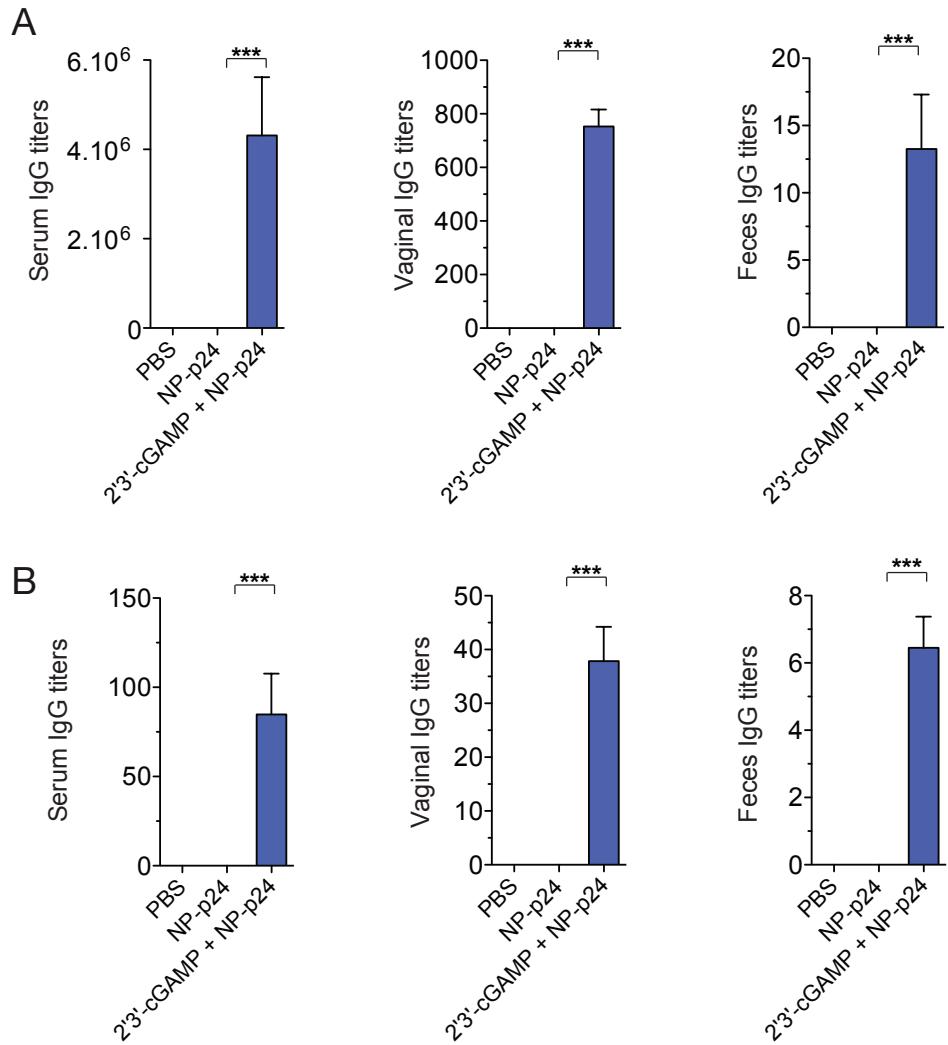
Magnitude of log 2 (fold change)  
-10 +10

**Figure S4. Secretion of inflammatory cytokines by PBMCs after stimulation with PRR ligands.**



Extracellular concentrations of IL-6 (**A**) and TNF (**B**) secreted by PBMCs in response to overnight stimulation with various PRR ligands. Horizontal bars indicate median values. *P* values are depicted as circles with variable size and color intensity (Mann-Whitney U test).

**Figure S5. Specific IgA and IgG titers in mice vaccinated with NP-p24.**



Titers of p24-specific IgA (**A**) and IgG (**B**) on day 42 after vaccination with NP-p24. \*\*\*P < 0.001 (Mann-Whitney U test).