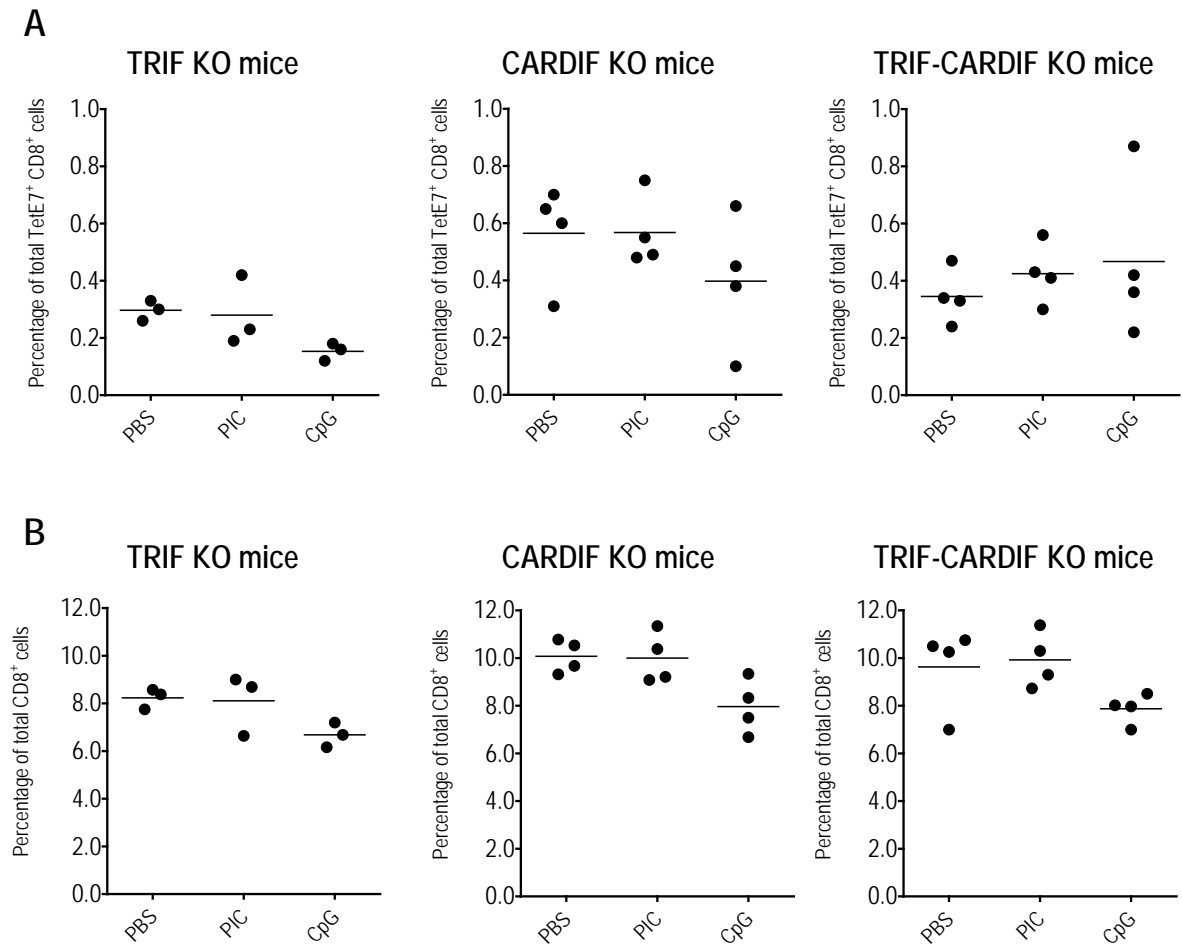


## Supplementary Figure 1 (Domingos-Pereira et al.)



### Supplementary Figure 1

E7-specific and total CD8 T cells in spleen of E7-immunized Trif KO, Cardif KO and Trif-Cardif double KO mice, instilled with ivag CpG or PIC. Groups of Trif KO (left panels), Cardif KO (middle panels) and Trif-Cardif double KO (right panels) mice were s.c. immunized with the adjuvanted E7 vaccine and 5 days later ivag instilled with PBS, PIC or CpG. Mice were sacrificed three days later and cells recovered from individual spleen were stained with CD8-APC antibodies and TetE7<sub>49-57</sub>-PE or TetL1<sub>165-173</sub>-PE (as control). The percentages of TetE7<sup>+</sup> CD8<sup>+</sup> cells (A) and total CD8<sup>+</sup> (B) cells are indicated. The horizontal bars represent the mean percentages.

## Supplementary Table 1 *(Domingos-Pereira et al.)*

E7-specific CD8 T cell responses in E7-vaccinated mice ivag challenged with different immunostimulants.

ivag immunostimulant	Mean $\pm$ SEM of E7-specific IFN- $\gamma$ secreting cells / $10^5$ cells		
	PBMC	GLN	Spleen
PBS	149.7 $\pm$ 45.2 (3) <sup>†</sup>	34.7 $\pm$ 6.8 (3)	53.5 $\pm$ 5.3 (3)
CpG	177.3 $\pm$ 10.4 (4)	36.5 $\pm$ 6.5 (4)	70.8 $\pm$ 8.3 (4)
PIC	270.3 $\pm$ 77.3 (4)	24.3 $\pm$ 4.1 (4)	67.3 $\pm$ 13.6 (4)

<sup>†</sup> The number of mice in each group is indicated in parenthesis

## Supplementary Table 2

### A. T cell coreceptor modulation by CpG in the genital tract (data extracted from the supplementary Table 1 in Lindqvist et al. <sup>20</sup>)

T cell coreceptor	4 hours		24 hours		48 hours	
	Adjusted P value	log <sub>2</sub> fold increase	Adjusted P value	Log <sub>2</sub> fold increase	Adjusted P value	Log <sub>2</sub> fold increase
CD4	0.06	- 0.36	5.29E-05	- 0.76	0.15	-0.34
CD8a	0.19	0.25	<b>1.05E-03</b>	<b>0.57</b>	<b>2.77E-04</b>	<b>0.72</b>
CD8b	0.45	0.20	<b>4.12-E03</b>	<b>0.62</b>	<b>2.54E-02</b>	<b>0.56</b>

### B. Chemokine and respective receptors both significantly increased by CpG in the genital tract (data extracted from the supplementary Table 1 in Lindqvist et al. <sup>20</sup>)

Chemokines and respective receptors increased by CpG	4 hours		24 hours		48 hours	
	Adjusted P value	log <sub>2</sub> fold increase	Adjusted P value	Log <sub>2</sub> fold increase	Adjusted P value	Log <sub>2</sub> fold increase
Ccl 2	<b>4.83E-14<sup>a</sup></b>	<b>3.31</b>	<b>6.73E-13</b>	<b>2.83</b>	<b>1.74E-09</b>	<b>2.24</b>
Ccl 3	<b>1.42E-06</b>	<b>3.62</b>	<b>1.28E-03</b>	<b>2.21</b>	<b>3.63E-04</b>	<b>2.78</b>
Ccl 4	<b>1.54E-11</b>	<b>2.45</b>	<b>1.73E-11</b>	<b>2.34</b>	<b>9.41E-05</b>	<b>1.77</b>
Ccl 5	<b>5.10E-10</b>	<b>2.68</b>	0.054	0.63	<b>8.29E-11</b>	<b>1.44</b>
Ccl 7	<b>8.73E-13</b>	<b>3.10</b>	<b>8.22E-14</b>	<b>3.36</b>	<b>7.40E-11</b>	<b>2.75</b>
Ccl 8	0.20	0.63	<b>1.54E-03</b>	<b>1.40</b>	0.31	0.63
Ccl 12	<b>2.28E-08</b>	<b>2.50</b>	<b>8.08E-13</b>	<b>3.72</b>	<b>1.62E-08</b>	<b>2.69</b>
Ccl 19	<b>9.97E-14</b>	<b>2.53</b>	<b>7.56E-10</b>	<b>1.67</b>	0.37	0.30
Cxcl 9	<b>4.01E-05</b>	<b>2.05</b>	<b>1.16E-12</b>	<b>4.59</b>	<b>1.50E-02</b>	<b>1.33</b>
Cxcl 10	<b>3.29E-08</b>	<b>4.77</b>	<b>9.51E-05</b>	<b>2.92</b>	0.20	1.25
Cxcl 11	<b>6.79E-11</b>	<b>2.49</b>	<b>3.42E-06</b>	<b>1.43</b>	0.74	0.18
Ccr 1	<b>3.13E-02</b>	<b>1.16</b>	0.23	0.69	0.78	1.37
Ccr 2	0.70	0.18	<b>9.06E-04</b>	<b>1.14</b>	<b>4.51E-04</b>	<b>1.37</b>
Ccr 5	<b>1.75E-03</b>	<b>0.94</b>	<b>2.87E-10</b>	<b>2.28</b>	<b>6.64E-11</b>	<b>2.64</b>
Ccr 7	<b>8.32E-09</b>	<b>1.28</b>	<b>1.71E-02</b>	<b>0.44</b>	0.99	0.03
Cxcr 3	0.33	-0.29	0.96	0.02	<b>1.63E-03</b>	<b>0.91</b>

### C. Adressin/selectin and respective ligand(integrin) both significantly increased by CpG in the genital tract (data extracted from the supplementary Table 1 in Lindqvist et al. <sup>20</sup>)

Adressins/selectin and respective ligand induced by CpG	4 hours		24 hours		48 hours	
	Adjusted P value	log <sub>2</sub> fold increase	Adjusted P value	Log <sub>2</sub> fold increase	Adjusted P value	Log <sub>2</sub> fold increase
Vcam	<b>1.97E-05</b>	<b>1.64</b>	0.62	0.24	0.60	0.33
Icam1	<b>3.63E-09</b>	<b>1.79</b>	<b>4.95E-03</b>	<b>0.70</b>	<b>3.26E-02</b>	<b>0.63</b>
Madcam	0.40	0.15	<b>3.95E-03</b>	<b>0.44</b>	0.83	-0.07
Glycam1	<b>2.18E-06</b>	<b>1.31</b>	<b>2.21E-02</b>	<b>0.59</b>	0.06	0.57
E selectin	<b>4.30E-05</b>	<b>1.72</b>	0.37	0.42	0.75	0.25
P selectin	<b>2.82E-10</b>	<b>2.19</b>	<b>3.38E-02</b>	<b>0.59</b>	0.24	0.43
L selectin	<b>3.84E-03</b>	<b>1.72</b>	<b>2.78E-03</b>	<b>1.75</b>	<b>1.82E-02</b>	<b>1.60</b>
ESL-1	1.35E-02	-0.41	0.88	0.04	<b>3.94E-02</b>	<b>0.39</b>
PSGL-1	0.28	0.43	0.32	0.40	<b>4.53E-03</b>	<b>1.11</b>
CD43	0.13	0.29	<b>2.98E-03</b>	<b>0.53</b>	<b>2.26E-13</b>	<b>2.01</b>
Alpha 4	0.57	0.21	0.13	0.47	<b>4.04E-05</b>	<b>1.17</b>
Alpha L	<b>4.19E-04</b>	<b>1.28</b>	<b>1.98E-05</b>	<b>1.56</b>	<b>1.28E-06</b>	<b>2.05</b>
Alpha M	<b>1.76E-02</b>	<b>0.96</b>	<b>1.92E-07</b>	<b>2.25</b>	<b>2.92E-11</b>	<b>3.62</b>
Beta 2	0.10	0.64	<b>2.00E-07</b>	<b>2.10</b>	<b>2.52E-11</b>	<b>3.40</b>
Beta 7	0.17	0.34	<b>3.07E-04</b>	<b>0.83</b>	0.08	0.49

<sup>a</sup> significant adjusted p value and respective fold increase are indicated in bold

### Supplementary Table 3 (Domingos-Pereira et al.)

A. CD4 and CD8 T-cells expressing the indicated chemokine receptor in spleen of E7-vaccinated mice receiving ivag PBS or CpG.

Chemokine receptor	Chemokine receptor-expressing T-cells among total T-cells (Mean % $\pm$ SEM)			
	CD4		CD8	
	PBS	CpG	PBS	CpG
CCR2	9.1 $\pm$ 0.6	14.3 $\pm$ 0.6	3.1 $\pm$ 0.4	4.0 $\pm$ 0.3
CCR5	5.7 $\pm$ 0.4	15.1 $\pm$ 0.6	4.9 $\pm$ 0.5	8.5 $\pm$ 0.9
CCR7	62.0 $\pm$ 1.3	66.3 $\pm$ 0.7	50.3 $\pm$ 0.5	47.5 $\pm$ 0.7
CXCR3	18.4 $\pm$ 0.5	14.7 $\pm$ 0.6	45.0 $\pm$ 0.8	33.4 $\pm$ 1.8

B. CD4 and CD8 T-cells expressing the indicated selectin/integrin receptor in spleen of E7-vaccinated mice receiving ivag PBS or CpG.

Selectin/Integrin receptor	Selectin/integrin-expressing T-cells among total T-cells (Mean % $\pm$ SEM)			
	CD4		CD8	
	PBS	CpG	PBS	CpG
$\alpha$ L	42.4 $\pm$ 3.3	56.1 $\pm$ 1.6	49.8 $\pm$ 4.5	59.8 $\pm$ 2.5
$\alpha$ 4	23.6 $\pm$ 2.4	27.8 $\pm$ 1.5	21.2 $\pm$ 1.5	20.9 $\pm$ 1.5
$\alpha$ 4 $\beta$ 7	10.6 $\pm$ 1.2	15.4 $\pm$ 2.4	16.2 $\pm$ 1.7	16.4 $\pm$ 1.5
L-selectin	68.4 $\pm$ 1.2	64.1 $\pm$ 2.1	79.1 $\pm$ 4.0	73.2 $\pm$ 4.4
E-selectin	22.8 $\pm$ 1.8	60.0 $\pm$ 1.8	15.1 $\pm$ 1.0	20.7 $\pm$ 1.0
P-selectin	10.9 $\pm$ 0.8	13.5 $\pm$ 0.3	7.9 $\pm$ 0.8	10.1 $\pm$ 1.2
PSGL-1	89.0 $\pm$ 0.7	86.0 $\pm$ 2.3	97.3 $\pm$ 0.2	96.0 $\pm$ 0.1
CD43	22.3 $\pm$ 2.9	29.7 $\pm$ 0.6	21.5 $\pm$ 2.1	23.8 $\pm$ 2.1