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### **Supplemental Material**

#### **Evaluating the Effects of Chronic Oral Exposure to the Food Additive Silicon Dioxide on Oral Tolerance Induction and Food Sensitivities in Mice**

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**Figure S3.** MLN cell viability and frequency after *ex vivo* treatment with food-grade SiO<sub>2</sub>. (A) Cell suspension from MLN of untreated mice (n=4 mice per group) were exposed for 48h to various concentrations of *fg*-SiO<sub>2</sub> (0, 6.25, 12.5, 25 and 50 µg/mL). Frequency of viable cells was evaluated by flow cytometry analysis of propidium iodide staining and normalized to control. (B-F) Cell suspension from MLN of untreated mice (n=9 per group) were exposed for 48h to various concentrations of *fg*-SiO<sub>2</sub> (0, 6.25, 12.5, 25 and 50 µg/mL) before stimulation for 5h with phorbol 12-myristate 13-acetate (PMA) and ionomycin. Frequency of CD3<sup>+</sup> CD4<sup>+</sup> cells (B), of CD3<sup>+</sup> CD4<sup>+</sup> CD25<sup>+</sup> cells (C), of CD3<sup>+</sup> CD4<sup>+</sup> CD25<sup>+</sup> Foxp3<sup>+</sup> cells (D), of CD45<sup>+</sup> CD103<sup>+</sup> CD11b<sup>+</sup> cells (E), and of CD3<sup>+</sup> CD4<sup>+</sup> Tbet<sup>+</sup> cells (F) was evaluated by flow cytometry. (G) Cell suspension from MLN of untreated mice (n=7 per group) were exposed for 3 days to concanavalin-A (a T-cell mitogen) in presence of various concentrations of *fg*-SiO<sub>2</sub> (0, 6.25, 12.5, 25 and 50 µg/mL). Frequency of dead T cells was evaluated by flow cytometry analysis of Viability 488/520 Fixable Dye staining. The data are expressed as median with interquartile range and whiskers extending from minimum to maximum ± SEM. \*p<0.05 by Kruskal-Wallis test followed by a *post-hoc* Dunn's test (A) or one-way ANOVA and *post-hoc* Tukey test (B-G). See Table S4 for data.

**Figure S4.** The gating strategy for analysis of T cell subpopulations from MLN *ex vivo* exposed to food-grade SiO<sub>2</sub>. Flow cytometry gating strategy for quantification of T cell subpopulations from MLN of untreated mice (n=9 per group) *ex vivo* exposed for 48h to various concentrations of *fg*-SiO<sub>2</sub> (0, 6.25, 12.5, 25 and 50 µg/mL) before stimulation for 5h with phorbol 12-myristate 13-acetate (PMA) and ionomycin. The frequency of CD3<sup>+</sup> CD4<sup>+</sup> cells, CD3<sup>+</sup> CD4<sup>+</sup> CD25<sup>+</sup> cells, CD3<sup>+</sup> CD4<sup>+</sup> CD25<sup>+</sup> Foxp3<sup>+</sup> cells, CD3<sup>+</sup> CD4<sup>+</sup> CD25<sup>+</sup> Foxp3<sup>+</sup> IL-10<sup>+</sup> cells, CD3<sup>+</sup> CD4<sup>+</sup> Tbet<sup>+</sup> cells, and CD3<sup>+</sup> CD4<sup>+</sup> Tbet<sup>+</sup> IFN-γ<sup>+</sup> cells was evaluated by flow cytometry. SS: side scatter. FS: forward scatter. FS-H: forward scatter height.

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**Figure S6.** The gating strategy for analysis of T cells proliferation. Flow cytometry gating strategy for quantification of CD4<sup>+</sup> proliferating cells isolated from MLN of untreated mice. Cell suspension from MLN of untreated mice were exposed for 3 days to concanavalin-A (a T-cell mitogen) in the absence or presence of various concentrations of *fg*-SiO<sub>2</sub> (0, 6.25, 12.5, 25 and 50 µg/mL). SS: side scatter. FS: forward scatter. FS-H: forward scatter height.

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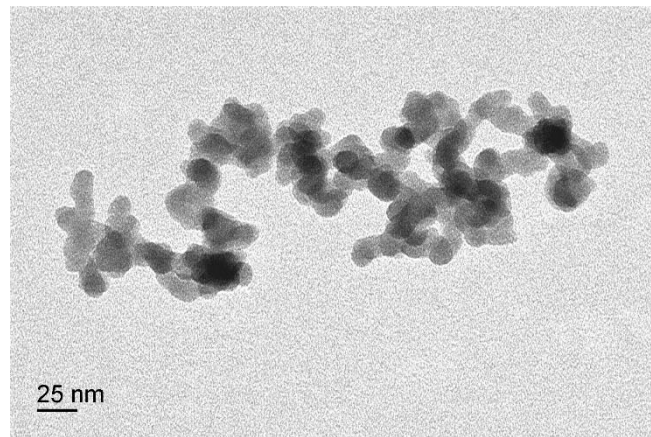
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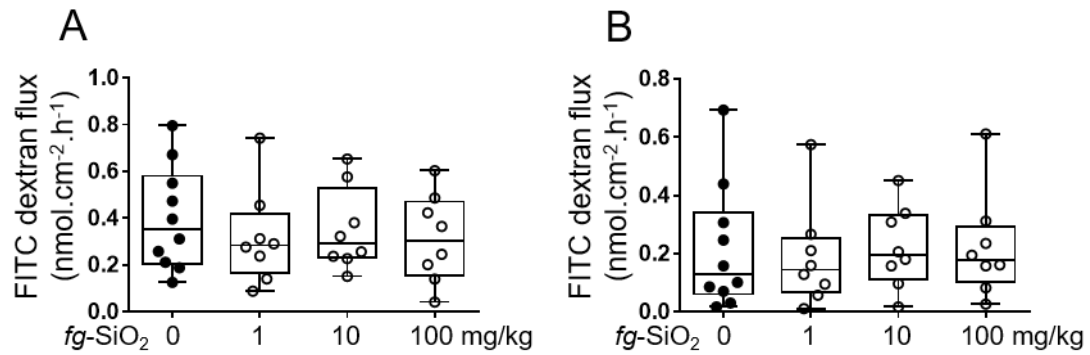
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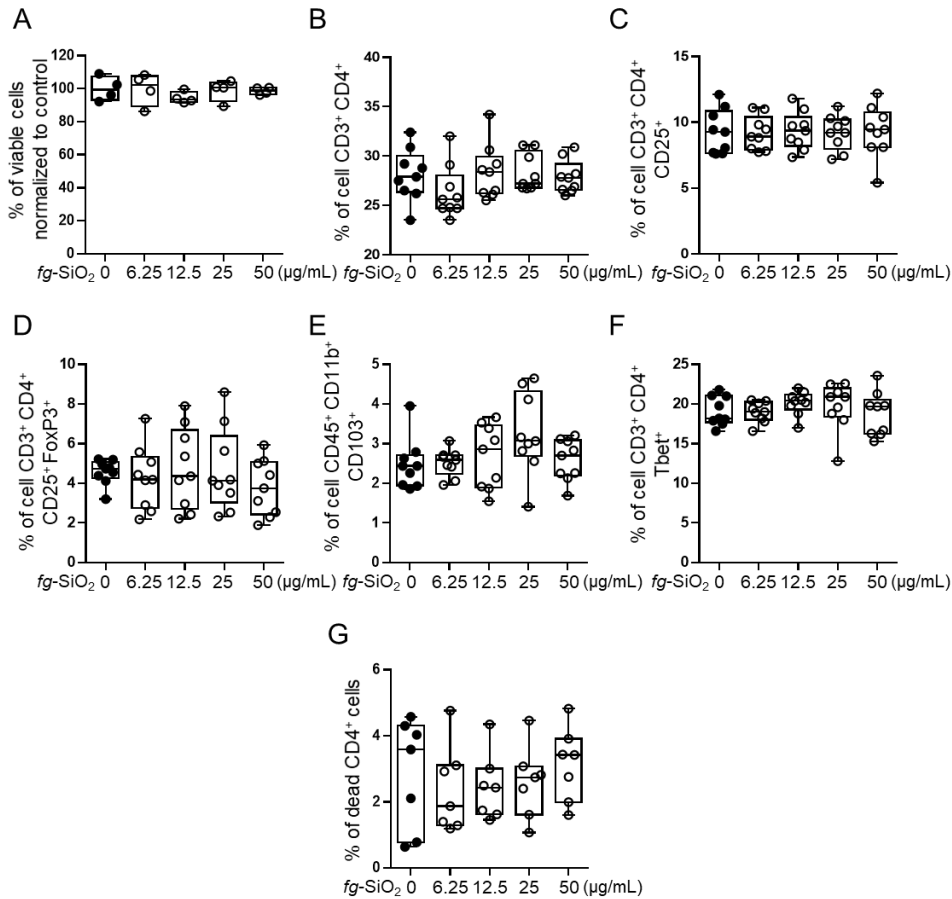
## Supplemental figures



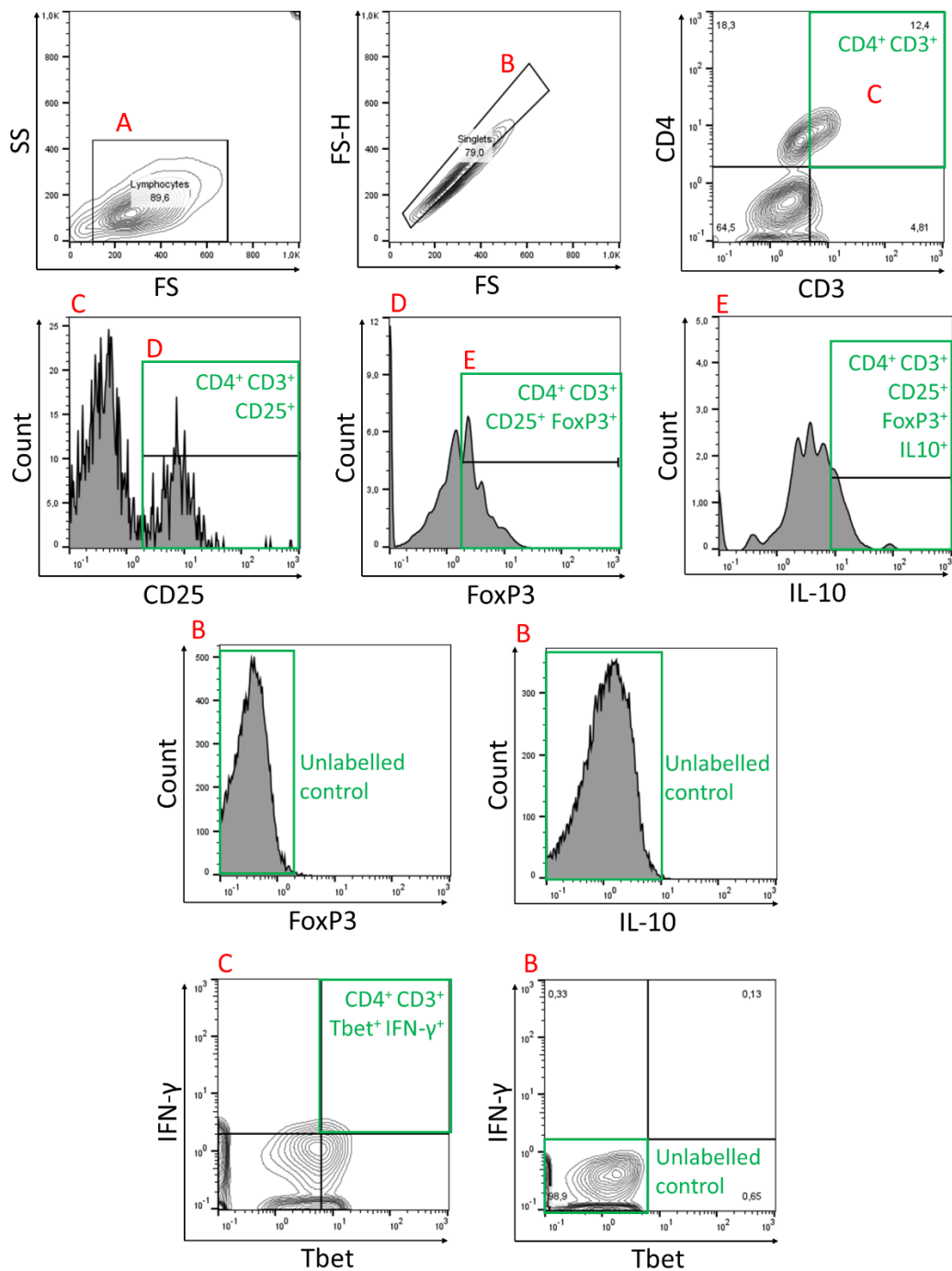
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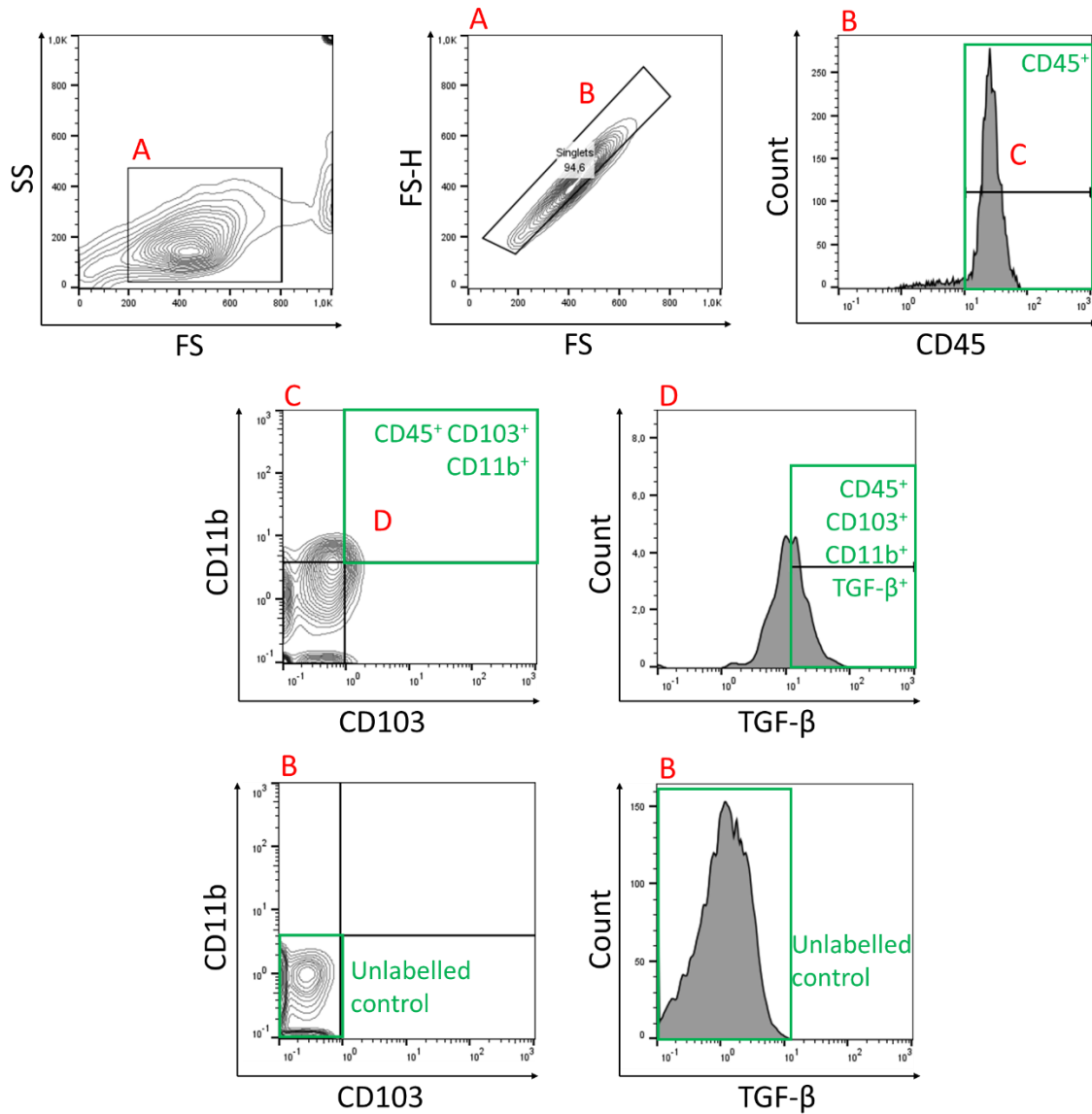
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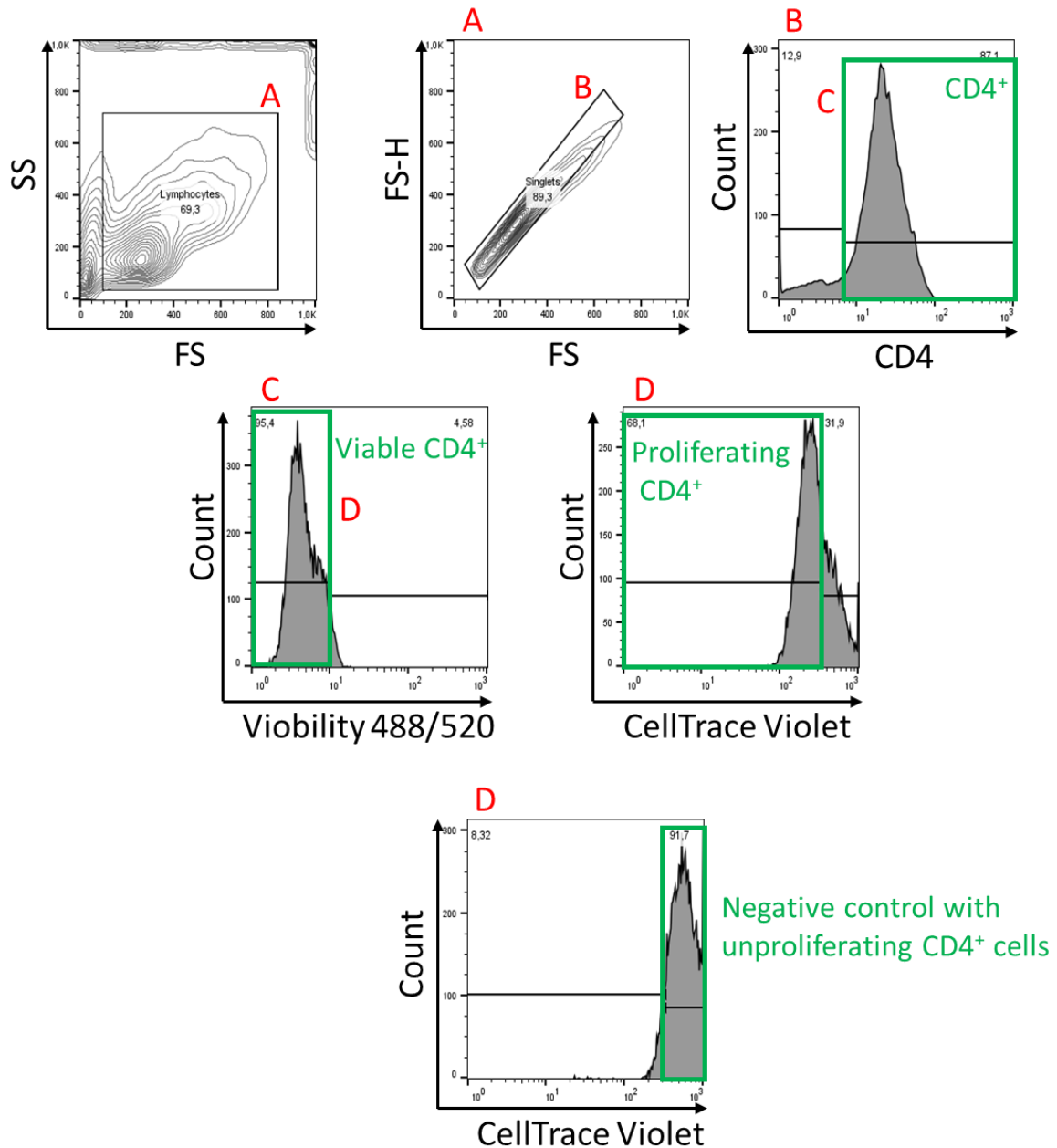


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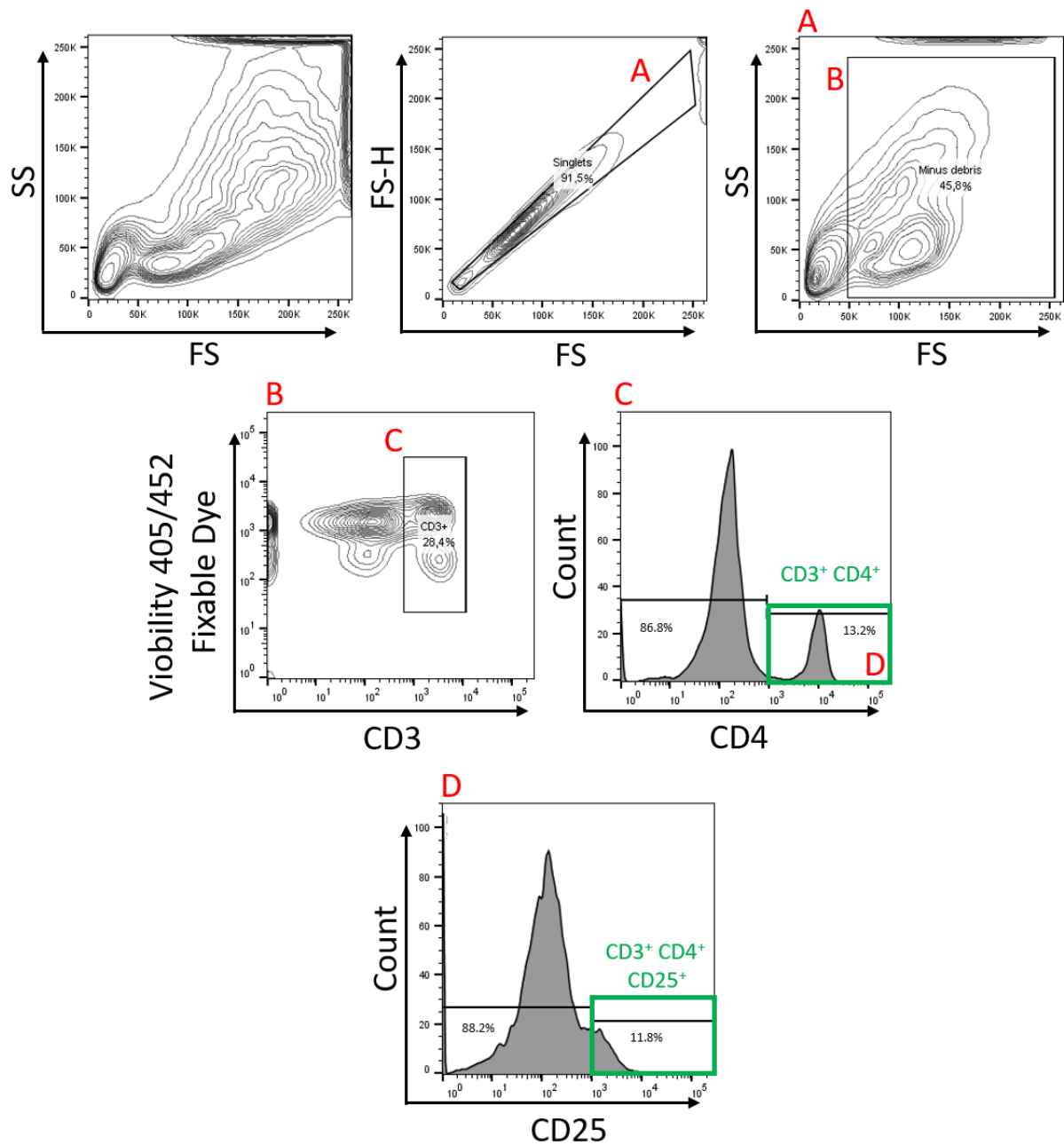


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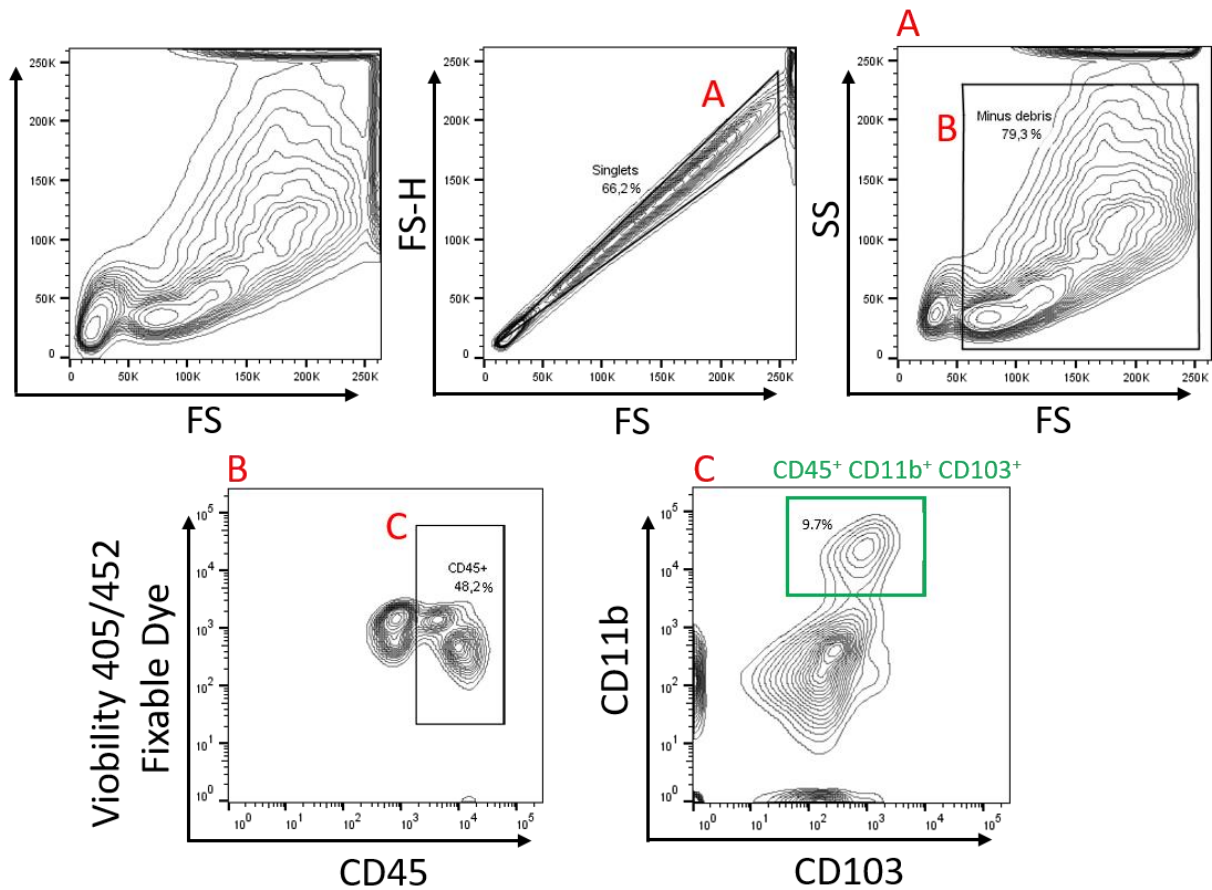




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**Table S1. *fg*-SiO<sub>2</sub> sample characterization by DLS**

SiO <sub>2</sub> sample	Ultrapure water (pH = 7.7)		
	Zeta potential (mV)	H. diam. (nm)	PdI
<b>E551</b>	-25	2406	0.20

H. diam., hydrodynamic diameter; PdI, polydispersity index.

**Table S2. Oral tolerance and challenge with OVA protocol**

Day of protocol	41-43d	48d	54d	55d-60d
OVA-tolerized	Gavage. 20mg OVA in PBS	OVA in CFA+PBS (100µg/s.c.)	IgG anti-OVA in serum	Gavage 25mg OVA in PBS
OVA- immunized	Gavage PBS	OVA in CFA+PBS (100µg/s.c.)	IgG anti-OVA in serum	Gavage 25mg OVA in PBS

CFA, complete Freund adjuvant; IgG, immunoglobulin G. OVA, ovalbumin; PBS, phosphate buffered saline; s.c., subcutaneous.

**Table S3. qPCR primers used for gene expression analysis**

<i>Rpl19</i>	FW	5'-GAAGGTCAAAGGGAATGTGTTCA-3'
	RV	5'-CCTTGTCTGCCTTCAGCTTGT-3'
<i>Il1<math>\beta</math></i>	FW	5'-TGTAATGAAAGACGGCACACC-3'
	RV	5'-TCTTCTTTGGGTATTGCTTGG-3'
<i>Il10</i>	FW	5'-AGAAGCATGGCCCAGAAATCA-3'
	RV	5'-GGCCTTGTTAGACACCTTGGT-3'
<i>Ifn<math>\gamma</math></i>	FW	5'-ATGAACGCTACACACTGCATC-3'
	RV	5'-CCATCCTTTTGCCAGTTCCTG-3'
<i>Tgf<math>\beta</math></i>	FW	5'- AGCCCTGGATACCAACTATTGC-3'
	RV	5'- CACAGCAGTTCTTCTCTGTGGA-3'
<i>Foxp3</i>	FW	5'-CCTGCCTTGGTACATTCGTG-3'
	RV	5'-TGTTGTGGGTGAGTGCTTTG-3'
<i>Il15</i>	FW	5'- CATTTTGGGCTGTGTCAGTG-3'
	RV	5'-GCAATTCCAGGAGAAAGCAG-3'
<i>Il17f</i>	FW	5'-GCCATTCTGAGGGAGGTAGC-3'
	RV	5'-GAGGACAGTTCCCAGCCTTC-3'

FW, Forward sequence; RV, Reverse sequence.

**Table S4.** Corresponding numeric data for all figures. Reported is the measured data for all replicates.

Figure 1B (Lcn2 pg/mg of feces)

<b>0mg/kg</b>	<b>1 mg/kg</b>	<b>10mg/kg</b>	<b>100mg/kg</b>
32.89	134.57	190.26	127.84
96.21	105.47	235.08	101.03
40.83	95.38	212.09	90.08
19.13	80.19	209.91	189.33
24.18	93.11	98.81	139.5
84.08	102.69	224.33	205.52
44.86	75.13	176.47	104.97
46.82	137.69	126.7	167.03
40.97			
40.33			

Figure 1C (IFN $\gamma$  pg/mL)

<b>0mg/kg</b>	<b>1 mg/kg</b>	<b>10mg/kg</b>	<b>100mg/kg</b>
24	45.2	29.3	13.7
19.3	34	75.2	92.2
23.3	32.6	68.8	35.4
13.1	19.1	66.4	24.7
13.2	25.7	37.5	20.5
18.7	12.3	43.3	36.4
5.9	27.3	38.5	65.49
34.1	28.03	51.29	8.81
3.2			
27.8			

Figure 1D (IL-10 pg/mL)

<b>0mg/kg</b>	<b>1 mg/kg</b>	<b>10mg/kg</b>	<b>100mg/kg</b>
1.65	0.3	0.5	0.3
37	0.2	0.4	0.4
2.5	2.2	0.4	2.5
9.9	0.6	0.2	1.2
12	3	3.9	0.3
7.5	0.4	0.9	0.2
21.6	2	3.2	0.5
2.2	0.3	3	2.6
2.7			
3.1			

Figure 1E (TGF- $\beta$  pg/mL)

<b>0mg/kg</b>	<b>1 mg/kg</b>	<b>10mg/kg</b>	<b>100mg/kg</b>
469.3	316.2	361.5	335
502.7	344.7	285.3	337.1
491.8	290.3	280.2	321.7
470.4	280.9	308.1	310.5
563.5	307.5	287.4	337.7
528.4	315.3	298.8	333.1
513.8	289.5	249.9	284.1
385.8	273.2	273.5	361.1
424.35			
441.3			

Figure 2A (TGF- $\beta$  pg/mL)

<b>0<math>\mu</math>g/mL</b>	<b>6.25<math>\mu</math>g/mL</b>	<b>12.5<math>\mu</math>g/mL</b>	<b>25<math>\mu</math>g/mL</b>	<b>50<math>\mu</math>g/mL</b>
135.3	42.5	47.7	66.3	66.7
44.8	43.5	58.5	60.3	64.8
57.7	66.7	51.5	68.2	53.8
43.8	47.3	57.5	62.7	49.8
45.8	66.2	56.5	65.8	49.5
48.2	53.3	61.2	61.2	47.3
59.8	54.3	54.3	53.8	54.2
			74.8	49.8

Figure 2B (TGF- $\beta$  pg/mL)

<b>0<math>\mu</math>g/mL</b>	<b>6.25<math>\mu</math>g/mL</b>	<b>12.5<math>\mu</math>g/mL</b>	<b>25<math>\mu</math>g/mL</b>	<b>50<math>\mu</math>g/mL</b>
102.9	83.0	72.5	69.3	110.8
83.3	81.1	82.9	91.9	63.4
99.8	94.1	73.0	67.0	65.4
83.3	97.8	83.1	90.1	69.8
93.3	90.9	75.1	82.3	77.8
125.4	76.9	81.8	70.1	65.6
83.6	87.1	85.1	77.4	66.0
			98.9	92.0



Figure 2C (IL-10 pg/mL)

0µg/mL	6.25µg/mL	12.5µg/mL	25µg/mL	50µg/mL
4.9	2.7	3.2	3.3	2.8
3.9	9.2	0.2	1.7	0.3
11.8	9.2	5.3	1.4	1.5
8.0	0.0	3.7	0.2	0.7
22.1	2.3	6.8	0.8	2.7
32.3	0.7	1.0	2.9	2.3
7.7	9.4	4.0	1.6	1.0
			1.7	0.8

Figure 2D (IL-10 pg/mL)

0µg/mL	6.25µg/mL	12.5µg/mL	25µg/mL	50µg/mL
2.8	4.4	2.2	4.4	3.6
3.9	3.8	2.5	5.5	2.6
4.7	4.2	2.9	2.6	2.8
2.3	2.8	1.9	1.9	2.4
9.2	2.6	2.1	4.4	6.3
9.3	5.4	4.9	2.1	4.9
3.3	2.4	2.5	1.9	4.4
			3.1	2.8

Figure 2E (IFN-γ pg/mL)

0µg/mL	6.25µg/mL	12.5µg/mL	25µg/mL	50µg/mL
10.4	5.7	10.7	12.4	7.2
11.1	6.1	7.0	8.7	3.2
10.5	7.2	6.8	10.0	4.0
7.2	11.9	13.1	15.3	30.0
10.7	7.9	4.1	3.3	5.8
4.5	4.5	14.9	14.1	13.0
6.5	6.7	6.4	8.5	4.6
			16.4	2.6

Figure 2F (IFN- $\gamma$  pg/mL)

<b>0<math>\mu</math>g/mL</b>	<b>6.25<math>\mu</math>g/mL</b>	<b>12.5<math>\mu</math>g/mL</b>	<b>25<math>\mu</math>g/mL</b>	<b>50<math>\mu</math>g/mL</b>
18.2	17.8	17.6	17.3	17.5
18.0	17.5	17.9	17.4	17.3
18.0	17.6	17.8	17.2	17.2
17.8	18.1	17.6	17.3	17.5
17.6	18.0	17.5	18.1	17.2
18.0	18.0	17.2	17.2	18.3
17.9	17.7	17.4	18.4	18.5
			17.8	17.3

Figure 2G (% of cell CD45<sup>+</sup> CD11b<sup>+</sup> CD103<sup>+</sup> TGF- $\beta$ <sup>+</sup>)

<b>0<math>\mu</math>g/mL</b>	<b>6.25<math>\mu</math>g/mL</b>	<b>12.5<math>\mu</math>g/mL</b>	<b>25<math>\mu</math>g/mL</b>	<b>50<math>\mu</math>g/mL</b>
42.9	37.5	18.9	10.8	17.6
51.7	33.9	16.7	11.6	11.1
36.4	30.4	13.1	8.7	10.0
26.5	18.6	11.5	8.8	8.3
30.1	20.0	10.2	10.5	10.7
31.9	13.4	20.4	4.0	10.3
30.1	25.2	7.7	10.1	5.6
18.2	22.4	7.2	8.9	8.0
25.0	24.6	10.2	6.8	13.9

Figure 2H (% of cell CD4<sup>+</sup> CD3<sup>+</sup> Foxp3<sup>+</sup> IL-10<sup>+</sup>)

<b>0<math>\mu</math>g/mL</b>	<b>6.25<math>\mu</math>g/mL</b>	<b>12.5<math>\mu</math>g/mL</b>	<b>25<math>\mu</math>g/mL</b>	<b>50<math>\mu</math>g/mL</b>
2.9	1.1	1.0	0.6	0.7
1.9	1.5	0.7	0.8	0.0
1.5	0.4	0.4	0.0	1.0
1.8	0.6	0.5	0.7	0.1
1.9	0.2	0.1	0.8	0.6
1.1	0.2	0.1	0.4	1.7
1.6	0.3	0.1	0.0	0.5
2.1	1.0	0.1	0.4	1.3
0.9	0.7	0.9	0.3	1.1

Figure 2I (% of cell CD4<sup>+</sup> CD3<sup>+</sup> Tbet<sup>+</sup> IFN- $\gamma$ <sup>+</sup>)

<b>0<math>\mu</math>g/mL</b>	<b>6.25<math>\mu</math>g/mL</b>	<b>12.5<math>\mu</math>g/mL</b>	<b>25<math>\mu</math>g/mL</b>	<b>50<math>\mu</math>g/mL</b>
1.2	1.2	1.5	1.9	0.9
0.7	1.1	0.9	0.4	0.9
1.6	0.7	1.1	1.0	0.5
1.6	1.3	0.7	1.6	0.6
1.3	1.3	0.7	2.8	0.2
1.0	0.5	1.5	1.2	1.5
0.7	0.7	1.3	0.5	1.4
0.8	1.2	1.1	1.1	1.8
1.1	1.9	1.2	1.1	0.7

Figure 2J (% of proliferating CD4<sup>+</sup> cells)

<b>0<math>\mu</math>g/mL</b>	<b>6.25<math>\mu</math>g/mL</b>	<b>12.5<math>\mu</math>g/mL</b>	<b>25<math>\mu</math>g/mL</b>	<b>50<math>\mu</math>g/mL</b>
66.4	58.8	50	59.6	50
65.5	60.2	54.6	59.1	62.5
68.1	66	61.1	61.5	65.1
73.8	55.9	52.2	51.7	49.2
59.7	58.8	57.6	55.3	51.9
61.8	62.4	57.6	58.5	58.5
60.4	57.1	55.6	53.9	53.9

Figure 3B (OD 450 nm)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>1 mg/kg</b>	<b>10mg/kg</b>	<b>100mg/kg</b>
0.65	0.06	0.31	0.39	0.31
0.53	0.07	0.50	0.11	0.47
0.62	0.06	0.30	0.86	0.63
0.75	0.05	0.68	0.58	0.55
0.63	0.06	0.41	0.43	0.54
0.63	0.14	0.27	0.63	0.63
0.62	0.06	0.72	0.43	0.38

Figure 3C (Lcn2 pg/mL of feces)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>1 mg/kg</b>	<b>10mg/kg</b>	<b>100mg/kg</b>
7854.3	885.2	1086.1	1976.1	2273.1
4685.2	1511.6	1885.8	2093.4	4767.5
1800.6	2553.3	2485.2	7529.0	2589.0
3527.2	868.5	3823.4	5107.1	6450.9
3215.3	1960.0	2328.8	4380.8	15831.6
6132.3	1645.6	1900.4	3823.7	10752.8
4073.8	554.4	1481.5	1844.0	3259.7

Figure 3D (*Il1 $\beta$*  relative expression)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>1 mg/kg</b>	<b>10mg/kg</b>	<b>100mg/kg</b>
3.39	1.45	8.10	2.71	15.10
2.00	1.79	2.43	2.97	15.42
3.43	0.90	1.59	2.00	2.62
2.07	0.76	2.10	3.87	2.25
2.78	0.10	5.39	4.59	2.54
11.62	0.35	7.50	1.71	1.50
4.22	1.65	1.31	2.52	2.48

Figure 3E (IFN- $\gamma$  pg/mL)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>1 mg/kg</b>	<b>10mg/kg</b>	<b>100mg/kg</b>
4.9	5.0	4.9	12.4	11.9
14.9	5.0	5.5	3.8	9.9
8.1	6.4	14.1	11.0	6.3
17.0	3.4	6.4	21.7	3.5
18.0	0.5	6.8	13.0	9.1
9.6	2.7	20.1	18.7	11.3
11.4	4.5	9.6	6.0	8.7

Figure 3F (*Il10* relative expression)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>1 mg/kg</b>	<b>10mg/kg</b>	<b>100mg/kg</b>
0.15	1.83	0.65	0.18	0.32
0.22	0.22	0.14	0.28	0.01
0.02	0.11	0.06	0.06	0.22
0.30	1.01	0.28	0.07	0.04
0.16	0.42	0.04	0.02	0.06
0.16	2.42	0.07	0.05	0.05
0.09	1.00	0.01	0.07	0.06

Figure 3G (*Tgfβ* relative expression)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>1 mg/kg</b>	<b>10mg/kg</b>	<b>100mg/kg</b>
0.46	1.25	0.77	0.7	0.24
0.47	2.02	0.71	0.39	0.44
0.41	0.49	0.48	0.31	0.53
0.52	0.47	0.04	0.5	0.59
0.03	0.78	0.51	0.33	0.31
0.47	0.77	0.37	0.5	0.43
0.38	1.22	0.23	0.48	0.42

Figure 3H (IL-10 pg/mL)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>1 mg/kg</b>	<b>10mg/kg</b>	<b>100mg/kg</b>
3.4	5.5	5.1	5.6	5.6
5.5	7.6	3.9	1.4	2.5
6.0	3.4	2.6	4.6	0.6
1.8	4.0	0.1	0.7	1.2
0.9	8.1	4.9	1.6	4.8
2.4	6.6	0.4	3.4	2.7
3.3	7.3	1.9	4.3	3.7

Figure 3I (TGF- $\beta$  pg/mL)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>1 mg/kg</b>	<b>10mg/kg</b>	<b>100mg/kg</b>
156.1	208.8	94.6	161.5	265.4
168.9	307.9	69.8	50.5	221.2
129.2	310.1	88.1	134.6	196.4
83.6	241.6	148.4	128.9	77.5
142.6	360.6	193.2	53.2	128.2
129.0	356.9	243.3	106.3	231.6
230.0	358.5	184.7	26.6	197.5

Figure 3J (TGF- $\beta$  pg/mL of tissue)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>1 mg/kg</b>	<b>10mg/kg</b>	<b>100mg/kg</b>
3.0	4.8	3.3	3.0	5.2
2.5	7.7	4.2	3.7	3.1
1.4	5.8	2.4	3.4	0.7
4.7	4.6	3.1	4.3	2.1
0.2	7.3	0.9	2.1	2.3
3.2	8.1	1.0	1.4	1.7
2.4	4.4	3.0	2.5	1.6

Figure 4B (OD 450 nm)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>10mg/kg (food)</b>	<b>10mg/kg (gav)</b>
0.80	0.06	0.36	0.82
0.24	0.07	0.81	0.58
0.86	0.11	1.06	0.38
0.59	0.06	0.72	1.73
0.38	0.08	0.57	1.20
0.93	0.06	0.68	0.48
0.69	0.05	0.90	1.19

Figure 4C (Lcn2 pg/mL of feces)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>10mg/kg (food)</b>	<b>10mg/kg (gav)</b>
1814.1	1337.0	5314.7	5138.0
2346.4	449.2	3696.9	4359.5
1557.9	151.0	1968.7	3742.2
2593.7	812.5	2690.4	3424.2
3332.5	767.2	1742.3	1993.0
2681.0	651.3	1296.7	1488.3
2108.9	1875.9	3027.7	2496.5

Figure 4D (IFN- $\gamma$  pg/mL)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>10mg/kg (food)</b>	<b>10mg/kg (gav)</b>
31.0	7.3	55.6	27.3
87.7	6.1	64.5	55.9
61.6	42.1	77.5	41.8
36.7	26.4	37.4	78.3
57.5	47.8	97.2	25.3
51.7	7.1	42.9	24.2
73.8	7.5	25.5	55.6

Figure 4E (IL-10 pg/mL)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>10mg/kg (food)</b>	<b>10mg/kg (gav)</b>
44.8	25.8	24.0	20.6
15.2	45.7	33.4	17.9
13.6	63.9	6.9	10.6
1.4	93.1	29.2	13.4
5.1	42.7	24.4	57.3
18.1	45.5	23.2	12.2
20.8	52.8	40.3	5.6

Figure 4F (TGF- $\beta$  pg/mL)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>10mg/kg (food)</b>	<b>10mg/kg (gav)</b>
16.7	169.5	67.8	80.2
11.5	253.6	84.7	43.0
13.2	61.7	82.8	12.7
2.9	72.3	31.0	15.5
69.6	163.5	93.7	30.0
90.8	158.1	53.1	58.0
49.5	112.6	71.8	89.4

Figure 4G (% of cell CD3<sup>+</sup> CD4<sup>+</sup>)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>10mg/kg (food)</b>	<b>10mg/kg (gav)</b>
4.5	9.6	3.9	5.1
2.6	6.4	4.0	4.8
7.4	9.5	4.5	8.3
5.3	13.2	6.7	6.3
7.1	9.6	3.2	7.1

Figure 4H (% of cell CD3<sup>+</sup> CD4<sup>+</sup> CD25<sup>+</sup>)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>10mg/kg (food)</b>	<b>10mg/kg (gav)</b>
8.8	25.9	11.2	18.4
9.5	29.5	15.2	17.2
11.8	27.0	20.3	20.0
12.3	26.1	16.7	18.8
19.3	21.0	12.6	19.7

Figure 4I (*foxp3* relative expression)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>10mg/kg (food)</b>	<b>10mg/kg (gav)</b>
0.58	0.85	0.52	0.39
0.37	0.98	0.55	0.26
0.52	1.34	0.58	0.79
0.53	0.88	0.6	0.27
0.63	0.95	0.61	0.27



Figure 4J (% of cell CD45<sup>+</sup> CD11b<sup>+</sup> CD103<sup>+</sup>)

<b>PBS</b>	<b>OVA</b>	<b>OVA</b>	<b>OVA</b>
<b>0mg/kg</b>	<b>0mg/kg</b>	<b>10mg/kg (food)</b>	<b>10mg/kg (gav)</b>
1.2	7.9	8.6	2.5
6.8	8.9	5.5	2.1
5.7	8.1	5.4	6.5
7.9	9.7	9.7	6.4
5.4	9.2	7.1	7.5

Figure 5B (OD 450 nm)

<b>Day 60</b>	<b>Day 60</b>	<b>Day 75</b>	<b>Day 75</b>
<b>0mg/kg</b>	<b>10mg/kg</b>	<b>0mg/kg</b>	<b>10mg/kg</b>
0.7	2.2	1.8	1.2
1.0	1.1	0.3	0.8
1.0	0.7	0.9	0.9
0.8	0.4	1.6	1.6
2.4	1.0	0.5	0.5
		0.6	2.1

Figure 5C (OD 450 nm)

<b>Day 60</b>	<b>Day 60</b>	<b>Day 75</b>	<b>Day 75</b>
<b>0mg/kg</b>	<b>10mg/kg</b>	<b>0mg/kg</b>	<b>10mg/kg</b>
0.4	0.6	0.8	0.3
0.3	0.5	0.1	0.4
0.5	0.4	0.5	0.5
1.0	0.2	0.5	1.6
0.3	0.2	0.2	0.3
		0.3	0.2

Figure 5D (V/C ratio)

<b>Day 60</b>	<b>Day 60</b>	<b>Day 75</b>	<b>Day 75</b>
<b>0mg/kg</b>	<b>10mg/kg</b>	<b>0mg/kg</b>	<b>10mg/kg</b>
6.4	6.4	7.4	5.5
6.3	6.2	7.6	6.4
7.2	6.4	6.4	5.9
7.6		7.2	6.2
6.2	7.5	6.5	5.5
		6.4	5.2

Figure 5F (IELs/100 EC)

<b>Day 60</b> <b>0mg/kg</b>	<b>Day 60</b> <b>10mg/kg</b>	<b>Day 75</b> <b>0mg/kg</b>	<b>Day 75</b> <b>10mg/kg</b>
7	8	5	11.5
3	6	5.5	16.5
5	5.5	6	
5	6.5	6	11
4	5	7.5	17.5
		5	12

Figure 5H (*Ifn $\gamma$*  relative expression)

<b>0mg/kg</b>	<b>10mg/kg</b>
0.47	2.00
0.60	2.34
2.21	3.59
0.86	2.04
0.27	2.14
1.59	2.20

Figure 5I (*Il17f* relative expression)

<b>0mg/kg</b>	<b>10mg/kg</b>
1.49	30.82
0.64	5.38
0.71	32.91
1.61	47.41
0.61	4.08
0.94	41.93

Figure 5J (*Il15* relative expression)

<b>0mg/kg</b>	<b>10mg/kg</b>
0.80	1.25
1.30	1.50
1.05	0.70
1.11	0.92
0.95	0.88
0.80	0.49

Figure 5K (*Il1 $\beta$*  relative expression)

<b>0mg/kg</b>	<b>10mg/kg</b>
0.94	1.07
0.83	1.67
1.08	1.46
0.94	0.95
1.23	0.65
1.03	0.42

Figure 5L (*Il10* relative expression)

<b>0mg/kg</b>	<b>10mg/kg</b>
1.41	1.35
1.72	0.61
0.71	1.62
0.62	1.27
0.70	3.18
0.84	1.62

Figure 5M (*Tgfb $\beta$*  relative expression)

<b>0mg/kg</b>	<b>10mg/kg</b>
1.00	0.62
0.99	2.59
1.09	0.50
0.69	0.77
1.27	1.13
0.96	1.26

Figure S2A (FITC dextran flux (nmol.cm<sup>-2</sup>.h<sup>-1</sup>))

<b>0mg/kg</b>	<b>1mg/kg</b>	<b>10mg/kg</b>	<b>100mg/kg</b>
0.80	0.74	0.38	0.25
0.47	0.28	0.65	0.14
0.26	0.09	0.24	0.60
0.55	0.31	0.58	0.20
0.13	0.29	0.23	0.04
0.19	0.46	0.26	0.42
0.21	0.14	0.15	0.49
0.40	0.24	0.32	0.37
0.67			
0.31			

Figure S2B (FITC dextran flux (nmol.cm<sup>-2</sup>.h<sup>-1</sup>))

<b>0mg/kg</b>	<b>1mg/kg</b>	<b>10mg/kg</b>	<b>100mg/kg</b>
0.02	0.06	0.45	0.61
0.31	0.10	0.10	0.08
0.07	0.16	0.21	0.03
0.25	0.21	0.31	0.31
0.69	0.01	0.34	0.24
0.44	0.13	0.02	0.16
0.16	0.27	0.16	0.16
0.09	0.58	0.18	0.20
0.10			
0.03			

Figure S3A (% of viable cells normalized to control)

<b>0µg/mL</b>	<b>6.25µg/mL</b>	<b>12.5µg/mL</b>	<b>25µg/mL</b>	<b>50µg/mL</b>
109.01	108.39	99.69	104.66	100.62
102.48	105.59	91.61	100.93	100.31
96.27	98.76	94.10	100.62	97.52
92.24	86.34	92.86	89.44	96.27

Figure S3B (% of cell CD3<sup>+</sup> CD4<sup>+</sup>)

0µg/mL	6.25µg/mL	12.5µg/mL	25µg/mL	50µg/mL
23.5	23.5	26.3	31.1	28.2
27.5	32	28.4	27.2	26.6
32.4	24.8	34.2	29.9	26
27.9	25.8	29.2	26.7	27.8
28.8	24.7	26.5	26.8	26.5
26.5	24.7	26.1	27.9	27.9
30.9	26.9	25.5	31.1	30.2
26.2	25.6	28.6	27.2	26.9
29.2	29.1	30.6	26.8	30.9

Figure S3C (% of cell CD3<sup>+</sup> CD4<sup>+</sup> CD25<sup>+</sup>)

0µg/mL	6.25µg/mL	12.5µg/mL	25µg/mL	50µg/mL
9.4	9.8	11.8	9.7	10.4
7.7	7.7	9.7	9.2	9.5
8.1	7.8	9.4	7.5	5.4
12.1	11.0	8.8	8.5	9.2
7.6	8.8	7.3	10.1	11.1
10.5	9.5	9.8	7.2	8.1
7.6	8.0	7.9	10.3	9.6
11.2	11.1	11.0	9.2	8.1
9.3	8.9	8.5	11.2	12.2

Figure S3D (% of cell CD3<sup>+</sup> CD4<sup>+</sup> CD25<sup>+</sup> FoxP3<sup>+</sup>)

0µg/mL	6.25µg/mL	12.5µg/mL	25µg/mL	50µg/mL
3.2	4.4	4.4	5.6	5.1
5.0	7.3	7.1	8.6	2.3
5.2	4.2	4.2	2.5	1.9
4.4	5.1	7.9	7.1	4.4
4.6	2.2	5.4	2.3	2.6
4.1	4.2	3.0	3.5	5.0
5.2	5.6	2.4	4.2	5.9
4.7	2.6	6.3	3.9	3.1
4.8	2.9	2.2	4.1	3.8

Figure S3E (% of cell CD45<sup>+</sup> CD11b<sup>+</sup> CD103<sup>+</sup>)

<b>0µg/mL</b>	<b>6.25µg/mL</b>	<b>12.5µg/mL</b>	<b>25µg/mL</b>	<b>50µg/mL</b>
1.9	2.1	3.1	3.1	3.2
4.0	2.7	2.9	3.0	2.8
2.3	2.5	3.4	4.5	2.3
2.8	2.7	3.5	3.2	2.1
2.0	2.6	3.7	1.4	3.1
2.4	3.1	1.9	4.7	2.7
2.6	2.4	1.9	2.8	3.1
2.4	2.7	1.6	4.1	2.3
1.9	2.0	2.1	2.6	1.7

Figure S3F (% of cell CD3<sup>+</sup> CD4<sup>+</sup> Tbet<sup>+</sup>)

<b>0µg/mL</b>	<b>6.25µg/mL</b>	<b>12.5µg/mL</b>	<b>25µg/mL</b>	<b>50µg/mL</b>
19.8	18.2	21.5	22.5	19.7
18.1	19.0	19.8	12.8	16.3
16.6	16.6	20.9	21.5	19.8
21.8	20.5	18.8	22.6	16.2
21.0	19.4	17.0	18.8	15.3
21.1	17.8	20.5	20.9	19.8
17.9	18.9	22.0	18.0	21.3
18.2	20.1	20.4	20.9	23.6
17.5	20.4	20.2	19.6	16.7

Figure S3G (% of dead CD4<sup>+</sup> cells)

<b>0µg/mL</b>	<b>6.25µg/mL</b>	<b>12.5µg/mL</b>	<b>25µg/mL</b>	<b>50µg/mL</b>
4.58	4.76	2.49	2.74	3.43
4.03	1.4	4.35	2.82	4.82
0.64	3.11	1.45	1.61	2.76
4.3	1.19	1.62	2.4	3.91
0.78	1.87	1.74	1.07	3.42
3.59	2.92	2.43	4.46	1.6
2.11	1.29	3.01	3.08	1.99