

Supplementary Material

Table S1: Secretion of splenic cytokines after *in vitro* re-stimulus. There was no significant stimulus for the production of cytokines IL-2, IL-4, IL-10, IL-17A. Levels measured in pg.mL⁻¹. Values express mean \pm standard deviation.

Cytokine	24h			48h			72h		
	nr	ENV	ENVNS1	nr	ENV	ENVNS1	nr	ENV	ENVNS1
IL-2	440.89 \pm 13.51	447.33 \pm 5.79	432.00 \pm 13.69	421.77 \pm 7.05	432.72 \pm 8.21	419.19 \pm 4.04	410.6 \pm 10.02	412.80 \pm 2.55	417.42 \pm 13.12
IL-4	907.44 \pm 0.90	905.87 \pm 0.09	906.68 \pm 0.88	905.67 \pm 0.58	905.66 \pm 0.70	905.60 \pm 0.58	904.47 \pm 0.55	904.78 \pm 0.51	905.54 \pm 0.77
IL-10	132.75 \pm 8.02	117.48 \pm 5.30	130.56 \pm 4.11	117.31 \pm 6.51	123.21 \pm 7.85	121.41 \pm 13.85	119.53 \pm 12.85	124.0 1 \pm 7.67	124.48 \pm 8.65
IL-17A	153.59 \pm 1.21	150.09 \pm 0.96	152.55 \pm 3.61	151.35 \pm 1.55	156.86 \pm 4.12	151.28 \pm 7.68	145.75 \pm 2.85	146.89 \pm 1.91	149.45 \pm 5.14

Table S2: Average weight of the mice groups throughout the immunization experiment. Values correspond to mean \pm standard deviation.

GROUPS	Weight (g)		
	Day 1	Day 7	Day 21
<i>P. pastoris</i> :nr	21.66 \pm 0.90	22.74 \pm 0.99	23.27 \pm 1.20
<i>P.pastoris</i> :ENV	22.06 \pm 1.63	22.63 \pm 1.77	23.71 \pm 2.02
<i>P.pastoris</i> :ENVNS1	20.86 \pm 0.55	22.03 \pm 1.03	22.75 \pm 1.01