**Fig. S1**

Homeostatic expansion of IFN-γ competent cells with age

BALB/c uninfected

| CD4+Foxp3- Teff/mem | spleen 3 mo. | spleen 5.5 mo. | mLN 3 | mLN 5.5 | mLN 5.5 mo. | siLP 3 | siLP 5.5 | siLP 5.5 mo. | CD62-L | GATA-3 |
|---------------------|--------------|----------------|-------|---------|------------|--------|----------|-------------|---------|--------|
| 16.7                | 23.7         | 8.4           | 11.2  | 80.2    | 82.2       | 17.1   | 17.1     | 17.1       | 9.9     | 17.1   |
| 18.5                | 38.7         | 9.9           | 17.1  | 17.1    | 17.1       | 17.1   | 17.1     | 17.1       | 17.1    | 17.1   |

**Fig. S1:** Homeostatic expansion of IFN-γ competent cells with age. a Left: Representative contour plots depicting CD44 vs. CD62L expression in CD4+Foxp3- cells in spleen, mLN and small intestine in uninfected BALB/c mice. Right: Corresponding contour plots depicting the T-bet vs. GATA-3 expression in CD44+ CD62L- cells.

**Fig. S2**

Early type 2 adaptive responses in Hp infected adult and mature mice

| CD4+Foxp3- effector cells | GATA-3+T-bet+ Th2/1 | GATA-3+ Th2 | T-bet+ Th1 |
|---------------------------|----------------------|-------------|------------|
| mLN 1.5 mo.               | 2.5                  | 25          | 10         |
| mLN 3-17 mo.              | 2                    | 4           | 1          |
| spleen 1.5 mo.            | 3                    | 6           | 10         |
| spleen 3-17 mo.           | 3                    | 4           | 2          |
| siLP naive                | 6                    | 60          | 30         |
| siLP Hp d6                | 4                    | 40          | 20         |

**Fig. S2:** Early type 2 adaptive responses in Hp infected adult and mature mice. Mature mice display an early impairment in Th2 responses. a Bar graphs depict the frequencies of Th2/1, Th2 and Th1 cells in top: mLN, mid: spleen and bottom: small intestine in CD4+Foxp3- cells in adult and mature BALB/c mice. Data from six independent experiments are reported ( n=3-10 mice/group) as mean ± SD. Statistical analysis was performed separately between adult and mature naive mice and between adult and mature Hp infected mice using unpaired t test or Mann-Whitney test. *p<0.05, **p<0.01, ***p<0.001, ****p<0.0001.
Fig. S3
Susceptible C57BL/6 mice accumulate more Th2/1 cells compared to resistant BALB/c mice.

Graphs depict the frequencies of Th2/1, Th2 and Th1 cells in spleen (a) and small intestine (b) at indicated time points post infection. Data derive from one of two experiments with similar results. Bar report the mean, circles represent individual mice. Statistical analysis was performed using one-way ANOVA and Tukey's multiple comparisons test or Kruskal Wallis test with Dunn’s multiple comparisons test depending on the normality tests.*p≤0.05, **p≤0.01, ***p≤0.001.

Fig. S4
Highly resistant SJL mice accumulate fewer Th2/1 cells associated with higher M2 polarization.

a Frequencies of IFN-γ producing cells in mLN, spleen and siLP shown as percentage in live cells at day 7 post infection. Cells were stimulated with PMA/ionomycin. Data derive from one out of two experiments with similar results (n=4 mice/group). b Frequencies of left: Th2/1 and right: Th2 cells in siLP at day 7 post infection. Cells were stained for transcription factors ex vivo. Statistical analysis was performed using one-way ANOVA and Tukey’s multiple comparisons test or Kruskal Wallis test with Dunn’s multiple comparisons test depending on the normality tests. *p≤0.05, **p≤0.01, ***p≤0.001, ****p≤0.0001.

Fig. S4 Highly resistant SJL mice accumulate fewer Th2/1 cells associated with higher M2 polarization. a Frequencies of IFN-γ producing cells in mLN, spleen and siLP shown as percentage in live cells at day 7 post infection. Cells were stimulated with PMA/Ionomycin. Data derive from one out of two experiments with similar results (n=4 mice/group). b Frequencies of left: Th2/1 and right: Th2 cells in siLP at day 7 post infection. Cells were stained for transcription factors ex vivo. Statistical analysis was performed using one-way ANOVA and Tukey’s multiple comparisons test or Kruskal Wallis test with Dunn’s multiple comparisons test depending on the normality tests. *p≤0.05, **p≤0.01, ***p≤0.001, ****p≤0.0001.