









\*\*\*

myd88<sup>-/-</sup>

\*\*\*

\*\*\*

myd88<sup>+/+</sup>

Head

**★**\*\*

4,000-

3,000-

2,000

1,000

S1WT:

Flagellin:



\*\*\*

\*\*\*

myd88<sup>-/-</sup>

Tail

\*\*\*

\*\*\*

\*\*\*

\*\*\* \*\*

myd88<sup>+/+</sup> i







ך 100,000 ך

G

10<sup>6</sup>

ifng/rps11 x



Figure S1 (related to Figure 1). Gene expression analysis of wild type and Myd88-deficient larvae injected with wild type S1. Recombinant S1WT (+) or vehicle (-) were injected in the hindbrain ventricle of 2 dpf wild type and Myd88-deficient larvae, and the transcript levels of the indicated genes were analyzed at 12 hpi by RT-qPCR in larval head and tail. Data are shown as mean  $\pm$  S.E.M. P values were calculated using one way ANOVA and Tukey multiple range test. ns, not significant, \* $\leq$ p0.05, \*\*p $\leq$ 0.01, \*\*\*p $\leq$ 0.001.

## A: crll1b



B: crTlr2



**Figure S2 (related to Figures 2 and 3).** Analysis of genome editing efficiency in larvae injected with *il1b* (A) and *tlr2* (B) crRNA/Cas 9 complexes and quantification rate of nonhomologous end joining mediated repair showing all insertions and deletions (INDELS) at the target site using TIDE (<u>https://tide.nki.nl</u>).















**Figure S3 (related to Figures 2 and 3). Il1b and Tlr2 deficiencies do not affect larval development.** The precentage of dead/alive (A, D) and malformed embryos (B, E), and the developmental stage (C, F) of Il1b- (A-C) and Tlr2-deficient (D-F) embryos was determined at 24 hpf. au, arbitrary units.





















Figure S4 (related to Figure 2). Gene expression analysis of wild type and II1b-deficient larvae injected with wild type S1. Recombinant S1WT (+) or vehicle (-) were injected in the hindbrain ventricle of 2 dpf wild type and II1b-deficient larvae, and the transcript levels of the indicated genes were analyzed at 12 hpi by RT-qPCR in larval head and tail. Data are shown as mean  $\pm$  S.E.M. P values were calculated using one way ANOVA and Tukey multiple range test. ns, not significant, \* $\leq$ p0.05, \*\*p $\leq$ 0.01, \*\*\*p $\leq$ 0.001.



Figure S5 (related to Figure 3). The expression analysis of wild type and Thr2-deficient larvae injected with wild type S1. Recombinant S1WT (+) or vehicle (-) were injected in the hindbrain ventricle of 2 dpf wild type and Thr2-deficient larvae, and the transcript levels of the indicated *thr* genes were analyzed at 12 hpi by RT-qPCR in larval head and tail. Data are shown as mean  $\pm$  S.E.M. P values were calculated using one way ANOVA and Tukey multiple range test. ns, not significant, \*\*p≤0.01, \*\*\*p≤0.001.



![](_page_5_Figure_1.jpeg)

![](_page_5_Figure_2.jpeg)

![](_page_5_Figure_3.jpeg)

![](_page_5_Figure_4.jpeg)

ns

+

+

Tail

ns

ns

+

Head

ns

il10/rps11 × 10<sup>6</sup>

60

40

20-

S1WT:

crTlr2:

![](_page_5_Figure_5.jpeg)

![](_page_5_Figure_6.jpeg)

![](_page_5_Figure_7.jpeg)

## ך 15,000 <sub>ד</sub>

U

![](_page_5_Figure_9.jpeg)

![](_page_5_Figure_10.jpeg)

Figure S6 (related to Figure 3). Gene expression analysis of wild type and Tlr2-deficient larvae injected with wild type S1. Recombinant S1WT (+) or vehicle (-) were injected in the hindbrain ventricle of 2 dpf wild type and Tlr2-deficient larvae, and the transcript levels of the indicated genes were analyzed at 12 hpi by RT-qPCR in larval head and tail. Data are shown as mean  $\pm$  S.E.M. P values were calculated using one way ANOVA and Tukey multiple range test. ns, not significant, \* $\leq$ p0.05, \*\*p $\leq$ 0.01, \*\*\*p $\leq$ 0.001.