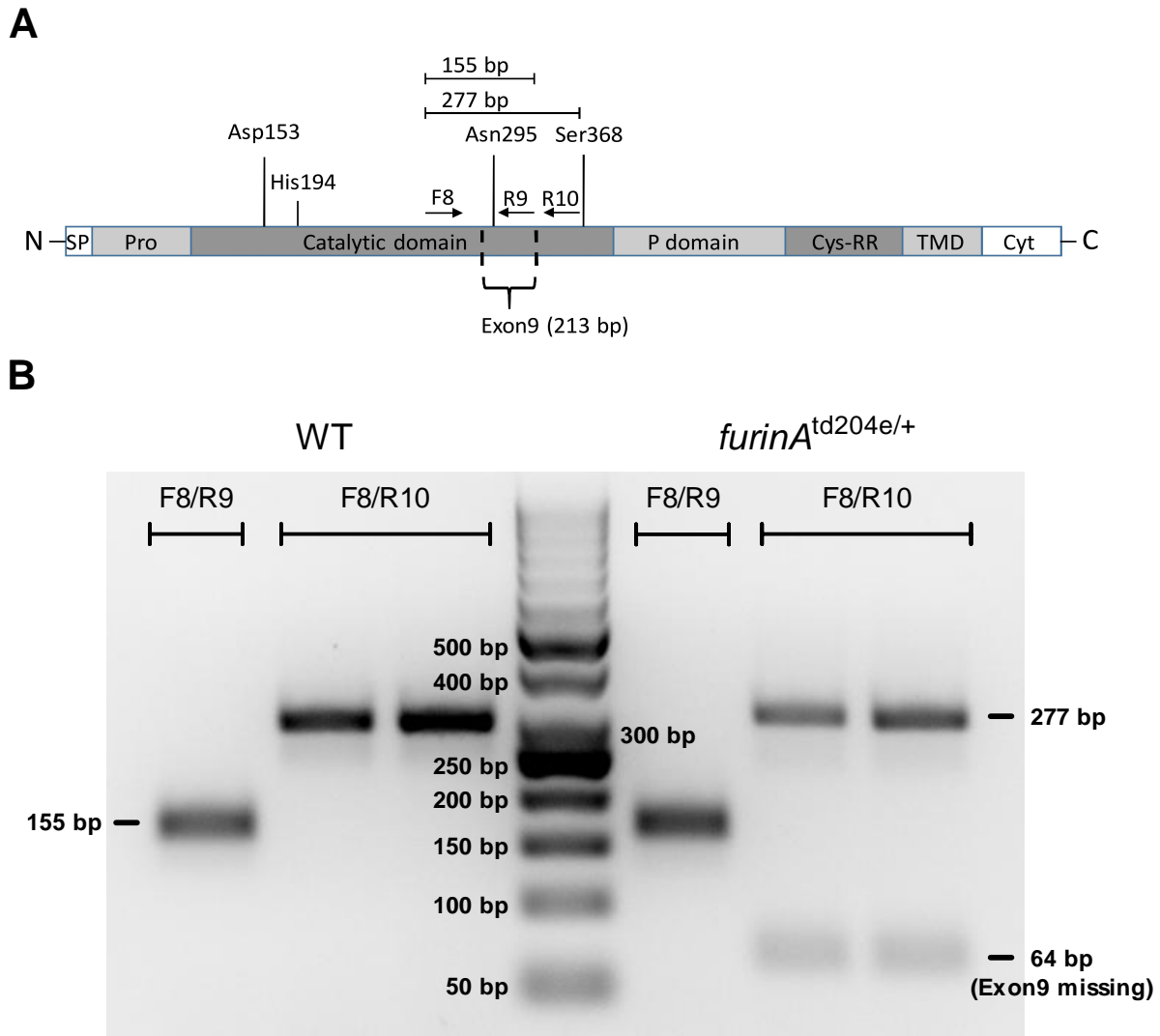


Supplemental Table 1. Primers used in the qRT-PCR analyses.

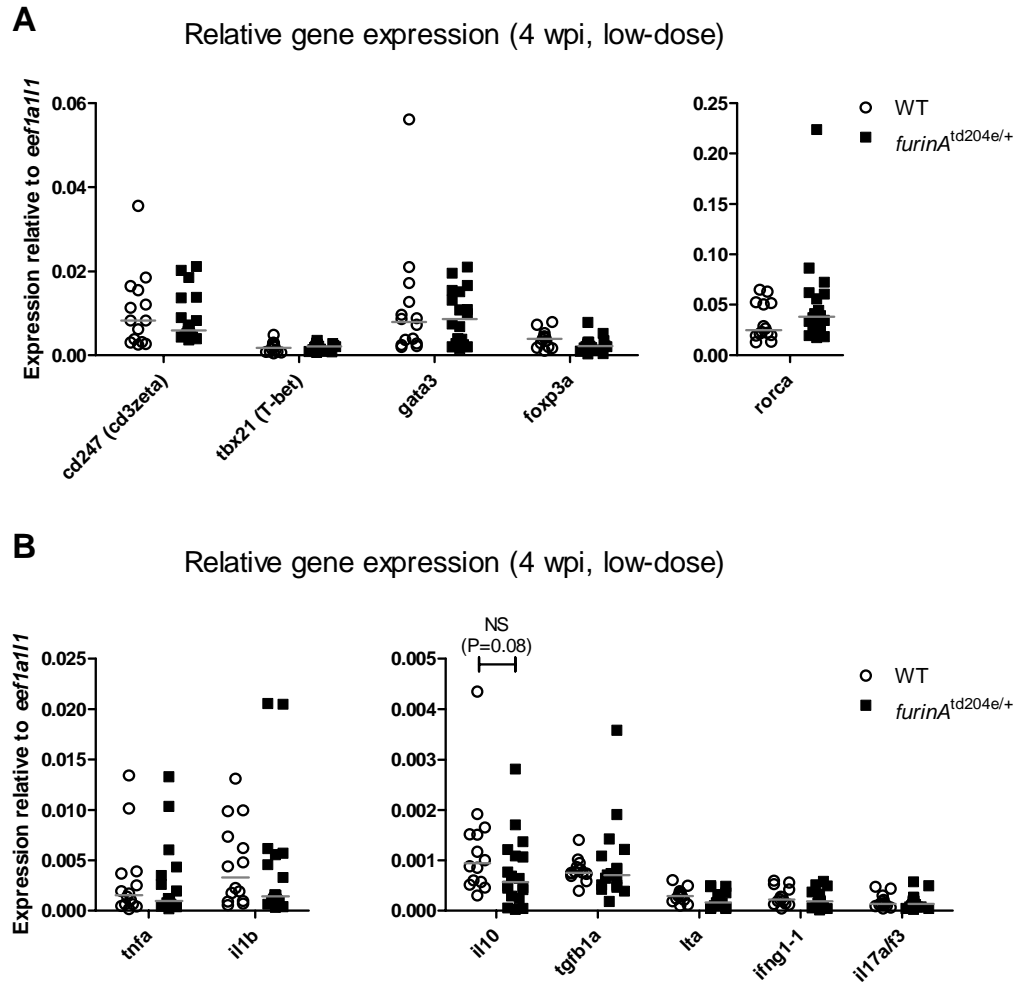
Gene	ZFIN ID	Human gene ortholog (HGNC)	Sequence 5'-3'	Reference
<i>furinA</i>	ZDB-GENE-040901-1	<i>FURIN</i>	F CCAAAGAGGCTTTCCAACGC R CGTACTGCTGCTGATGGACAG	-
<i>pcsk1</i>	ZDB-GENE-071009-1	<i>PCSK1</i>	F CGGAAAAGGAGTGGTCAT R GGTGGAGTCGTATCTGGG	Turpeinen et al. 2013
<i>pcsk2</i>	ZDB-GENE-090608-1	<i>PCSK2</i>	F CGGATCTGTATGGAACTGC R GCCGGACTGTATTTTATGAAT	Turpeinen et al. 2013
<i>furinB</i>	ZDB-GENE-040901-2	<i>FURIN</i>	F CCAAGGCATCTACATCAACAC R ACACCTCTGTGCTGGAAA	Turpeinen et al. 2013
<i>pcsk5a</i>	ZDB-GENE-060531-130	<i>PCSK5</i>	F GGAGTTTCAATGACCCCAA R ACCACAACCTTTCCCA	Turpeinen et al. 2013
<i>pcsk5b</i>	ZDB-GENE-070822-7	<i>PCSK5</i>	F TGTTCTCGACCCTTACCAC R ATCTCGCCATGTCAGGAAA	Turpeinen et al. 2013
<i>pcsk7</i>	ZDB-GENE-030131-7293	<i>PCSK7</i>	F AGAGTGTGGACGGG R TGCCTAATGGATGCGGT	Turpeinen et al. 2013
<i>cd247 (cd3zeta)</i>	ZDB-GENE-061130-4	<i>CD247</i>	F CATCACC GGCTTCTTTGTGC R CCCAGTTTATCAATGGCCTGA	Hammarén et al. 2014
<i>tbx21 (T-bet)</i>	ZDB-GENE-080104-3	<i>TBX21</i>	F GGCCTACCAGAATGCAGACA R GGTCCGTACAGCGTGCATA	Hammarén et al. 2014
<i>gata3</i>	ZDB-GENE-990415-82	<i>GATA3</i>	F GGATGGCACC GGTC ACTATT R CAGCAGACAGCCTCCGTTT	Hammarén et al. 2014
<i>foxp3a</i>	ZDB-GENE-061116-2	<i>FOXP3</i>	F CAAAAGCAGAGTGCCAGTGG R CGCATAAGCACC GATTCTGC	Hammarén et al. 2014
<i>rorca</i>	ZDB-GENE-990415-250	<i>RORC</i>	F GAAGGCTGCAAGGGCTTCTT R TGCAGTTCCTCTGCCTTGAG	-
<i>tnfa</i>	ZDB-GENE-050317-1	<i>TNF</i>	F GGGCAATCAAC AAGATGGAAG R GCAGCTGATGTGCAAGACAC	Parikka et al. 2012
<i>il1b</i>	ZDB-GENE-040702-2	<i>IL1B</i>	F TGGACTTCGCAGCACAAAATG R GTTCACTTCACGCTTTGGATG	Parikka et al. 2012
<i>lta</i>	ZDB-GENE-050601-3	<i>LTA</i>	F CCACAGTTCAGCAGGACCTC R TTTCTGCGTGCTCTCATGTC	-
<i>ifng1-1</i>	ZDB-GENE-060210-1	<i>IFNG</i>	F AAATGGTGCTACTCTGTGGAC R TTCCAACCCAATCCTTTG	Oksanen et al. 2013
<i>il22 (ifnphi6)</i>	ZDB-GENE-060209-3	<i>IL22</i>	F TCAGACGAGCACACAGATATG R GATGGCTGGAGTAGTCGTG	-
<i>il17a/f3</i>	ZDB-GENE-041001-192	<i>IL17A</i> and <i>IL17F</i>	F GGCTCTCACGGGTTTTCAG R ACACTTCTTCACACCAGAACATC	-
<i>il10</i>	ZDB-GENE-051111-1	<i>IL10</i>	F GCTCTGCTCACGCTTCTTC R TGGTTCCAAGTCATCGTTG	-
<i>tgfb1a</i>	ZDB-GENE-030618-1	<i>TGFB1</i>	F TCGTCTTCCAGCAAGCTCAG R TTGGAGACAAAGCGAGTTCC	-
<i>eef1a111 (ef1a)</i>	ZDB-GENE-990415-52	<i>EEF1A1</i>	F CTGGAGGCCAGCTCAAACAT R ATCAAGAAGAGTAGTACCGCTAGCATTAC	Tang et al. 2007
<i>mmts</i>	-	-	F CACCACGAGAAACTCCAA R ACATCCCGAAACCAACAGAG	Parikka et al. 2012

Zebrafish gene names and qRT-PCR primer sequences are listed accompanied with the ZFIN identification codes and the names of the orthologous genes in humans. HGNC, HUGO Gene Nomenclature Committee.



Supplemental Figure 1. *furina*^{td204e} mutation disrupts the transcription of exon 9.

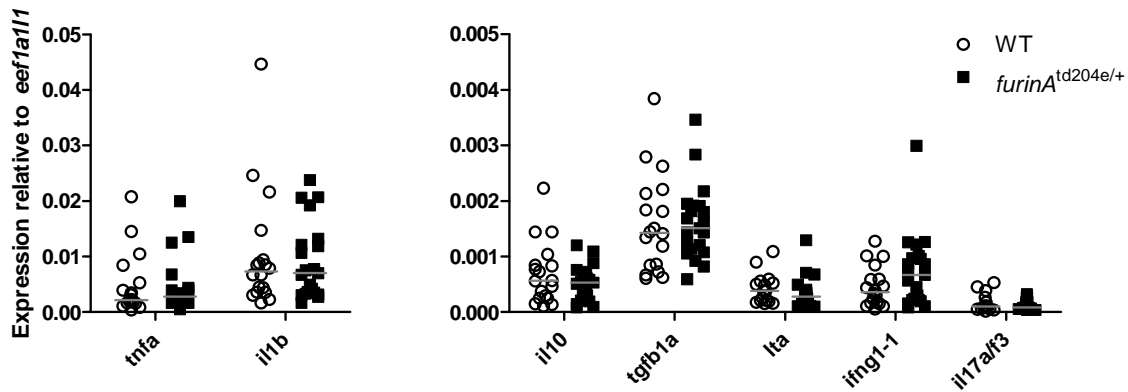
(A) A schematic presentation of the FURIN/FurinA domain structure and the catalytic amino acid residues (Asp153, His194, Asn295 and Ser 368), as well as the location of exon 9. (B) cDNA from both WT and *furina*^{td204e/+} mutant zebrafish was used as a template in a standard PCR reaction with different primer pairs (F8=Forward primer in exon 8, R9=Reverse primer in exon 9, R10=Reverse primer in exon 10). PCR products were analyzed with agarose gel electrophoresis, which demonstrates the presence of a 64 bp band only in reactions containing cDNA from *furina*^{td204e/+} mutants. The bands were excised and further verified by DNA sequencing (Data not shown).



Supplemental Figure 2. Comparison of the T cell marker gene expression and the innate cytokine response in *furinA*^{td204e/+} mutants and WT controls in an experimental low-dose mycobacterial infection at 4 wpi.

A latent mycobacterial infection was induced with a low-dose *M. marinum* inoculate. Relative expression of (A) Th cell marker genes (*cd247*, *tbx21*, *gata3*, *foxp3a*, *rorca*) as well as (B) pro-inflammatory cytokine genes (*tnfa*, *il1b*, *lta*, *ifng1-1*, *il17a/f3*) and anti-inflammatory cytokine genes (*il10*, *tgfb1a*) was determined in *furinA*^{td204e/+} (n=13-14) and WT (n=16-18) zebrafish with qRT-PCR at 4 wpi. Gene expressions were normalized to *eef1a1/1* expression and represented as a scatter dot plot and median. A two-tailed Mann-Whitney was used in the statistical comparison of differences.

Relative gene expression (9 wpi, low-dose)



Supplemental Figure 3. Comparison of the innate cytokine response in *furinA*^{td204e/+} mutants and WT controls in an experimental low-dose mycobacterial infection at 9 wpi.

A latent mycobacterial infection was induced with a low-dose *M. marinum* inoculate. Relative expression of pro-inflammatory cytokine genes (*tnfa*, *il1b*, *lta*, *ifng1-1*, *il17a/f3*) and anti-inflammatory cytokine genes (*il10*, *tgfb1a*) was determined in *furinA*^{td204e/+} (n=18-21) and WT (n=16-18) zebrafish with qRT-PCR at 9 wpi. Gene expressions were normalized to *eef1a111* expression and represented as a scatter dot plot and median. A two-tailed Mann-Whitney was used in the statistical comparison of differences.