

1 **Table S1.** Specific primer pairs of the gut-homeostasis-related genes for qRT-PCR.

Genes	Description	Primers	Sense/Antisense primer sequences (5'-3')
<i>PGRP-LC</i>	Peptidoglycan recognition protein LC	PGRP-LC-F/R	TGGTGCGAAACATCCAGGACTTC/TGCGGTAGCTGTAAATGTACCTATG ΔG
<i>cLys</i>	c-type lysozyme	cLys-F/R	TATCGACAACATCAGAAGC/TCATACACTATCACCCCAA
<i>iLys1</i>	i-type lysozyme 1	iLys1-F/R	GAGATGTGTGCGGTGTTTTTC/AGCTGTCCCCTGTTGTGTAA
<i>iLys2</i>	i-type lysozyme 2	iLys2-F/R	TGAAGATAATCCCAACAG/AGAGTACCTCAAACCAAA
<i>iLys3</i>	i-type lysozyme 3	iLys3-F/R	AGGAGATGTCTGCGGCATC/TTGTACTGAGCGTCGAGCG
<i>iLys6</i>	i-type lysozyme 6	iLys6-F/R	AGTCTGAGGGAGCATACCA/TTCTTCAAACACTCGGGAA
<i>iLys7</i>	i-type lysozyme 7	iLys7-F/R	TTTCCTGGTTTTAGTTATCGCTA/GATTGCTGAAGATTCACACATTG
<i>defA</i>	Defensin A	defA -F/R	GCCTCTGTGATGGCACTGTA/TGGTTCGGAGTCACCCATTG
<i>defB</i>	Defensin B	defB -F/R	TGCCTCTGTAATGGCACTGTA/GGAGTCACCCATTTGCTGTTG
<i>Duox1</i>	Dual oxidase 1	duox1-F/R	TCGAGAACGGAACCCTGCTG/GCGAAAGAAAAGGATGCCGAA
18S rRNA	Internal standard gene	18S-F/R	GTAACCCGCTGAACCTCC/GTCCGAAGACCTCACTAAATCA

2