

Appendix A. Supplementary data

Table S1. Ingredient and nutritional composition of basal diet

Ingredients	Inclusion rate (%)
Fish meal	3.00
Soybean meal	20.00
Cottonseed meal	9.50
Rapeseed meal	27.00
Wheat bran	5.00
Rice bran	5.00
Wheat middling	25.00
Soybean oil	2.00
Monocalcium phosphate	2.00
Choline chloride	0.50
Vitamin premix	0.50
Mineral premix	0.50
Total	100.00
Nutritional composition	
Crude protein	30.18
Crude lipid	3.51
Crude ash	9.79
Moisture	9.68

Note: To contain vitamin and mineral in diet added as premix (mg/kg diet): VA: 6000.00IU, VC: 200.00, VD: 2000.00IU, VE: 50.00, VK: 5.00, VB1: 15.00, VB2: 15.00, VB3: 30.00, VB5: 35.00, VB6: 6.00, VB7: 0.20, VB9: 3.00, VB12: 0.03, Inositol: 200.00, Zn: 80.00, Fe: 150.00, Cu: 4.00, Mn: 20.00, I: 0.40, Co: 0.10, Se: 0.10, Mg: 100.00.

Table S2. The concentrations of antibiotic in water ($\mu\text{g} / \text{L}$).

Days	1	10	20	30
Items	SMZ	SMZ	SMZ	SMZ
Con	nd	nd	nd	nd
LYS	nd	nd	nd	nd
SMZ	0.307 \pm 0.036	0.320 \pm 0.032	0.319 \pm 0.016	0.306 \pm 0.017
L+S	0.322 \pm 0.008	0.289 \pm 0.023	0.305 \pm 0.020	0.309 \pm 0.022

Table S3. A list of primers in qPCR analysis of mRNA expression of the target genes

Genes	GenBank accession	Primer sequence
<i>bcl-2</i>	AY695820.1	GAGGCTTCAGGCTCCCTCAG GCATCCCGTAACACCCGGTA
<i>bax</i>	KT697992.1	GTGCCGGCTTGTCATCAAGG CGATGGTTTGCCATGTGGGG
<i>puma</i>	DQ860151.1	CGAACATAACTCGGGCACGC CAATGGTTCGGCGTCGATGG
<i>p53</i>	KX871190.1	GAGCAGGATTCACCACAGTATTA CTGAGTCTCCAGAGTGATGATTG

<i>caspase3</i>	XM_019110173.1	TGACCAGGGTCAACCATAAAG TGGTGAGCATCGAGACAATG
<i>caspase9</i>	XM_019066459.1	GATGACCAGATGGACGCTATTC GACGTATCCTGGAAAGGTTGAG
<i>il-1β</i>	MK942107.1	TCCAAGCACGTCGTGTGACT GACGAGGAGATCCGCTGCTT
<i>il-6</i>	KC535507.1	GTCAGGATCAGCACGCCTCT TAAATGCGCCCCAGACACCT
<i>il-8</i>	JN255694.1	ACCCTCCTAGCCCTCACTGT CATGGTGCTTTGTTGGCAAGG
<i>tnf-α</i>	JQ670916.1	GGCGCTTTTCAGCGCTATCC GTAATTGGAAGGCCGCACCG
<i>tlr2</i>	FJ542042.1	TCCCAAGCGTTTCTGCAAGC AGGCGGCTCTCAGATTGCTC
<i>tlr4</i>	FJ542043.1	CAGCTCCCATAACCACCCAGT TGIGCTTGATGTGGCATCTTGAC
<i>myd88</i>	DQ100359.1	CACATGCGTGTGGACCATCG AATGCTGGGAAACGGCCTCT
<i>cyp1a</i>	XM_019064218.1	CAAACGTGCAAGTGTCTGATG TAGATAGACGACAGCCCAAGA
<i>β-actin</i>	NM_181601.5	CCTTCCAGCAGATGTGGATTAG TGAAGTGGTAACAGTCCGTTTAG
