**Table S1.** The composition and nutrients (g/kg diet) of the basal diets.

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **d 1-14** | **d 15-28** | **d 29-42** |
| Ingredients |  |  |  |
| Corn | 592.0 | 588.0 | 603.0 |
| Soybean meal | 276.0 | 316.0 | 305.0 |
| Soybean oil | 16.0 | 27.0 | 28.0 |
| Fish meal | / | 8.0 | 8.0 |
| Corn gluten meal | 72.0 | 20.0 | 20.0 |
| NaCl | 2.5 | 2.5 | 2.5 |
| Choline chloride | 2.0 | 2.0 | 2.0 |
| Calcium hydrogen phosphate | 19.0 | 18.4 | 15.5 |
| Limestone | 13.0 | 11.6 | 11.1 |
| DL-Methionine | 2.1 | 2.5 | 1.4 |
| Lysine Hydrochloride | 3.0 | 1.6 | 1.1 |
| Vitamin-mineral premix a | 2.4 | 2.4 | 2.4 |
| Calculated nutrient composition |  |  |  |
| Metabolizable energy (MJ/kg) | 12.56 | 12.51 | 12.61 |
| Crude protein | 213.3 | 202.7 | 198.1 |
| Total lysine | 11.9 | 11.7 | 11.1 |
| Total methionine | 5.8 | 5.7 | 4.6 |
| Total methionine + cysteine | 9.2 | 9.0 | 7.9 |
| Available phosphorus | 4.5 | 4.4 | 3.8 |
| Calcium | 10.2 | 9.9 | 9.1 |

a Vitamin-mineral premix provided the following (per kilogram of complete diet): Fe, 80 mg as FeSO4; Cu, 10 mg as CuSO4·5H2O; Zn, 100 mg as ZnSO4; Mn, 80 mg as MnSO4; I, 0.6 mg as KI; Se, 0.15 mg as Na2SeO3; vitamin A, 4000 IU; vitamin D3, 800 IU; vitamin E, 44 IU; vitamin B1, 3.6 mg; vitamin B2, 3.75 mg; vitamin B6, 5 mg; vitamin B12, 0.015 mg; vitamin K3, 0.5 mg; biotin, 0.2 mg; folic acid, 1.3 mg; pantothenic acid, 12 mg; nicotinic acid, 40 mg.

**Table S2.** Sequences of Real-Time PCR Primers.

|  |  |  |
| --- | --- | --- |
| **Genes** | **Accession no.** | **Primer sequence (5'-3')** |
| *β-actin* | NM\_205518.1 | F: TGCGTGACATCAAGGAGAAG |
| R: GGACTCCATACCCAAGAAAGAT |
| *Nrf2* | NM\_205117.1 | F: AGTGACCCAGTCTTCATTTC |
| R: TCTTCCCAAACTTGCTCTAT |
| *CAT* | NM\_001031215.2 | F: CTTCCTGGTCTTTCTACATTC |
| R: ATACGCCATCTGTTCTACCT |
| *GSH-Px* | NM\_001277853.3 | F: GGCAAAGTGCTGCTGGTGGTC |
| R: TCTCCTCGTTGGTGGCGTTCT |
| *SOD1* | NM\_205064.2 | F: AAGGGAGGAGTGGCAGAAGT |
| R: GCTAAACGAGGTCCAGCATT |
| *NF-κB* | NM\_001001472.2 | F: ACTTGGCGATCATTCACGAGG |
| R: AGCGGAGTCTGGCTGAGGTT |
| *IL-1β* | NM\_204524.1 | F: GACCAAACTGCTGCGGAGGC |
| R: CGAAGGACTGTGAGCGGGTGT |
| *IL-6* | NM\_204628.1 | F: GAAATCCCTCCTCGCCAATCT |
| R: CCTCACGGTCTTCTCCATAAACG |
| *IL-10* | NM\_001004414.2 | F: GCTGTCACCGCTTCTTCACC |
| R: TCCCGTTCTCATCCATCTTCTC |
| *TNF-α* | NM\_204267.2 | F: TGTTCTATGACCGCCCAGTT |
| R: TTCAGAGCATCAACGCAAAA |
| *ZO-1* | XM\_015278975.3 | F: TCCCTAAAGGCGAAGAAGTA |
| R: CAACAATGCGACGATAAACA |
| *Occludin* | NM\_205128.1 | F: TCCTCATCGTCATCCTGCTCTG |
| R: CCATCCGCCACGTTCTTCAC |

*Nrf2*, nuclear factor erythroid-2 related factor 2; *CAT*, catalase; *GSH-Px*, glutathione peroxidase; *SOD1*, superoxide dismutase 1; *NF-κB*, nuclear factor kappa B; *IL*, interleukin; *TNF-α*, tumor necrosis factor-α; *ZO-1*, zonula occludens-1.