

Supplementary Material Table S1. Primers used for quantification of immune-related gene expression by qRT-PCR of Asian seabass (*Lates calcarifer*).

| Gene | Primer name | Nucleotide sequences (5'→3') | Amplicon size (bp) | Tm (°C) | Reference |
|---|--|--|--------------------|---------|-------------|
| α -2-macroglobulin (<i>α-2m</i>) | <i>Lc_</i> <i>α2M</i> | F: TGCTTTCTGGTTTGGCC R: TGGTTGATGCCTATGTCC | 136 | 60 | ASM164080v1 |
| Complement 3 (<i>c3</i>) | <i>Lc_</i> C3 | F: GCAATCCTCCACAACACTACAG R: ACTCTGACCTCCTGACGATAC | 11 | 60 | |
| CC chemokine (<i>cc</i>) | <i>Lc_</i> CC | F: CCTGCCCTGTGTCAATG R: TTGCGGGCCTCTTCTAG | 111 | 60 | |
| CD4 receptor for T-helper cell (<i>cd4</i>) | <i>Lc_CD4</i> | F: AGTGCAATGGATTGGGGTAGATAA R: GTTGCAGGCTCTGTAACTTTGATT | 156 | 60 | |
| CD8 receptor for T-cytotoxic cell (<i>cd8</i>) | <i>Lc_CD8</i> | F: AATTCCTTCAGCAAAGCTCGTG R: GTGGTTGTGGGTAGTCTTGGAT | 188 | 60 | |
| C-type lectin (<i>C-lec</i>) | <i>Lc_</i> <i>CLEC</i> | F: AAGGGTGGTTTCAAGTAGAG R: GTCAAGATGGCAAGATGTC | 112 | 60 | |
| Dendritic cell-specific transcript (DC-specific) (<i>cd</i>) | <i>LC-DCs</i> | F: AACAGCACACGCTCACTCAC R: CGATCATGTGAGCCTTGAGA | 153 | 60 | |
| Hepcidin (<i>hep</i>) | <i>Lc_</i> <i>Hep1</i> | F: ATTTGCATTCTGGAGAGCTCTGCC R: CCATTGACATCTCTTGATGTGCCG | 208 | 60 | |
| Heat shock protein 70 kDa (<i>hsp70</i>) | <i>Lc_</i> <i>Hsp70</i> | F: AAGGCAGAGGATGATGTC R: TGCAGTCTGGTTCTTGTC | 186 | 60 | |
| Heat shock protein 90 kDa (<i>hsp90</i>) | <i>Lc_</i> <i>Hsp0</i> | F: ACCTCCCTCACAGAATACC R: CTCTTGCCATCAAACCTCC | 197 | 60 | |
| Immunoglobulin M heavy chain (<i>igm H</i>) | <i>LC- IgMH3</i> | F: AAGGTAAACGAGGGAGCTGTTG R: TGGCTCCATGCCATCTACAAGT | 192 | 60 | |
| Lysozyme (<i>lys</i>) | <i>Lc_</i> <i>Lys</i> | F: TGCATCACACACCATGGCAA R: CATCCACGTTGTCATAGGAG | 401 | 60 | |
| Major histocompatibility complex (MHC) class II α molecules (<i>mhc IIα</i>) | <i>LC- MHC II</i> | F: TCTGAACCAACCACTGACCAGA R: CTGATGACATCATCAGCTCCAG | 177 | 60 | |
| T-cell receptor α (<i>tr α</i>) | <i>LC-TCR a</i> | F: ACCCAACCAACAGTGACAGTGT R: CTCAACCTGCTGGTGATTCTGT | 233 | 60 | |

| | | | | |
|---------------------------------|------------------------------------|---|-----|----|
| <i>β-actin</i> | <i>Lc_β-actin</i> | F: CTCACCACCACAGCCGAGA R: TGCCGATGGTGATGACCTGT | 157 | 60 |
|---------------------------------|------------------------------------|---|-----|----|
