

Supplement Table S1. Summary of the common carp *Cyprinus carpio* genes and the nucleotide sequences of the primers and probes used for the RT-qPCR assays.

GenBank accession no.	Gene name	Gene symbol/ID	Forward primer (5' → 3')	Reverse primer (5' → 3')	Probe (Fam 5'→ MGB 3')	qPCR efficiency (%)	Function
XM_042747598.1	<i>urokinase plasminogen activator surface receptor-like</i>	LOC109072973	TGTTGAGCTGTACAGGGAATGAA	GCCACCGAAAGTCCCTGTT	CCGCTGCTTGAAAG	92.7	Pattern recognition cell surface receptor
XM_019125028.2	<i>cd59 glycoprotein-like</i>	LOC109112007	CTGTGTCCCAGAGAAAGCAGAA	CCGGTGGGCAGGTTACAGT	CCTGCGAGATCAC	136.8	Antigen cluster of differentiation
XM_042752900.1	<i>cd44 antigen-like isoform X2</i>	LOC109074181	CGTGCAGGTACGGATGGATA	TGTGGCGTGTGACGGAGTA	ACAGCTCAGAGGTGGTG	107.2	Antigen cluster of differentiation
XM_042737121.1	<i>arginase, non-hepatic 1-like</i>	LOC122139442	GGACGCTCACGCAGATATCA	GGCCGTGGAGGTTTCCA	CACTCCTCTGACGTCAC	105.3	M2-type macrophage marker
XM_042734270.1	<i>interleukin-10</i>	LOC109076801	CAGTGCGCAGTGCAGAAGAG	CCCTCCACAAATGAGCAACA	CGACTGCAAGACTG	-	Anti-inflammatory cytokine
XM_042730488.1	<i>ferroportin or solute carrier family 40 member 1</i>	LOC109058299	AACCGCTGAGGTGAAGAAAAAC	GTGCGGATGGGTTCTGTCAT	CCAGTTGCTGCTACCA	121.2	Involved in cellular iron metabolism
XM_042725334.1	<i>transglutaminase 5, like</i>	<i>tgm5l</i>	TGTTAAAGCCGTTTATGAGCAGAA	GCGTAAACGAACGGCACAT	TGGACGCGCAATAC	95.2	M2-type macrophage marker
XM_042718436.1	<i>macrophage mannose receptor 1-like</i>	LOC109075423	AGCCGAGTCACAGTGCTGTCT	CACTTTCCTCTCTCTCTCA	TCCAGAGGACTGTGTGTTA	111.1	M2-type macrophage marker
XM_019119505.2	<i>CD83 antigen-like</i>	LOC109106145	TTGCGCACAGGAGATGGA	CAGCCGATGGTCCTCTTCAG	AGTCCACAGAGCTTG	90.5	M2-type macrophage marker

XM_019104238.2	<i>C-C motif chemokine 19a.1</i>	<i>ccl19a.1</i>	CGGAGGCTCAGGCAGACTT	GGATGGCTTTGTGGCTAACTG	CAATGGACTGTTGCCTG	98.4	Pro-inflammatory cytokine
XM_019088805.2	<i>allograft inflammatory factor 1-like isoform X1</i>	LOC109072573	GCGAGCGCTCACACAACA	GGTCGAGAGGAGGCGATGA	CAGTGTCTCTGTTCTCTAC	110.1	Macrophage phagocytic activity
AJ438158.1	<i>actin beta 1</i>	<i>actb</i>	CACCATGTACCCTGGCATTG	GAGGGAGCAAGGGAGGTGAT	TGACCGTATGCAGAAGG	88.2	Reference gene used for normalization purposes [9]
AF411803	Koi herpesvirus <i>orf90</i>	KHV <i>orf90</i>	GACGCCGGAGACCTTG TG	CGGGTTCTTATTTTGTCTTGTT	CTTCCTCTGCTCGGCGAGCACG	-	KHV WOA H-recommended diagnostic RT-qPCR [39]

References

- [9] I. Cano, B. Mulhearn, S. Akter, R. Paley, Seroconversion and skin mucosal parameters during koi herpesvirus shedding in common carp, *Cyprinus carpio*, *Int. J. Mol. Sci.* (2020). <https://doi.org/10.3390/ijms21228482>.
- [39] O. Gilad, S. Yun, F.J. Zagmutt-Vergara, C.M. Leutenegger, H. Bercovier, R.P. Hedrick, Concentrations of a Koi herpesvirus (KHV) in tissues of experimentally infected *Cyprinus carpio* koi as assessed by real-time TaqMan PCR, *Dis. Aquat. Organ.* 60 (2004) 179–187. <https://doi.org/10.3354/dao060179>.