*AGCAGTTTGTGTGTATTTACAGAAACAGTAACCATTTGAG*ATGGAACTAGGCAGAGCTCTGAGTTACTTTGC[72]
M E L G R A L S Y F A
TCTAGCAACAATTATTCAATATTCCTGCAGTCAGACACTGATTGAGTCGGAGTCAGTGATCATCAAACCTGA[144]
L A T I I Q Y S C S Q T L I E S E S V I I K P D
TCAGTCTCATAAACTGACCTGTACAGCCTCTGGATTTAACTTTGGTAACTATTACATGGCCTGGATTAGACA[216]
Q S H K L T C T A S G F N F G N Y Y M A W I R Q
GGCACCTGGAAAAGGGCTGGAATTTGTTGCAACTATCTCAGAAGGCAGTAGTAGCAAGTATTACTCCAGTGC[288]
A P G K G L E F V A T I S E G S S S K Y Y S S A
AGTTAATGGCCGCTTCACCATGTCCAGAGACAACAGTAAGATGCAGGTGTATCTGTACATGACCAGTGTGAG[360]
V N G R F T M S R D N S K M Q V Y L Y M T S V R
GACAGAAGACACTGCAGTGTATTACTGCACTAGACGGACTGGGGTGTACTTTGACTACTGGGGAAAAGGAAC[432]
T E D T A V Y Y C T R R T G V Y F D Y W G K G T
TTCAGTGACCGTGACTTCAGCTGTGCAAAGCGCCCCGAAATCCCTGTTTCCCGTGTGGCAGTGCGGCTCGGC[504]
S V T V T S A V Q S A P K S L F P V W Q C G S A
CTCGGACGGTTTAGTCACTCTTGGCTGCGTCACGCGCGATTTGGCCTCCGCCGACGGACTGAGCTTCATATG[576]
S D G L V T L G C V T R D L A S A D G L S F I W
GAAGGATGCGAGCGGGAGCGCGCTGACTGACGTCGTGCAATACCCGGCGGTGCAAGCGACCGGAGGGTACAC[648]
K D A S G S A L T D V V Q Y P A V Q A T G G Y T
CTCGGTGAGCCATGTGCGCGTCAAGGCTTCTGACTGGAACGGGAACAAGAAGTTCACGTGCGAAGTCAAAAA[720]
S V S H V R V K A S D W N G N K K F T C E V K N
TGGCCTAGGATCTAAAGACGCGTCCTTGCAAAAGCCAGTTGAGAGAGAGCTCCATGCATCTCTGCTTCTAAC[792]
G L G S K D A S L Q K P V E R E L H A S L L L T
AACTCCAACCCAAACAGAAATAGACAATGGAACAGCTACCTTCGTCTGCTTAGCTACACCATTTTCACCTAA[864]
T P T Q T E I D N G T A T F V C L A T P F S P K
ATCACACACATTTAAGTGGACTCTTGAAAAGACAGACATCAGTAATAAGGTCAAAGAGAACATAGTAAGCCA[936]
S H T F K W T L E K T D I S N K V K E N I V S Q
GAATAAAGGTAACTTCACTGCCATAAGTGTTTTGGAACTCAGCGCCAGTGAATGGACAAGCTCAACTTCTCC[1008]
N K G N F T A I S V L E L S A S E W T S S T S P
AGTTAAGTGCGAATTCCAGCAGAAGAACCATAATGTGTTCAAAGAAGCGAGTTATGCACCAGGTGACACAAA[1080]
V K C E F Q Q K N H N V F K E A S Y A P G D T K
ACAGCCACAGGTGAAAATAACTGGACCTTCCACCGAGGACATTCTGATCAAAAGAGCCGGCCAGCTCGAGTG[1152]
Q P Q V K I T G P S T E D I L I K R A G Q L E C
CAGGGCCGAGGGAGACACGGGTTTCAAGAGCATTAAATGGCTTATTGGAAATAGAGAGATCTCTTCTCTATC[1224]
R A E G D T G F K S I K W L I G N R E I S S L S
AAATCTATCTTCGAAAACGACGGTTTCACTCCAAACCCACATCGGTTTCGAAGAGTGGATCAATGGCACCGA[1296]
N L S S K T T V S L Q T H I G F E E W I N G T E
ATTCATCTGTGAGGTGGAACATGAAGCATTCACTCAACAGTATGAAAAAGTAACCTTCAAAAGAGAAAATGG[1368]
F I C E V E H E A F T Q Q Y E K V T F K R E N G
CAATCCGGAATTCCCCAAGGTTTACTTGCTCGCTCCACCAGAGAGCTCTGGTGAATCAGTGACCCTGACTTG[1440]
N P E F P K V Y L L A P P E S S G E S V T L T C
CTATGTTAAAGACTTCTACCCTAAGGAGGTGGCTGTGTCTTGGCTTGTTAACGATAAACAAGTGGAAGAAGT[1512]
Y V K D F Y P K E V A V S W L V N D K Q V E E V
GGTCGGCTATGAGCAGAACACCACTGCAGTTATCGACAGAAACAACCTCTTTTCAGTGTACAGCCAGCTGAT[1584]
V G Y E Q N T T A V I D R N N L F S V Y S Q L I
TATCAAAACTGCAGACTGGAACAGTGGCAGTGTGTTCAGCTGCCTGGTTTATCATGAGTCCATCAAGGACTG[1656]
I K T A D W N S G S V F S C L V Y H E S I K D C
TGTGCGCCCCATATCCAGATCCATCGCTAAAGATTCAAAAACGCCCACCTTAGTGAATCTCACCCTGACCAA[1728]
V R P I S R S I A K D S K T P T L V N L T L T N
TCCCCAATCTTGCTCTTGCTCTACGTATTAG*AATTTGTGTTGTCTGCTATTAATGCTTGATTTATTTTAATT*[1800]
*P Q S C S C S T Y **
TTTGCCTCATCTTTTATGTCTTTTTTTTTTTATTAATGCAATGTCATTGTCTTGATGTCTGTCTGATGCTTG[1872]
TATGTCCTTGGTTTTTGGAACATGTCTAATGCAATAATACACTGAAACAATGAC<u>AATAAA</u>AAAAATCCTTCAG[1944]
CATGTACAAAAAAAAAAAAAAAAAAAAAAAAAAAAA[1980]

Figure S2. The full-length cDNA sequence and translated amino acid of catfish IgM heavy chain (variant 1A32). 5’ and 3’-untranslated sequences were shown in italic. The stop codon was marked as asterisk. The poly-A signal was underlined.