

A

Grass carp SOCS1

1 ATG GTG GCG CAC AGT ACA GTG GAA GGG AAT CAA GGC ACA GAA GAA CCC CAA GTG AGC ACA GAA CCC TCC CCA GAG
 1 M V A H S T V E G N Q G T E E P Q V S T E P S P E
 76 GTC TCC CAA TCC CAA AGG TCC AGA CCC AGC CAG GCA GCC ATT TTA CAG ACA CAT TTC AGA CCC TTC AAC TAT
 26 V S Q S Q R S R P S Q Q A A I L Q T H F R P F N Y
 151 GCG AGA GAC TTC AAG ATC ATC GCA AAG ACC ACC TCA ATG CTA GAG GAG AGT GGC TTC TAT TGG GGT CCC ATG ACT
 51 A R D F K I I A K T T S M L E E S G F Y W G P M T
 226 GTA GAG GAG GCA CAT CAG AAG GAA TCT TTT GAC TCT CTT TTC AAA CTG GAA CCA GTC GGA ACT TTC CTG ACT CGG GAC AGT TCC CCG AAG AAG
 76 V E E A H Q K L K K E P V G T F L I R D S R Q S D
 301 GTG TTC TTT ACG CTG AGT TAC AAA GGA CAA CAC GGT CCC GTG AGT GTC CGG ATT ACC TTC AAG AAT TCC AAA TTC
 101 V F F T L S Y K G Q H G P V S V R I T F K N S K F
 376 AGC CTG ACC GGC AGC AAG GAA TCT TTT GAC TCT CTT TTC AAA CTG CTG GAA CAC TAC ATG TCC CCG AAG AAG
 126 S L T G S K E S F D S L F K L L E H Y I S S P K K
 451 GGT CTC GTC AGG CCC TAC AGG AAA GAA CCA GTG CAG TCC CTG CAG CAA CTG TGC CGC AGA CGG ATT ATC GAA ACA
 151 G L V R P Y R K E P V Q S L Q Q L C R R R I I E T
 526 TGC GAC GGA AAA GAC ATC GAC CGC ATC CCT GTG CAC CCA ATC CTC AAA GAC TTC CTC CAT GCC TTC CCT CAT CCG
 176 C D G K D I D R I P V H P I L K D F L H A F P H P
 601 CTA TGA
 201 L *

B

Grass carp SOCS2

1 ATG ACC TGT CAC TCA TCC GAC TCC ACG GAA AGC ATC GAG AAT GAA AGG AGA TCG CAA ACT GAA ACC CAA ATC ACG
 1 M T C H S S D S T E S I E N E R R S Q T E T Q I T
 76 GAG TCC GAA CAG AGT CGC ATT GCC ACT GCC ATG AGA GAC CTT AAA AAC ACC GGC TGG TAT TGG GGC AGC CTG
 26 E S E Q S R I A T A M R D L K N T G W Y W G S L T
 151 GCC AAT GAA GCC AAG GAG ATC CTG CAG GAC ACG TCG GAG GGC ACA TTT CTG GTC CGG GAC AGC TCT CAG AGG GAC
 51 A N E A K E I L Q D T S E G T F L V R D S S O R D
 226 TAC CTC TTC ACC ATC TCC GCC ATG ACA TCT GCG GGA CCA ACC AAC CTG CGT ATC GAA TAC AAG GAC GGC AAG TTC
 76 Y L F T I S A M T S A G P T N L R I E Y K D G K F
 301 AAG CTG GAC TCC GTG GTG CTG GTC AAG CCC AAA CTC AAG CAG TTC GAC AGC GTC GTC CAT CTT GTG GAG CAC TAC
 101 K L D S V V L V K P K L K Q F D S V V H L V E H Y
 376 GTG CAG CTG TCC CGG ACG TCT TGT AAG GGC AGG ACT ACC CCT CTC GCC CCA TCC AAC GGC TCT GTG CAG CTG CTG
 126 V Q L S R T S C C K G R T T P L A P S N G S V Q A L CG
 451 CTC ACG ACT CCG GTG TAC ACA GCC ACA CCG TCT CTG CAG CAT CTG TGT CGT ATT GCC ATT AAT AAA ACC ACA CGG
 151 L T T P V Y T A T P S L Q H L C R I A I N K T T R
 526 CGG GTA CAA GAA CTT CCT TTG CCT AAC CGG CTG AAG GAT TAC CTG ACA GAC TAC ACC TAT AAT GTA TAG
 176 R V Q E L P L P N R L K D Y L T D Y T Y N V *

C

Grass carp SOCS3

1 ATG GTA ACT CAC AGC AAG TTT GAC AAC GCA ATG AGC AGC AGC CTG TTT GAC TCA AGC ATG CGG CTG CCG TCT CAC
 1 M V T H S K F D N A M S S S L F D S S M R L P S H
 76 CGT TAC AAA ACC TTC AAG TCC AAG CTG CAA TAC CAG ATG GTG CAA CAC GCC ATC AGG ATG CTC CAG GAG AGC GGC
 26 R Y K T F S S K L Q Y Q M V Q H A I R M L Q E S G
 151 TTC TAC TGG GGC TCC ATC AGC GGC AAA GAG GCC AAC CAC CTG TTG AAC TCG GAG CCT AGC GGG ACC TTT CTG GTC
 51 F Y W G S I S G K E A N H L L N S E P S G T F L V
 226 AGA GAC AGT TCG AAC CGG CAC TTC CTG ACG CTC AGC GTC AAG ACC GAG TCG GGC ACC AAG AAC CTG CGG ATG
 76 R D S S D N R H F F T L S V K T E S G T K N L R M
 301 CAG TGT GAC AAC AAG TCG TTT TTC CTA CAA ACG GAC TCC AAG AGC ATG CAG TCG GTG CCA CGC TTC GAC TGC GTG
 101 Q C D N K S F F L Q T D S K S M Q S V P R F D C V
 376 CTG AAG CTC GTC CAT CAC TAC ATG CCC TCA GCC AGA AGC GCT CTG TCC ATT GGA AAC PCT CGG AGC GCC TAC TAC
 126 L K L V H H Y M P S A R S A L S I G N S R S A Y Y
 451 ATC TAC ACA GGG GGC GAG AAA ATC CCC TTG GAG CTG TTG AGG CCC CTA CCT TGC ACA ATG TCC TCC CTG CAG CAT
 151 I Y T G G E K I P L E L L R P L P C T M S S L Q H
 526 CTA TGC AGG AAG ACT GTG AAT GGA CAT ATA GAC GTT TCT GGG AAA AAA GAG CAG CTC CCA CAA CAG CTC AAA GAC
 176 L C R K T V N G H I D V S G K K E Q L P Q Q L K D
 601 TTC CTA CAA GAG TAC GAT GCT CCC ATT TAA
 301 F L Q E Y D A P I *

D

Grass carp CISH

1 ATG ATT CTG TGC GTT CAA GGC CCA AGA GCT CAT TTG CCT GAT ACC TCG GAT CCA ACG GGC CGG TTT CCG GTG GTG
 1 M I L C V Q G P R A H L P D T S D P T G R F P V V
 76 ACT TTC TCT TCT CCT CGC TGC ATT CAC ACG ACC GTT ACC TTA TGG GAC CCT AGC AAA GAT TTC AGA GCC ATC TCT
 26 T F S S P R C I H T T V T L W D P S K D F R A I S
 151 GAA AAT TTC TCC TAT CTG GAT GCC TCA GGT TGG TAC TGG GGT GCC ATC TCT GTC TGT GAG GCC CAC TCT GTC CTA
 51 E N F S Y L D A S G W Y W G A I S V C E A H S V L
 226 CAG GGG GCA TCG GAG GGT ACT TTC CTG ATA CGG GAC AGC AGC CAC CCT CTC TAT ATG TTG ACA CTG TCC GTT AAA
 76 Q G A S E G T F L I R D S S H P L Y M L T L S V K
 301 ACC GGT CGC GGG CCT ACA AAT GTA CGC ATC GAG TAC AGT CTC GGA CGT TTC CGT CTG GAC TCC AGT TCC CCA GCC
 101 T G R G P T N V R I E Y S L G R F R L D S S S P A
 376 AGA TCT CGC CTG CAG TCC TTC CVC GAC ATC CCC AGC CTC GTG CAG CAC TAT GTG GGC TCC AGG AGC AAA GAG GAG
 126 R S R L Q S F P D I P S L V Q H Y V G S R S K E E
 451 GGG GAA AAG ACT GAG GAG TCT GAT CCC ATA ATT TCG CCA ACA CCC AAG GAA TGT GCA GTG TTG CTA AAA CTC AAA
 151 G E K T E E S D P I I S P T P K E C A V L L K L K
 526 AAG CCT ATC CAT CGT CCT CAA GCC TTT CTT TTT GAA CAT CTC ACT CGC TTG GTA ATC AAC AAA AAC ACA CAG
 176 K P I H R P Q A F P S L Q H L T R L V I N K N T Q
 601 AGC ACA GAG CGC CTG CCT CTA CCG AGA CCG TTA CTT CAG TAT CTT CAG GAT TAC CCT TTC CAG CTC TGA
 201 S T E R L P L P R P L L Q Y L Q D Y P F Q L *