Supplementary data

Table S1

Sequences of the PCR primers used in this study for gene cloning and qPCR.

Primer	Sequences	Primer Information
ACC1-ORF-F	ATGTTTCCCTGGCTCACGTTTG	ORF clone
ACC1-ORF-R	CTAGGAGGAGGCCGACGTCTCC	ORF clone
ACC2-ORF-F	ATGCTCCCTTTTGCAGTTTTGGG	ORF clone
ACC2-ORF-R	TTAACTGGTGCTGGTGCTGTCCAT	ORF clone
acc1-F	GACTTGGCGGAATACCTACTGG	qPCR
acc1-R	GCTTGCTGGATGATCTTTGCTT	qPCR
acc2-F	AAAGAATCCCTGTGCAGGCTGTC	qPCR
acc2-R	TCCTCCTCGGTCCAATCCACTC	qPCR
fas-F	CAGCCACAGTGAGGTCATCC	qPCR
fas-R	TGAGGACATTGAGCCAGACAC	qPCR
scd-F	AAAGGACGCAAGCTGGAACT	qPCR
scd-R	CTGGGACGAAGTACGACACC	qPCR
elovl6-F	TCAACGAGGACGAAGCCATACGA	qPCR
elovl6-R	CCCAGTGCGGACAGCACCAAATA	qPCR
dgat2-F	TTCGGTGCTTTCTGCAACTTCG	qPCR
dgat2-R	AAGGATGGGGAAGCGGAAGT	qPCR
cpt1-F	GCTGAGCCTGGTGAAGATGTTC	qPCR
cpt1-R	TCCATTTGGTTGAATTGTTTACTGTCC	qPCR
acads-F	ACGAGTGGGTGCTGAATGG	qPCR
acads-R	TGGATGAGGCTCTGATGCCCAACTT	qPCR
ehhadh-F	CCGTGGAGGTCCCATGTTCT	qPCR
ehhadh-R	GGCTGCCACTGGCCACGAGCCTCCT	qPCR
acat1-F	CGTTGCACCCATTGATTTCC	qPCR
acat1-R	GCCTCGTTGATCTCCCACAT	qPCR
acat2-F	CCTGACAGACGCCTTCCAT	qPCR
acat2-R	CCTTCACCTCCACTGAACCTTGTCT	qPCR
cd36-F	GAGCATGATGGAAAATGGTTCAAAG	qPCR
cd36-R	CTCCAGAAACTCCCTTTCACCTTAG	qPCR
mtp-F	CTTGAGTCGCTGATTGCTGC	qPCR
mtp-R	TGAGGTCGCTGTAACCCTTG	qPCR
apob100-F	AGAGTGTTGTCCAGGATAAAGATGC	qPCR
apob100-R	CAGGGCTCAGGGTCTCAGTC	qPCR
fatp1-F	CAACCAGCAGGACCCATTACG	qPCR
fatp1-R	CATCCATCACCAGCACATCACC	qPCR
fabp3-F	CCAAACCCACCACTATCATCTCAG	qPCR
fabp3-R	GCACCATCTTTCCCTCCTCTATTG	qPCR
ogt-F	ACATGGGTCTGCCTGGCTCTC	qPCR

ogt-R	ATGCCTGTAGTGTGACCGTTG	qPCR
oga-F	ACAGCCGACAGGTGCCTCAG	qPCR
oga-R	GCTGCTGGAACACCGTCGTAAC	qPCR
camkk2-F	TCACAGAGTACGAGCCCAGTAGAC	qPCR
camkk2-R	AGCAGGTCGCAGGAAGGAGTC	qPCR
lkb1-F	AAGAAGATCGGGATCAGGGGC	qPCR
lkb1-R	TGAGGGGTTGGATGAAGAGGA	qPCR
β-actin-F	GACCTGACAGACTACCTCATG	qPCR
β-actin-R	AGTTGAAGGTGGTCTCGTGGA	qPCR

ATGTTTCCCTGGCTCACGTTTGCGGCGTGTTTGGCGTCAGTGCTCGGCTTGTTTTTCTGGTCCCGCAAGCAGCTAACGTCGATAGTATTCGCAGCCTGTTCGTGTCGTCCAGCCATGGCA
M F P W L T F A A C L A S V L G L F F W S R K Q L T S I V F A A C S C R P A M A
CAGCAGGACGGTGCCGCCGCCGCTAAGAAGAACCCGGCCGTCGCGGCGTTGCACTCTCACTTTATCGTGGGCTCTGTGTCGGAGGAGAACTCGGAAGATGAAATCCAAGGGAAGCCTGAC
Q Q D G A A A A K K N P A V A A L H S H F I V G S V S E E N S E D E I Q G K P D
GTTCAGCTGGAGGAAAAGGAGAATCGGTCCTTGTCGCCGTCCTCCGCTAGCTCAGACAGCACCTGTGAAATGGGATTTGATCACATTGATGGCCCCGTGCAGAATCTAAGGCCGAGCATG
V Q L E E K E N R S L S P S S A S S D S T C E M G F D H I D G P V Q N L R P S M
TCAGGGCTGCACCTGGTGAAGCAAGGCAGAGATCGCCGCCGCCATCGATCTCCAGAGAGACTTCACCGTGGCTTCTCCTGCTGAATTTGTCACCCGCTTCGGTGGCAATAAAGTTATCGAG
S G L H L V K Q G R D R R R T D L Q R D F T V A S P A E F V T R F G G N K V T E
AAGGTGCTTATCGCCAACAATGGCATTGCAGCAGTCAAATGCATGCGCTCCATCCGCCGGTGGGCCTATGAGATGTTCCGCAATGAAAGGGCGATCCGCTTCGTCGTTATGGTGACCCCA
K V L I A N N G I A A V K C M R S I R R W A Y E M F R N E R A I R F V V M V T P
GAGGACCTGAAAGCCAACGCGGAGTACATTAAAATGGCAGATCATTACGTGCCTGTGCCAGGAGGGACTAACAACAACAACTACGCCAACGTGGAGCTCATTCTAGACATTGCTAAACGC
E D L K A N A E Y I K M A D H Y V P V P G G T N N N N Y A N V E L I L D I A K R
ATACCTGTTCAGGCGGTGTGGGCCGGGTGGGGTCATGCTTCAGAGAACCCGAAACTTCCAGAGCTGCTTCACAAGCACGGCATTGCTTTCATGGGTCCCCCAAGTCAGGCTATGTGGGCT
I P V Q A V W A G W G H A S E N P K L P E L L H K H G I A F M G P P S Q A M W A
CTGGGAGACAAGATTGCTTCGTCTATTGTGGCTCAGACAGCTGGCATTCCCACCCTGCCATGGAGCGGCACAGGCCTTTCGGTAGAATGGACAGAGAACAACCAAAAGAAGAAAGTTATC
L G D K I A S S I V A Q T A G I P T L P W S G T G L S V E W T E N N Q K K K V I
AACGTCCCTACTGACGTGTATGAGCTTGGCTGCATCCAGGATGTCGAGGATGGCCTTAAAGCTGCAGAGAAGATCGGCTACCCTGTGATGGTGAAGGCCTCTGAGGGAGGCGGCGGAAAA
N V P T D V Y E L G C I Q D V E D G L K A A E K I G Y P V M V K A S E G G G G K
GGCATCCGTAAAGTGAACTGCGTCGATGATTTCCCAAACCTCTTCCGACAGGTCCAGGCAGAAGTTCCAGGCTCGCCTGTTTTCGTCATGCAGCTAGCCAAACACGCCCGCCATCTGGAG
G I R K V N C V D D F P N L F R Q V Q A E V P G S P V F V M Q L A K H A R H L E
GTCCAGATCTTGGCTGATCAGTATGGCAATGCCATTTCCCTGTTTGGTCGTGACTGCTCCGTGCAGCGACGGCATCAGAAAATTATAGAGGAAGCCCCCGCTACCATCGCGACCTCTGAT
V Q I L A D Q Y G N A I S L F G R D C S V Q R R H Q K I I E E A P A T I A T S D
GTGTTTGAGGATATGGAAAGGTGTGCAGTGAAGCTGGCTAAGATGGTGGGATACGTCAGCGCAGGTACAGTGGAGTACCTCTATAGCCAGGACGGCAGCTTCTACTTCCTGGAGCTCAAC
V F E D M E R C A V K L A K M V G Y V S A G T V E Y L Y S Q D G S F Y F L E L N
CCCCGTCTGCAGGTGGAGCACCCCTGCACCGAGATGGTGGCTGACGTCAACTTGCCTGCTGCCCAACTGCAGATTGCTATGGGTATTCCTCTTCAAAGGATCAAAGACATCAGGATGCTT
P R L Q V E H P C T E M V A D V N L P A A Q L Q I A M G I P L Q R I K D I R M L
TATGGAGTCCAGCCCTGGGGAGACTCACCCATTGACTTCGAGGGTCTGTCGACAGCCCCCTGCCCACGGGGCCACGTCATTGCAGCACGTATCACCAGTGAAAATCCTGATGAGGGTTTC
Y G V Q P W G D S P I D F E G L S T A P C P R G H V I A A R I T S E N P D E G F
AAGCCAAGCTCCGGAACAGTGCAAGAGTTGAATTTCCGCAGCAATAAAAACGTGTGGGGCTACTTCAGCGTGGCAGCGGCTGGAGGCCTCCACGAGTTCGCTGACTCCCAGTTTGGACAC
K P S S G T V Q E L N F R S N K N V W G Y F S V A A A G G L H E F A D S Q F G H
TGTTTCTCTTGGGGAGAAAATCGTGAAGAAGCCATCTCCAACATGGTGGTGGCTCTGAAGGAGCTGTCTATCAGAGGAGACTTCAGGACCACAGTCGAATACCTCATTAAGCTGCTGGAG
C F S W G E N R E E A I S N M V V A L K E L S I R G D F R T T V E Y L I K L L E
ACGGAAAGCTTTCAGCACAACAGCATCGACACTGGCTGGCTGGACAGGCTGATCTCAGAGAAGATGCAGGCGGAGCGCCCTGACACCATGCTGGGAATCGTGAGTGGGGCTCTTCACGTG
T E S F Q H N S I D T G W L D R L I S E K M Q A E R P D T M L G I V S G A L H V
GCAGATGTCAATCTGAGGAACAGTGTCTCCAACTTCCTGCATTCTCTAGAAAGGGGCCAGGTGCTGCCGGCACACACACTACTCAACACTGTGGATGTGGAGCTGATCTATGAAGGCACT
A D V N L R N S V S N F L H S L E R G Q V L P A H T L L N T V D V E L I Y E G T
AAGTACGTCCTGACGGTGACGCGCCAGTCTCCCAACTCCTACGTGGTCATCATGAACAACTCCTCCGCTGAGGTGGACGTCCATCGGCTCAGCGATGGAGGTCTTTTGCTGTCTTATGAC
K Y V L T V T R Q S P N S Y V V I M N N S S A E V D V H R L S D G G L L L S Y D
GGAAGCAGCTACACTACATACATGAAAGAAGAGGTGGACAGGTATCGCATCACAATTGGGAACAAGACTTGTGTTTTCGAAAGGGAGAACGACCCTTCGCTGCTACGATCTCCTTCAGCG
G S S Y T T Y M K E E V D R Y R I T I G N K T C V F E R E N D P S L L R S P S A
GGAAAACTCATCCAGTACACAGTCGAGGATGGCGGACATGTGTTTTCTGGCCAGTGCTACGCTGAAATAGAGGTGATGAAGATGGTAATGACCCTTACGGCTGCAGAGTCTGGATGTATT
G K L I Q Y T V E D G G H V F S G Q C Y A E I E V M K M V M T L T A A E S G C I
CACTATGTGAAGAGAGCTGGAGCGGCACTGGATCCAGGCTGTGTGATTGCCAAGCTGCAACTGGATGACCCAAGCCGAGTGCAACAGGCAGAGCTGCACACAGGGGCCTTGCCTTCTATC
H Y V K R A G A A L D P G C V I A K L Q L D D P S R V Q Q A E L H T G A L P S I
CAGGCAGTAGCTCTGAGAGGAGAGAAGCTGCACAGAGTTTTCCACAACACACTGGATCATCTCGTTCACATAATGAACGGCTACTGTCTCCCTGAGCCTTTCTTCAGTGCTAAACTGAAA
Q A V A L R G E K L H R V F H N T L D H L V H T M N G Y C L P E P F F S A K L K
GAGTGGGTGGAAAGGTTGATGAAAACCATGCGTGATCCCTCTTTGCCACTGTTGGAACTCCAAGACATCATGACCAGTGTGTCTGGTCGCATCCCTCCTGCCGTGGAGAAGGCTATCAAG
E W V E R L M K T M R D P S L P L L E L Q D I M T S V S G R I P P A V E K A I K
AAAGAAATGGCTCAGTATGCGAGCAACATCACCTCCGTGCTCTGCCAGTTTCCCAGCCAGCAGATCGCGAACATCCTGGACAGCCATGCTGCTACTCTAAACAAGAAGTCAGAGAGAGAA
K E M A Q Y A S N I T S V L C Q F P S Q Q I A N I L D S H A A T L N K K S E R E
GTCTTCTTTATGAACACACAAAGCATTGTTCAGCTGGTACAGAAATATCGCAGTGGCATCCGAGGTCACATGAAGGCCGTGGTGATGGACCTGCTGAGACAGTACCTGAAAGTAGAGATC
V F F M N T Q S I V Q L V Q K Y R S G I R G H M K A V V M D L L R Q Y L K V E I
CAGTTTCAGAATGGACACTACGACAAATGTGTGTTCGCACTACGTGAGGAAAACAAAGGCGACATGTCCAATGTGCTCAACTATATCTTCTCCCATGCTCAAGTCACCAAGAAGAACCTG
Q F Q N G H Y D K C V F A L R E E N K G D M S N V L N Y I F S H A Q V T K K N L
CTGGTTACCATGCTGATTGACCAGCTCTGTGGCCGCGATCCCACGCTGACAGATGAACTGATGGCCATCTTGACTGAACTCACCCAGCTCAGCAAAACGACCAACGCCAAGGTGGCACTG
L V T M L I D Q L C G R D P T L T D E L M A I L T E L T Q L S K T T N A K V A L
CGTGCCCGACAGGTGTTGATCGCTTCTCATCTCCCCTCATACGAGCTACGACACAACCAGGTGGAGTCCATCTTCCTCTCTGCCATCGATATGTACGGGCACCAGTTCTGCATTGAAAAC
R A R Q V L I A S H L P S Y E L R H N Q V E S I F L S A I D M Y G H Q F C I E N
CTGCAGAAACTGATCCTTTCGGAAACATCCATCTTTGATGTTCTGCCCAACTTCTTCTACCACAGCAATCAGGTAGTCAGGATGGCTGCCCTTGAGGTGTACGTTCGCAGAGCATACATT
L Q K L I L S E T S I F D V L P N F F Y H S N Q V V R M A A L E V Y V R R A Y I
GCGTATGAGCTGAACAGCGTTCAGCATCGGCAGCTGAGGGACAACACGTGTATAGTAGAGTTCCAGTTCATGCTTCCCACCTCGCACCCAAACAGAGGGAACATCCCCACTCTAAACAGG
A Y E L N S V Q H R Q L R D N T C I V E F Q F M L P T S H P N R G N I P T L N R
ATGTCATTCTCGTCTAACCTAAACCACTACGGCATGGTGCATGTAGCCAGCGTCAGTGACGTTCTGCTTGACACATCTTTTACACCACCTTGTCAGCGCATGGGAGCCATGGTCGCTTTC
M S F S S N L N H Y G M V H V A S V S D V L L D T S F T P P C Q R M G A M V A F
CGCTCCTTCCAGGAGTTCACAAGGAACATCGCAGACGTGTTGAGCTGCTTCTCCGACTCTCCTCCCCCAAGTCCAACCTTCCCAGAGGGAGGTAATCCTGTCCTGTATGGCGAAGAGGAC
R S F Q E F T R N I A D V L S C F S D S P P P S P T F P E G G N P V L Y G E E D

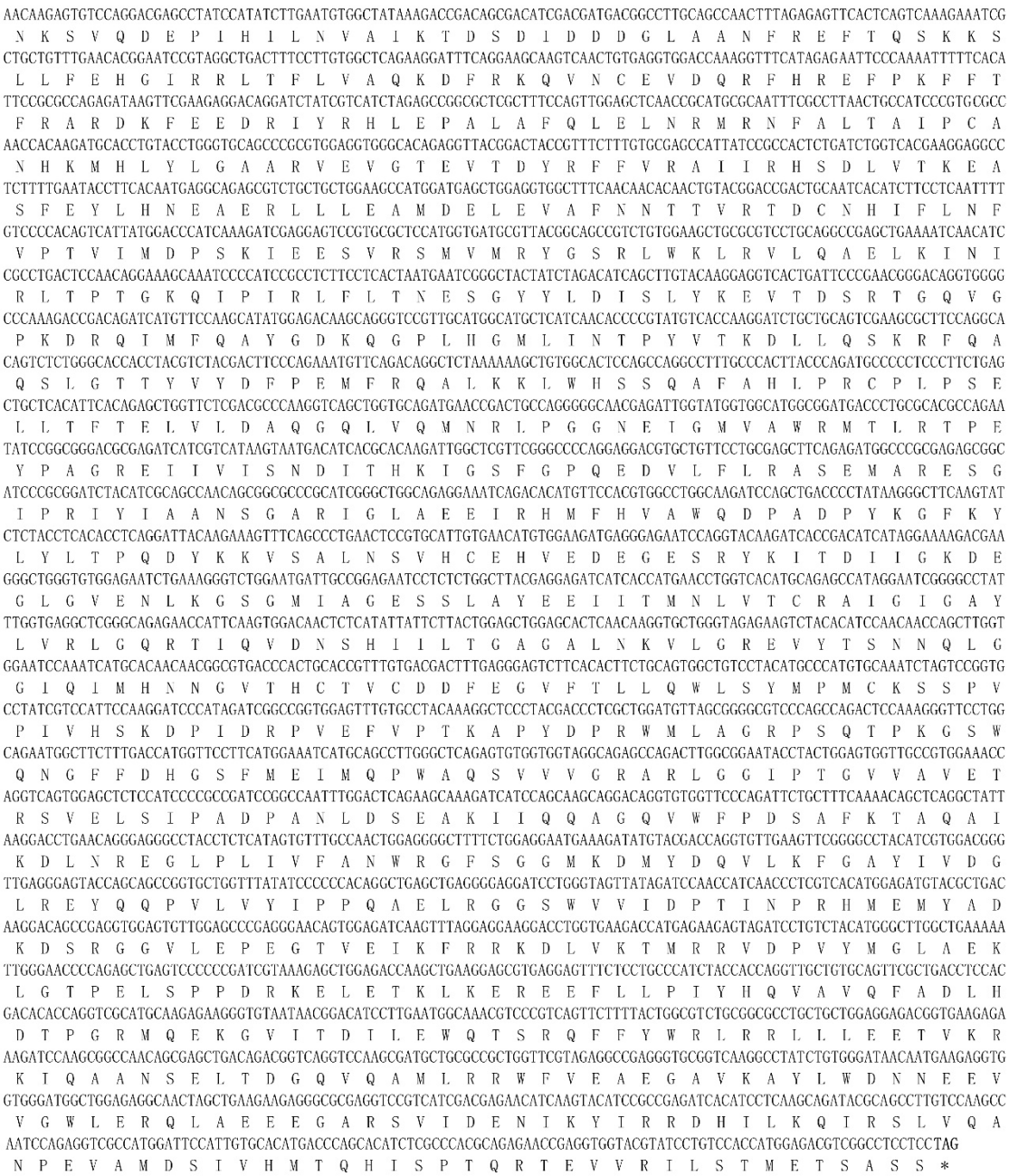


Figure S1 Nucleotide and deduced amino acid sequences of *acc1* gene. The start codon (ATG) and the stop codon (TGA) are in bold.

ATGCTCCCTTTTGCAGTTTTGGGATTAATCCTATGGATTTCATTGCTACTGTGGAGGATTATCACCAAGGCAGTAGCGATGCCCGTGAAAGGAGAGGAATCTCCGTCTGGCTGTGGTCCG
M L P F A V L G L I L W I S L L L W R I I T K A V A M P V K G E E S P S G C G P
CCTGCAGCTGAGGAGGACATGCCTGTTACACAATCCCCTCATCCAGGCGAACATTCCCTGTCAACAGCCCCTACTACCTCAGCGCACAATGAGGATAACAGTTCTCAGGCCGGCTGTGCC
P A A E E D M P V T Q S P H P G E H S L S T A P T T S A H N E D N S S Q A G C A
CCTGCAGGTCAAGTTAAAGCAGTGGACACAGAGGCTCTGCAGGAGTCCTCTGAGGTAAATTCAGAAAAACCACCAACCACACAGACATCTTCCAAAACCAAAGTGCCAATGCTCAAATCA
P A G Q V K A V D T E A L Q E S S E V N S E K P P T T Q T S S K T K V P M L K S
GGGCCTGAGGGGAGGGAACGCCTCAAGTTCATTCTCGGAGCATCTGAGGATAACTCTTCAGACGAGGAGCCTCTGGTTAGCAAACCTCCAAGTGGCGCATCTCAGCCACCGGCCTCCACA
G P E G R E R L K F I L G A S E D N S S D E E P L V S K P P S G A S Q P P A S T
AGCAAATCTTATCCCCAGGAGGGATCCACAGCAGCACGACGATCCAGCTCCTCAGGCATCAAGCCTAGCATGTCTGGTCTTCACTTGGTGAGAAAAGGACGCGAACACAGAAAGATGGAT
S K S Y P Q E G S T A A R R S S S S G I K P S M S G L H L V R K G R E H R K M D
CTCCAGAGGGACTTCACTGTGGCCTCTCCTGCTGAGTTTGTCACTAGATTTGGTGGCAACCGTGTCATTGAAAAAGTGCTGATAGCTAACAATGGCATTGCTGCGGTAAAATGTATGCGC
L Q R D F T V A S P A E F V T R F G G N R V I E K V L I A N N G I A A V K C M R
TCTATCCGTCGCTGGTCCTACGAAATGTTTCGCAACGAGAGGACCATCCGTTTTGTGGTCATGGTAACCCCTGAAGACCTGAAAGCAAATGCAGAATACATTAAAATGGCAGACCATTAT
S I R R W S Y E M F R N E R T I R F V V M V T P E D L K A N A E Y I K M A D H Y
GTTCCTGTACCCGGTGGGCCCAACAATAACAACTACGCCAACGTAGAGCTGATAGTAGACATTGCTAAAAGAATCCCTGTGCAGGCTGTCTGGGCTGGATGGGGTCATGCCTCTGAAAAT
V P V P G G P N N N N Y A N V E L I V D I A K R I P V Q A V W A G W G H A S E N
CCCAAACTGCCTGAGCTGTTGAACAAAGCAGGAATCTCATTTTTAGGACCGTCCAGTAAAGCCATGTGGGCTCTTGGAGATAAAGTGGCTTCTTCTATCGTGGCTCAGAGTGCTGACATT
P K L P E L L N K A G I S F L G P S S K A M W A L G D K V A S S I V A Q S A D I
CCCACACTACCATGGAGCGGATCAGGTCTAAGAGTGGATTGGACCGAGGAGGACCAAAAACTGGGCAACGTAATCAGTGTTCCTTCAGAGATCTATGCAAACGGCTGTGTTCGGGATGTT
P T L P W S G S G L R V D W T E E D Q K L G N V I S V P S E I Y A N G C V R D V
GATGATGGGCTGGCAGGGGCTGAGAGAATTGGTTATCCGGTTGTTATCAAGGCCTCTGAGGGTGGAGGTGGAAAAGGCATCCGTAAAGTAGAATGCTCTGAGGATTTTCCAGGTTCTTT
D D G L A G A E R I G Y P V V I K A S E G G G G K G I R K V E C S E D F P G F F
AGACAGGTTCAGACAGAGGTACCCGGTTCCCCTATCTTCGTCATGCAGCTAGCTCAGCACGCCAGACACCTTGAGGTTCAGATACTGGCTGATGAGTATGGAAATGCCATCTCTCTGTTT
R Q V Q T E V P G S P I F V M Q L A Q H A R H L E V Q I L A D E Y G N A I S L F
GGACGAGACTGCTCCATCCAGAGGAGGCACCAGAAGATTATAGAGGAGGCTCCGGCCACCATTGCTGCTACCTCAACATTCGAGCAAATGGAATGGTGTGCTGTGCGACTGGCCAAGATG
G R D C S I Q R R H Q K I I E E A P A T I A A T S T F E Q M E W C A V R L A K M
GTTGGCTACGTGAGCGCAGGTACCGTGGAATATCTCTTCTCTGAAGACGGAAATTTCCATTTCCTGGAGCTGAATCCTCGCCTGCAGGTGGAACATCCCTGTACAGAGATGATCGGAGAT
V G Y V S A G T V E Y L F S E D G N F H F L E L N P R L Q V E H P C T E M I G D
GTAAACCTGCCAGCTGCCCAGCTTCAGATTGCGATGGGCATCCCCCTTTATAGAATTAAGGACATCCGTCTACTTTATGGAGAGACTCCGTGGGGTGATACCATCATTAACTTTGAAACT
V N L P A A Q L Q I A M G I P L Y R I K D I R L L Y G E T P W G D T I I N F E T
CCAGACTGCATACCAAGTCCAAGAGGGCACGTCATAGCTGCTCGGATCACCAGTGAGAACCCTGATGAGGGGTTTAAGCCCAGTTCGGGCACAGTGCAGGAGCTGAACTTCCGCAGCAGT
P D C I P S P R G H V I A A R I T S E N P D E G F K P S S G T V Q E L N F R S S
AAAAACGTGTGGGGTTATTTCAGCGTGGGAGCAACTGGTGGCCTGCATGAATTTGCCGACTCCCAGTTTGGACACTGTTTCTCCTGGGGAGAGAATCGTGAAGAAGCCATTTCGAACATG
K N V W G Y F S V G A T G G L H E F A D S Q F G H C F S W G E N R E E A I S N M
GTCGTGGCTATGAAGGAGCTGTCCATCAGAGGTGACTTCAGGACCACGGTTGAGTACCTCATCAAGTTACTGGAGACAGAATGCTTCAGAAACAATGACATCGACACGGGGTGGCTGGAT
V V A M K E L S I R G D F R T T V E Y L I K L L E T E C F R N N D I D T G W L D
CATCTGATTGCAGAGAAAGTGCAGGCGGAGAGACCAGATACGATGCTGGGGATTGTTTGTGGGGCTTTGCATGTTGCTGATGCGAGCTTTCGAAAGAGCATGTCTGATTACCTGCATTCA
H L I A E K V Q A E R P D T M L G I V C G A L H V A D A S F R K S M S D Y L H S
CTTGAAAGAGGCCAAGTACTGCCTGCGGCCAGTCTCCTCAACTCTGTCAGCGTGGACCTAATATATGAAGGAGTCAAGTACTGCCTCAAGGTGGCTCGCCAATCTCCGACAACTTACGTC
L E R G Q V L P A A S L L N S V S V D L I Y E G V K Y C L K V A R Q S P T T Y V
ATCATGATGAACGGCTCCAACATCGAGATAGATGTCCACAGGTTGAGCGACGGTGGCCTCTTGCTGTCCTATGACGGCAGCAGCCACACCACCTACATGAAGGAGGAAGTGGACAGCTAC
I M M N G S N I E I D V H R L S D G G L L L S Y D G S S H T T Y M K E E V D S Y
CGCATCACTGTTGGCAACAAGACGTGTGTATTTGAGAAGGAGAAGGATCCCACGGTGCTGAGGTCGCCCTCTGCTGGCAAACTGCTTCAGTACATCTGTGAGGATGGAGCTCACGTTTGT
R I T V G N K T C V F E K E K D P T V L R S P S A G K L L Q Y I C E D G A H V C
GCAGGAGAGACCTACGCGGAGATCGAGGTCATGAAGATGGTGATGACATTGACTGTGCAGCAGTCTGGTTGTATTCATTTTGTCAAGAGACCTGGAGCTGTTCTGGAGCCGGCTGTGTG
A G E T Y A E I E V M K M V M T L T V Q Q S G C I H F V K R P G A V L E P G C V
GTGGCACACATAGAGCTAGATGACCCGAGCAGTATACATCTGGTGGAGCTCAACACGGCCATACTACCACCACAGCAACCCCTGCCCATTGTTGGGGAAAAGCTTCACCAGGTGTTTCAC
V A H I E L D D P S S I H L V E L N T A I L P P Q Q P L P I V G E K L H Q V F H
AGTGTGCTGGAAAACTTGGGTAAAGTCATGGATGGTTACTGCCTTGAGGAGCCGTTATTCAGCAGCAAGCTCAAACAGTGGGTGACTACCCTGATGAAGACTTTAAGGGACCCCTCACTA
S V L E N L G K V M D G Y C L E E P L F S S K L K Q W V T T L M K T L R D P S L
CCGCTGCTGGAACTTCAGGAGATCATGACGAGTGTGGGGGGTCGGATTCCTCCCGGTGTAGAGAAAGATATCCGTAAAGTCATGGCTCAGTATGCGAGCAACATCACCTCTGTCCTCTGC
P L L E L Q E I M T S V G G R I P P G V E K D I R K V M A Q Y A S N I T S V L C
CAGTTCCCTAGCCAAAGGATTGCAAACGTTTTAGACAGCCATGCAGCAACCCTGCAGAGGAAAGCTGATCGCGAGGTGTTCTTCATGAACACTCAGAGTATTGTTCAGCTGGTGCAGAGG
Q F P S Q R I A N V L D S H A A T L Q R K A D R E V F F M N T Q S I V Q L V Q R
TACCGCAGTGGAATCCGTGGTTATATGAAGTCTGTGGTTCTCGATCTGCTGAAGCGATACCTGCAAGTAGAGATGCAGTTTCAGCAAGCTCACTATGACAAGTGTGTCATCAACTTGAGA
Y R S G I R G Y M K S V V L D L L K R Y L Q V E M Q F Q Q A H Y D K C V I N L R
GAGCAGCACAAACCTGACATGAGTCGCGTGCTGGAGTACATCTTCTCTCATGCCCAAGTCTCCAAGAAGAACATCCTTGTCACAATGCTCATAGACCAGCTGTGTGGAAGAGATTCAACG
E Q H K P D M S R V L E Y I F S H A Q V S K K N I L V T M L I D Q L C G R D S T
CTAGCAGAAGAGCTGATGGCCATTTTGAACGAGCTCACGCAGCTTAGCAAGATGGAGAACTCAAAGGTTGCCTTGAGAGCCAGACAGGTTTTGATTGCCTCCCATTTACCATCATACGAA
L A E E L M A I L N E L T Q L S K M E N S K V A L R A R Q V L I A S H L P S Y E
CTGAGGCACAACCAGGTGGAGTCCATCTTCCTGTCAGCCATCGACATGTACGGCCACCAGTTCTGTCCGGAAAACTTGAAGAAACTTATCCTCTCTGAAACCTCCATTTTTGACGTTTTG
L R H N Q V E S I F L S A I D M Y G H Q F C P E N L K K L I L S E T S I F D V L
CCCAATTTCTTCTATCACTCCAATCAAGTTGTCTGCATGGCTGCCCTGGAGGTGTACGTACGCAGAGCTTACATCGCCTATGAGCTGAATAGCATCCAGCATCACCAGCTGCAGGATGGA
P N F F Y H S N Q V V C M A A L E V Y V R R A Y I A Y E L N S I Q H H Q L Q D G
TCGTGCGCTGTAGACTTCCAGTTCATGCTGCCGTCATCACATCCGAACAGAGGGAGCAGCCCTACTCTGAACAGGGTTCCCGTGCCAGTCAGTGGATCAGGCCAGTTTAAAATGAGGCGA
S C A V D F Q F M L P S S H P N R G S S P T L N R V P V P V S G S G Q F K M R R

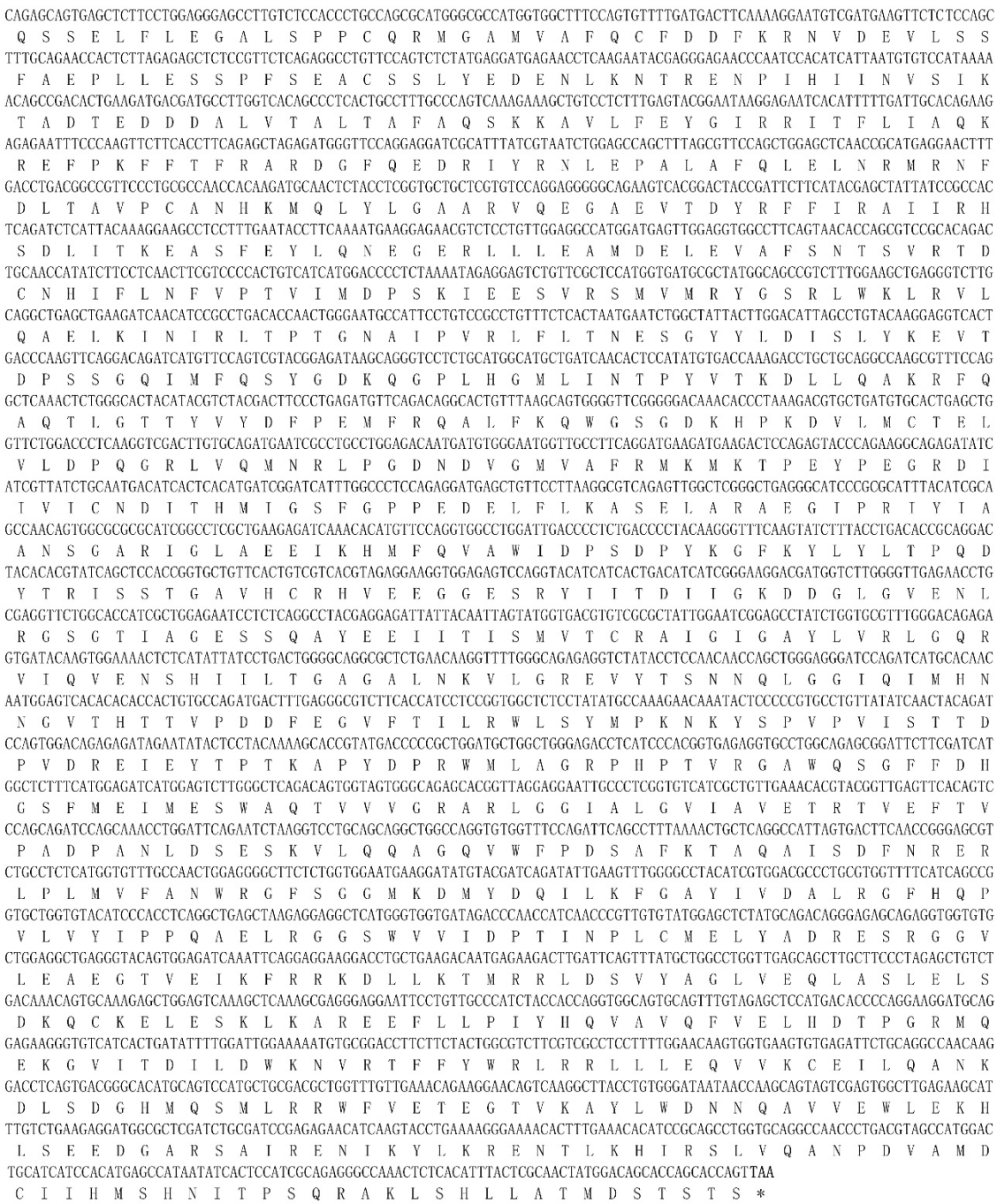
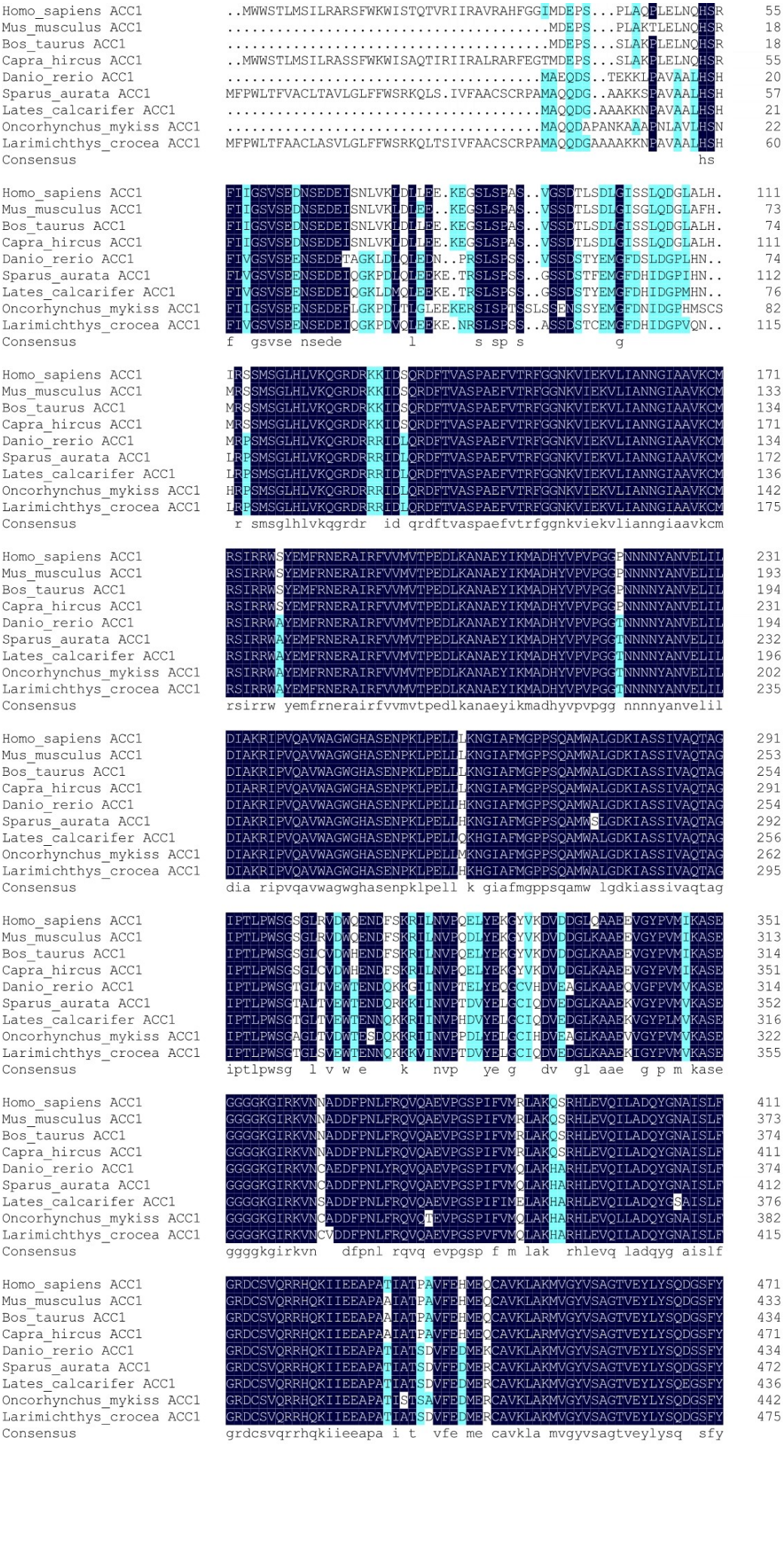
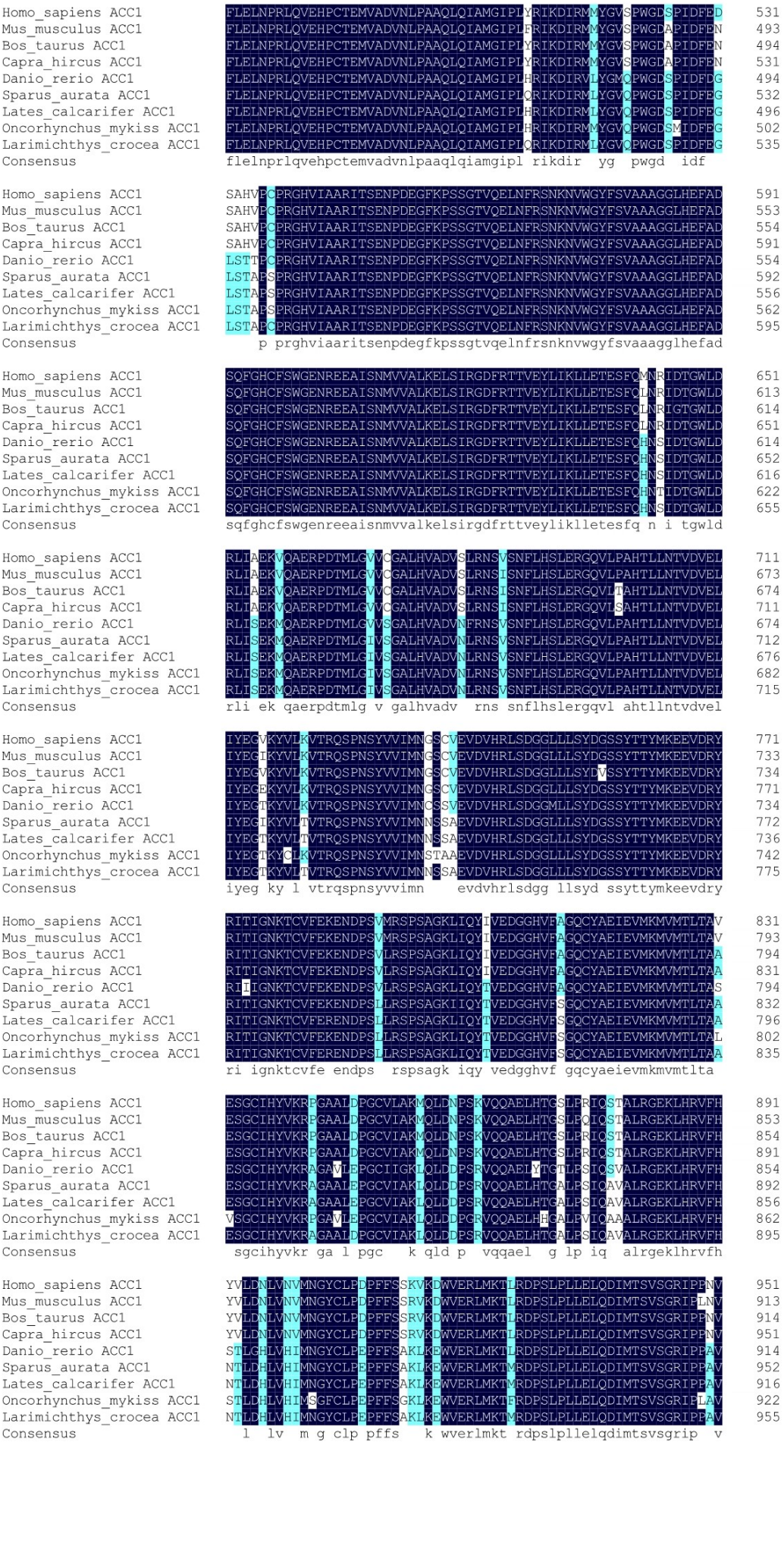
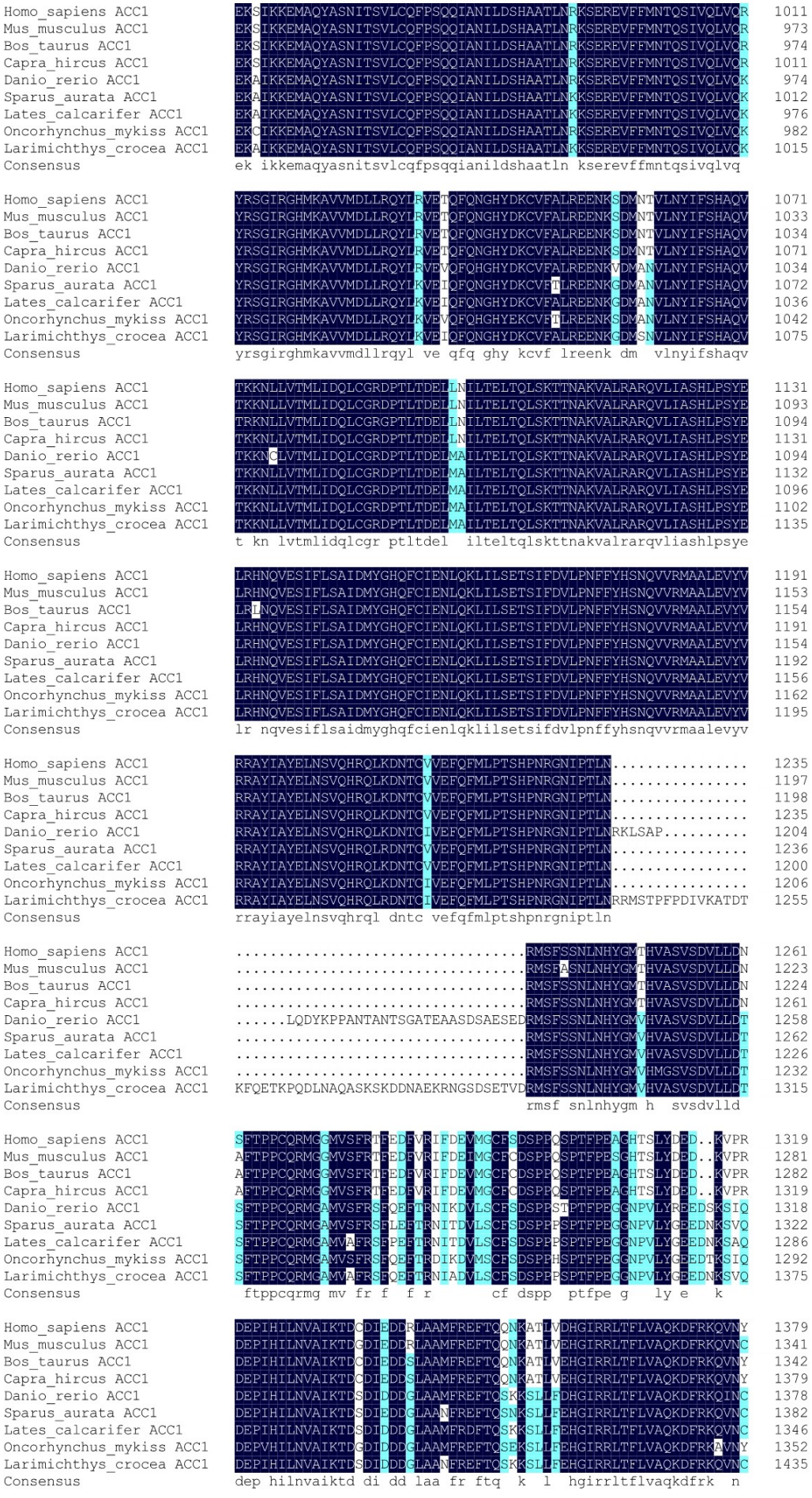
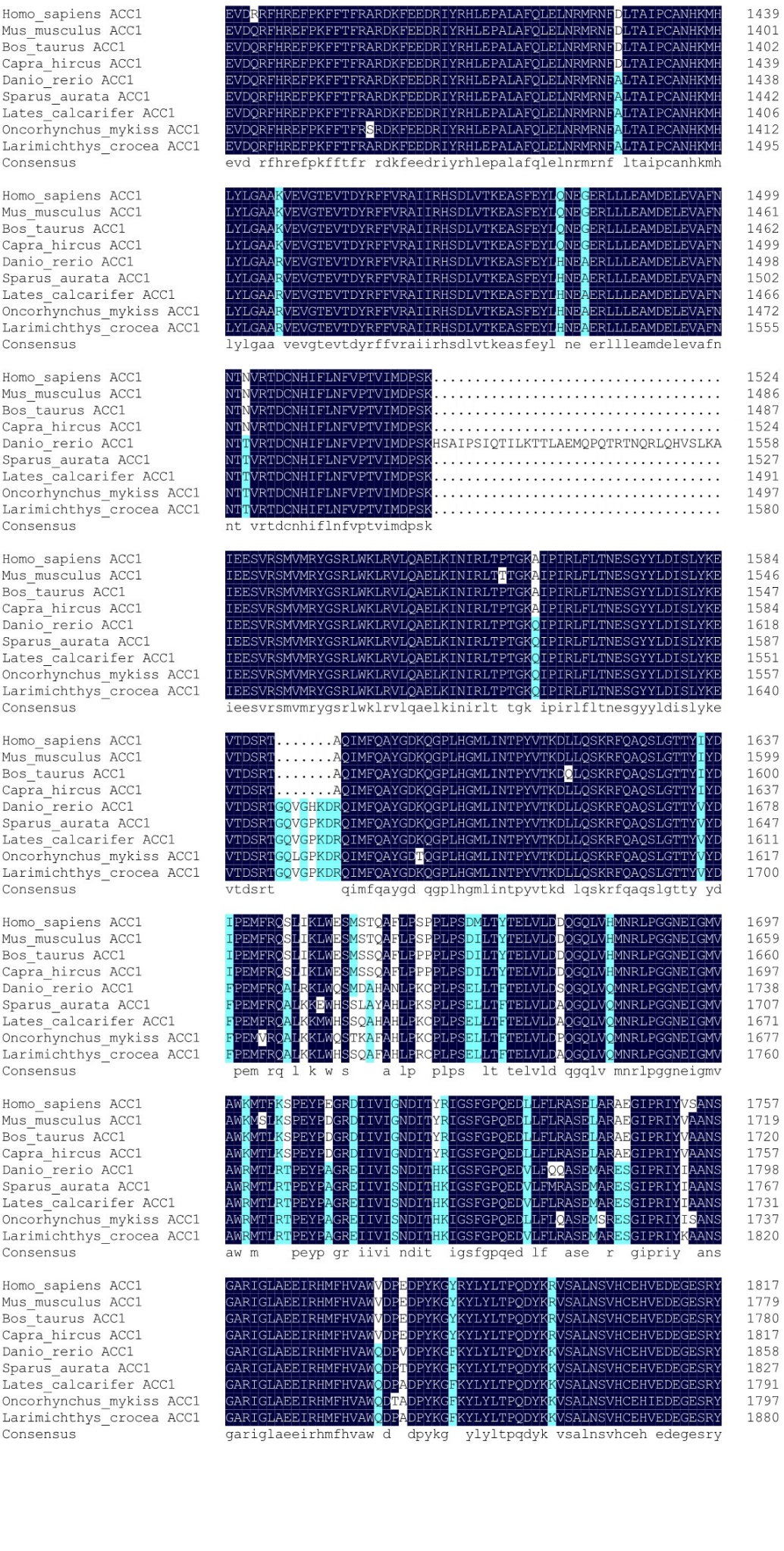


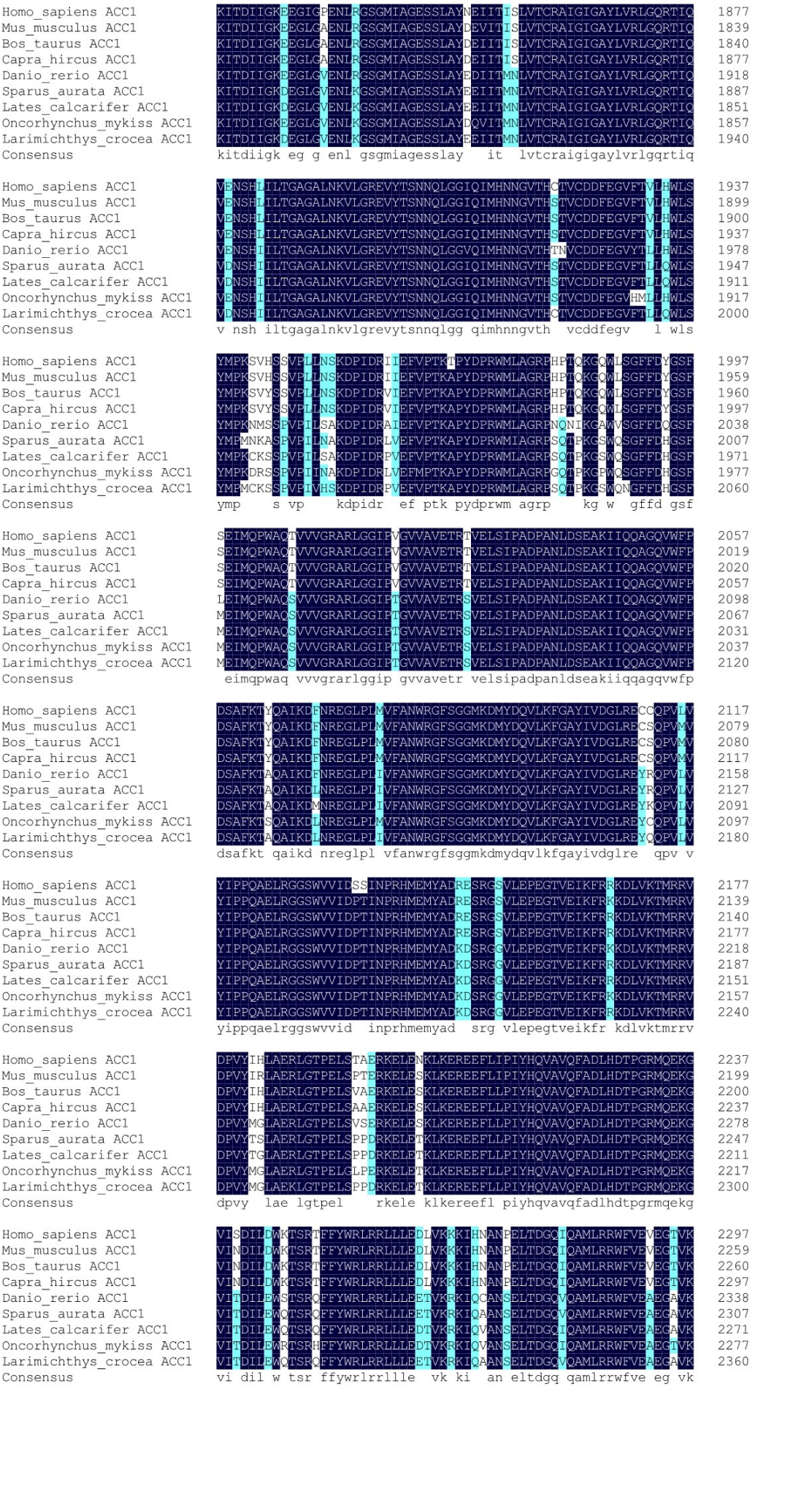
Figure S2 Nucleotide and deduced amino acid sequences of *acc2* gene. The start codon (ATG) and the stop codon (TGA) are in bold.


Homo_sapiens ACC1
Mus_musculus ACC1
Bos_taurus ACC1
Capra_hircus ACC1
Danio_rerio ACC1
Sparus_aurata ACC1
Lates_calcarifer ACC1
Oncorhynchus_mykiss ACC1
Larimichthys_crocea ACC1
Consensus


Homo_sapiens ACC1 531
Mus_musculus ACC1 493
Bos_taurus ACC1 494
Capra_hircus ACC1 531
Danio_rerio ACC1 494
Sparus_aurata ACC1 532
Lates_calcarifer ACC1 496
Oncorhynchus_mykiss ACC1 502
Larimichthys_crocea ACC1 535
Consensus
Homo_sapiens ACC1 591
Mus_musculus ACC1 553
Bos_taurus ACC1 554
Capra_hircus ACC1 591
Danio_rerio ACC1 554
Sparus_aurata ACC1 592
Lates_calcarifer ACC1 556
Oncorhynchus_mykiss ACC1 562
Larimichthys_crocea ACC1 595
Consensus
Homo_sapiens ACC1 651
Mus_musculus ACC1 613
Bos_taurus ACC1 614
Capra_hircus ACC1 651
Danio_rerio ACC1 614
Sparus_aurata ACC1 652
Lates_calcarifer ACC1 616
Oncorhynchus_mykiss ACC1 622
Larimichthys_crocea ACC1 655
Consensus
Homo_sapiens ACC1 711
Mus_musculus ACC1 673
Bos_taurus ACC1 674
Capra_hircus ACC1 711
Danio_rerio ACC1 674
Sparus_aurata ACC1 712
Lates_calcarifer ACC1 676
Oncorhynchus_mykiss ACC1 682
Larimichthys_crocea ACC1 715
Consensus
Homo_sapiens ACC1 771
Mus_musculus ACC1 733
Bos_taurus ACC1 734
Capra_hircus ACC1 771
Danio_rerio ACC1 734
Sparus_aurata ACC1 772
Lates_calcarifer ACC1 736
Oncorhynchus_mykiss ACC1 742
Larimichthys_crocea ACC1 775
Consensus
Homo_sapiens ACC1 831
Mus_musculus ACC1 793
Bos_taurus ACC1 794
Capra_hircus ACC1 831
Danio_rerio ACC1 794
Sparus_aurata ACC1 832
Lates_calcarifer ACC1 796
Oncorhynchus_mykiss ACC1 802
Larimichthys_crocea ACC1 835
Consensus
Homo_sapiens ACC1 891
Mus_musculus ACC1 853
Bos_taurus ACC1 854
Capra_hircus ACC1 891
Danio_rerio ACC1 854
Sparus_aurata ACC1 892
Lates_calcarifer ACC1 856
Oncorhynchus_mykiss ACC1 862
Larimichthys_crocea ACC1 895
Consensus
Homo_sapiens ACC1 951
Mus_musculus ACC1 913
Bos_taurus ACC1 914
Capra_hircus ACC1 951
Danio_rerio ACC1 914
Sparus_aurata ACC1 952
Lates_calcarifer ACC1 916
Oncorhynchus_mykiss ACC1 922
Larimichthys_crocea ACC1 955
Consensus


Homo_sapiens ACC1 EKSIKKEMAQYASNITSVLCQFPSQQIANILDSHAATLNRKSEREVFFMNTQSIVQLVQR 1011
Mus_musculus ACC1 EKSIKKEMAQYASNITSVLCQFPSQQIANILDSHAATLNRKSEREVFFMNTQSIVQLVQR 973
Bos_taurus ACC1 EKSIKKEMAQYASNITSVLCQFPSQQIANILDSHAATLNRKSEREVFFMNTQSIVQLVQR 974
Capra_hircus ACC1 EKSIKKEMAQYASNITSVLCQFPSQQIANILDSHAATLNRKSEREVFFMNTQSIVQLVQR 1011
Danio_rerio ACC1 EKAIKKEMAQYASNITSVLCQFPSQQIANILDSHAATLNRKSEREVFFMNTQSIVQLVQK 974
Sparus_aurata ACC1 EKAIKKEMAQYASNITSVLCQFPSQQIANILDSHAATLNKKSEREVFFMNTQSIVQLVQK 1012
Lates_calcarifer ACC1 EKAIKKEMAQYASNITSVLCQFPSQQIANILDSHAATLNKKSEREVFFMNTQSIVQLVQK 976
Oncorhynchus_mykiss ACC1 EKCIKKEMAQYASNITSVLCQFPSQQIANILDSHAATLNRKSEREVFFMNTQSIVQLVQK 982
Larimichthys_crocea ACC1 EKAIKKEMAQYASNITSVLCQFPSQQIANILDSHAATLNKKSEREVFFMNTQSIVQLVQK 1015
Consensus ek ikkemaqyasnitsvlcqfpsqqianildshaatln kserevffmntqsivqlvq
Homo_sapiens ACC1 YRSGIRGHMKAVVMDLLRQYLRVETQFQNGHYDKCVFALREENKSDMNTVLNYIFSHAQV 1071
Mus_musculus ACC1 YRSGIRGHMKAVVMDLLRQYLRVETQFQNGHYDKCVFALREENKSDMNTVLNYIFSHAQV 1033
Bos_taurus ACC1 YRSGIRGHMKAVVMDLLRQYLRVETQFQNGHYDKCVFALREENKSDMNTVLNYIFSHAQV 1034
Capra_hircus ACC1 YRSGIRGHMKAVVMDLLRQYLRVETQFQNGHYDKCVFALREENKSDMNTVLNYIFSHAQV 1071
Danio_rerio ACC1 YRSGIRGHMKAVVMDLLRQYLRVEVQFQHGHYDKCVFALREENKVDMANVLNYIFSHAQV 1034
Sparus_aurata ACC1 YRSGIRGHMKAVVMDLLRQYLKVEIQFQNGHYDKCVFTLREENKGDMANVLNYIFSHAQV 1072
Lates_calcarifer ACC1 YRSGIRGHMKAVVMDLLRQYLKVEIQFQNGHYDKCVFALREENKGDMANVLNYIFSHAQV 1036
Oncorhynchus_mykiss ACC1 YRSGIRGHMKAVVMDLLRQYLKVEVQFQHGHYEKCVFTLREENKSDMANVLNYIFSHAQV 1042
Larimichthys_crocea ACC1 YRSGIRGHMKAVVMDLLRQYLKVEIQFQNGHYDKCVFALREENKGDMSNVLNYIFSHAQV 1075
Consensus yrsgirghmkavvmdllrqyl ve qfq ghy kcvf lreenk dm vlnyifshaqv
Homo_sapiens ACC1 TKKNLLVTMLIDQLCGRDPTLTDELLNILTELTQLSKTTNAKVALRARQVLIASHLPSYE 1131
Mus_musculus ACC1 TKKNLLVTMLIDQLCGRDPTLTDELLNILTELTQLSKTTNAKVALRARQVLIASHLPSYE 1093
Bos_taurus ACC1 TRKNLLVTMLIDQLCGRGPTLTDELLNILTELTQLSKTTNAKVALRARQVLIASHLPSYE 1094
Capra_hircus ACC1 TKKNLLVTMLIDQLCGRDPTLTDELLNILTELTQLSKTTNAKVALRARQVLIASHLPSYE 1131
Danio_rerio ACC1 TKKNCLVTMLIDQLCGRDPTLTDELMAILTELTQLSKTTNAKVALRARQVLIASHLPSYE 1094
Sparus_aurata ACC1 TKKNLLVTMLIDQLCGRDPTLTDELMAILTELTQLSKTTNAKVALRARQVLIASHLPSYE 1132
Lates_calcarifer ACC1 TKKNLLVTMLIDQLCGRDPTLTDELMAILTELTQLSKTTNAKVALRARQVLIASHLPSYE 1096
Oncorhynchus_mykiss ACC1 TKKNLLVTMLIDQLCGRDPTLTDELMAILTELTQLSKTTNAKVALRARQVLIASHLPSYE 1102
Larimichthys_crocea ACC1 TKKNLLVTMLIDQLCGRDPTLTDELMAILTELTQLSKTTNAKVALRARQVLIASHLPSYE 1135
Consensus t kn lvtmlidqlcgr ptltdel ilteltqlskttnakvalrarqvliashlpsye
Homo_sapiens ACC1 LRHNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLPNFFYHSNQVVRMAALEVYV 1191
Mus_musculus ACC1 LRHNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLPNFFYHSNQVVRMAALEVYV 1153
Bos_taurus ACC1 LRLNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLPNFFYHSNQVVRMAALEVYV 1154
Capra_hircus ACC1 LRHNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLPNFFYHSNQVVRMAALEVYV 1191
Danio_rerio ACC1 LRHNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLPNFFYHSNQVVRMAALEVYV 1154
Sparus_aurata ACC1 LRHNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLPNFFYHSNQVVRMAALEVYV 1192
Lates_calcarifer ACC1 LRHNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLPNFFYHSNQVVRMAALEVYV 1156
Oncorhynchus_mykiss ACC1 LRHNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLPNFFYHSNQVVRMAALEVYV 1162
Larimichthys_crocea ACC1 LRHNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLPNFFYHSNQVVRMAALEVYV 1195
Consensus lr nqvesiflsaidmyghqfcienlqkllsetsifdvlpnffyhsnqvvrmaalevyv
Homo_sapiens ACC1 RRAYIAYELNSVQHRQLKDNTCVVEFQFMLPTSHPNRGNIPTLN..... 1235
Mus_musculus ACC1 RRAYIAYELNSVQHRQLKDNTCVVEFQFMLPTSHPNRGNIPTLN..... 1197
Bos_taurus ACC1 RRAYIAYELNSVQHRQLKDNTCVVEFQFMLPTSHPNRGNIPTLN..... 1198
Capra_hircus ACC1 RRAYIAYELNSVQHRQLKDNTCVVEFQFMLPTSHPNRGNIPTLN..... 1235
Danio_rerio ACC1 RRAYIAYELNSVQHRQLKDNTCIVEFQFMLPTSHPNRGNIPTLNRKLSAP..... 1204
Sparus_aurata ACC1 RRAYIAYELNSVQHRQLRDNTCVVEFQFMLPTSHPNRGNIPTLN..... 1236
Lates_calcarifer ACC1 RRAYIAYELNSVQHRQLKDNTCVVEFQFMLPTSHPNRGNIPTLN..... 1200
Oncorhynchus_mykiss ACC1 RRAYIAYELNSVQHRQLKDNTCIVEFQFMLPTSHPNRGNIPTLN..... 1206
Larimichthys_crocea ACC1 RRAYIAYELNSVQHRQLRDNTCIVEFQFMLPTSHPNRGNIPTLNRRMSTPFPDIVKATDT 1255
Consensus rrayiayelnsvqhrql dntc vefqfmlptshpnrgniptln
Homo_sapiens ACC1 .....RMSFSSNLNHYGMTHVASVSDVLLDN 1261
Mus_musculus ACC1 .....RMSPASNLNHYGMTHVASVSDVLLDN 1223
Bos_taurus ACC1 .....RMSFSSNLNHYGMTHVASVSDVLLDN 1224
Capra_hircus ACC1 .....RMSFSSNLNHYGMTHVASVSDVLLDN 1261
Danio_rerio ACC1 ......LQDYKPPANTANTSGATEAASDSAESEDRMSFSSNLNHYGMVHVASVSDVLLDT 1258
Sparus_aurata ACC1 .....RMSFSSNLNHYGMVHVASVSDVLLDT 1262
Lates_calcarifer ACC1 .....RMSFSSNLNHYGMVHVASVSDVLLDT 1226
Oncorhynchus_mykiss ACC1 .....RMSFSSNLNHYGMVHMGSVSDVLLDT 1232
Larimichthys_crocea ACC1 KFQETKPQDLNAQASKSKDDNAEKRNGSDSETVDRMSFSSNLNHYGMVHVASVSDVLLDT 1315
Consensus rmsf snlnhygm h svsdvlld
Homo_sapiens ACC1 SFTPPCQRMGGMVSFRTFEDFVRIFDEVMGCFSDSPPQSPTFPEAGHTSLYDED..KVPR 1319
Mus_musculus ACC1 AFTPPCQRMGGMVSFRTFEDFVRIFDEIMGCFCDSPPQSPTFPESGHTSLYDED..KVPR 1281
Bos_taurus ACC1 AFTPPCQRMGGMVSFRTFEDFVRIFDEVMGCFCDSPPQSPTFPEAGHTSLYDED..KVPR 1282
Capra_hircus ACC1 AFTPPCQRMGGMVSFRTFEDFVRIFDEVMGCFCDSPPQSPTFPEAGHTSLYDED..KVPR 1319
Danio_rerio ACC1 SFTPPCQRMGAMVSFRSFQEFTRNIKDVLSCFSDSPPSTPTFPEGGNPVLYREEDSKSIQ 1318
Sparus_aurata ACC1 SFTPPCQRMGAMVSFRSFLEFTRNITDVLSCFSDSPPSPTFPEGGNPVLYGEEDNKSVQ 1322
Lates_calcarifer ACC1 SFTPPCQRMGAMVAFRSFPEFTRNITDVLSCFSDSPPSPTFPEGGNPVLYGEEDNKSAQ 1286
Oncorhynchus_mykiss ACC1 SFTPPCQRMGAMVSFRSFQEFTRDIKDVMSCFSDSPPHSPTFPEGGNPVLYGEEDTKSIQ 1292
Larimichthys_crocea ACC1 SFTPPCQRMGAMVAFRSFQEFTRNIADVLSCFSDSPPSPTFPEGGNPVLYGEEDNKSVQ 1375
Consensus ftppcqrmg mv fr f f r cf dspp ptfpe g ly e k
Homo_sapiens ACC1 DEPIHILNVAIKTDCDIEDDRLAAMFREFTQQNKATLVDHGIRRLTFLVAQKDFRKQVNY 1379
Mus_musculus ACC1 DEPIHILNVAIKTDGDIEDDRLAAMFREFTQQNKATLVEHGIRRLTFLVAQKDFRKQVNC 1341
Bos_taurus ACC1 DEPIHILNVAIKTDCDIEDDSLAAMFREFTQQNKATLVEHGIRRLTFLVAQKDFRKQVNY 1342
Capra_hircus ACC1 DEPIHILNVAIKTDCDIEDDSLAAMFREFTQQNKATLVEHGIRRLTFLVAQKDFRKQVNY 1379
Danio_rerio ACC1 DEPIHILNVAIKTDSDIDDDGLAAMFREFTQSKKSLLFDHGIRRLTFLVAQKDFRKQINC 1378
Sparus_aurata ACC1 DEPIHILNVAIKTDSDIEDDGLAANFREFTQSNKSLLFEHGIRRLTFLVAQKDFRKQVNC 1382
Lates_calcarifer ACC1 DEPIHILNVAIKTDSDIDDDGLAAMFRDFTQSKKSLLFEHGIRRLTFLVAQKDFRKQVNC 1346
Oncorhynchus_mykiss ACC1 DEPVHILNVAIKTDGDIDDDGLAAMFREFTQSEKSLLFEHGIRRLTFLVAQKDFRKAVNY 1352
Larimichthys_crocea ACC1 DEPIHILNVAIKTDSDIDDDGLAANFREFTQSKKSLLFEHGIRRLTFLVAQKDFRKQVNC 1435
Consensus dep hilnvaiktd di dd laa fr ftq k l hgirrltflvaqkdfrk n


Homo_sapiens ACC1 1439
Mus_musculus ACC1 1401
Bos_taurus ACC1 1402
Capra_hircus ACC1 1439
Danio_rerio ACC1 1438
Sparus_aurata ACC1 1442
Lates_calcarifer ACC1 1406
Oncorhynchus_mykiss ACC1 1412
Larimichthys_crocea ACC1 1495
Consensus
Homo_sapiens ACC1 1499
Mus_musculus ACC1 1461
Bos_taurus ACC1 1462
Capra_hircus ACC1 1499
Danio_rerio ACC1 1498
Sparus_aurata ACC1 1502
Lates_calcarifer ACC1 1466
Oncorhynchus_mykiss ACC1 1472
Larimichthys_crocea ACC1 1555
Consensus
Homo_sapiens ACC1 1524
Mus_musculus ACC1 1486
Bos_taurus ACC1 1487
Capra_hircus ACC1 1524
Danio_rerio ACC1 1558
Sparus_aurata ACC1 1527
Lates_calcarifer ACC1 1491
Oncorhynchus_mykiss ACC1 1497
Larimichthys_crocea ACC1 1580
Consensus
Homo_sapiens ACC1 1584
Mus_musculus ACC1 1546
Bos_taurus ACC1 1547
Capra_hircus ACC1 1584
Danio_rerio ACC1 1618
Sparus_aurata ACC1 1587
Lates_calcarifer ACC1 1551
Oncorhynchus_mykiss ACC1 1557
Larimichthys_crocea ACC1 1640
Consensus
Homo_sapiens ACC1 1637
Mus_musculus ACC1 1599
Bos_taurus ACC1 1600
Capra_hircus ACC1 1637
Danio_rerio ACC1 1678
Sparus_aurata ACC1 1647
Lates_calcarifer ACC1 1611
Oncorhynchus_mykiss ACC1 1617
Larimichthys_crocea ACC1 1700
Consensus
Homo_sapiens ACC1 1697
Mus_musculus ACC1 1659
Bos_taurus ACC1 1660
Capra_hircus ACC1 1697
Danio_rerio ACC1 1738
Sparus_aurata ACC1 1707
Lates_calcarifer ACC1 1671
Oncorhynchus_mykiss ACC1 1677
Larimichthys_crocea ACC1 1760
Consensus
Homo_sapiens ACC1 1757
Mus_musculus ACC1 1719
Bos_taurus ACC1 1720
Capra_hircus ACC1 1757
Danio_rerio ACC1 1798
Sparus_aurata ACC1 1767
Lates_calcarifer ACC1 1731
Oncorhynchus_mykiss ACC1 1737
Larimichthys_crocea ACC1 1820
Consensus
Homo_sapiens ACC1 1817
Mus_musculus ACC1 1779
Bos_taurus ACC1 1780
Capra_hircus ACC1 1817
Danio_rerio ACC1 1858
Sparus_aurata ACC1 1827
Lates_calcarifer ACC1 1791
Oncorhynchus_mykiss ACC1 1797
Larimichthys_crocea ACC1 1880
Consensus


Homo_sapiens ACC1 1877
Mus_musculus ACC1 1839
Bos_taurus ACC1 1840
Capra_hircus ACC1 1877
Danio_rerio ACC1 1918
Sparus_aurata ACC1 1887
Lates_calcarifer ACC1 1851
Oncorhynchus_mykiss ACC1 1857
Larimichthys_crocea ACC1 1940
Consensus
Homo_sapiens ACC1 1937
Mus_musculus ACC1 1899
Bos_taurus ACC1 1900
Capra_hircus ACC1 1937
Danio_rerio ACC1 1978
Sparus_aurata ACC1 1947
Lates_calcarifer ACC1 1911
Oncorhynchus_mykiss ACC1 1917
Larimichthys_crocea ACC1 2000
Consensus
Homo_sapiens ACC1 1997
Mus_musculus ACC1 1959
Bos_taurus ACC1 1960
Capra_hircus ACC1 1997
Danio_rerio ACC1 2038
Sparus_aurata ACC1 2007
Lates_calcarifer ACC1 1971
Oncorhynchus_mykiss ACC1 1977
Larimichthys_crocea ACC1 2060
Consensus
Homo_sapiens ACC1 2057
Mus_musculus ACC1 2019
Bos_taurus ACC1 2020
Capra_hircus ACC1 2057
Danio_rerio ACC1 2098
Sparus_aurata ACC1 2067
Lates_calcarifer ACC1 2031
Oncorhynchus_mykiss ACC1 2037
Larimichthys_crocea ACC1 2120
Consensus
Homo_sapiens ACC1 2117
Mus_musculus ACC1 2079
Bos_taurus ACC1 2080
Capra_hircus ACC1 2117
Danio_rerio ACC1 2158
Sparus_aurata ACC1 2127
Lates_calcarifer ACC1 2091
Oncorhynchus_mykiss ACC1 2097
Larimichthys_crocea ACC1 2180
Consensus
Homo_sapiens ACC1 2177
Mus_musculus ACC1 2139
Bos_taurus ACC1 2140
Capra_hircus ACC1 2177
Danio_rerio ACC1 2218
Sparus_aurata ACC1 2187
Lates_calcarifer ACC1 2151
Oncorhynchus_mykiss ACC1 2157
Larimichthys_crocea ACC1 2240
Consensus
Homo_sapiens ACC1 2237
Mus_musculus ACC1 2199
Bos_taurus ACC1 2200
Capra_hircus ACC1 2237
Danio_rerio ACC1 2278
Sparus_aurata ACC1 2247
Lates_calcarifer ACC1 2211
Oncorhynchus_mykiss ACC1 2217
Larimichthys_crocea ACC1 2300
Consensus
Homo_sapiens ACC1 2297
Mus_musculus ACC1 2259
Bos_taurus ACC1 2260
Capra_hircus ACC1 2297
Danio_rerio ACC1 2338
Sparus_aurata ACC1 2307
Lates_calcarifer ACC1 2271
Oncorhynchus_mykiss ACC1 2277
Larimichthys_crocea ACC1 2360
Consensus

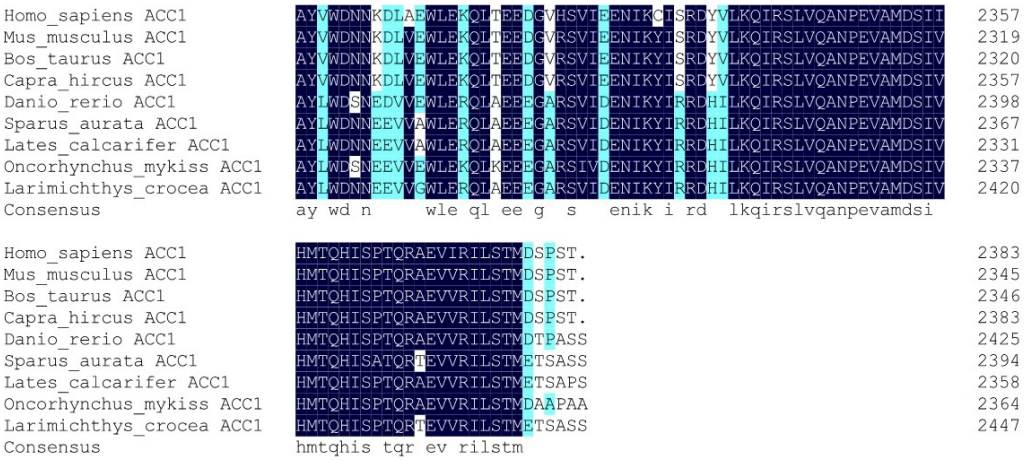
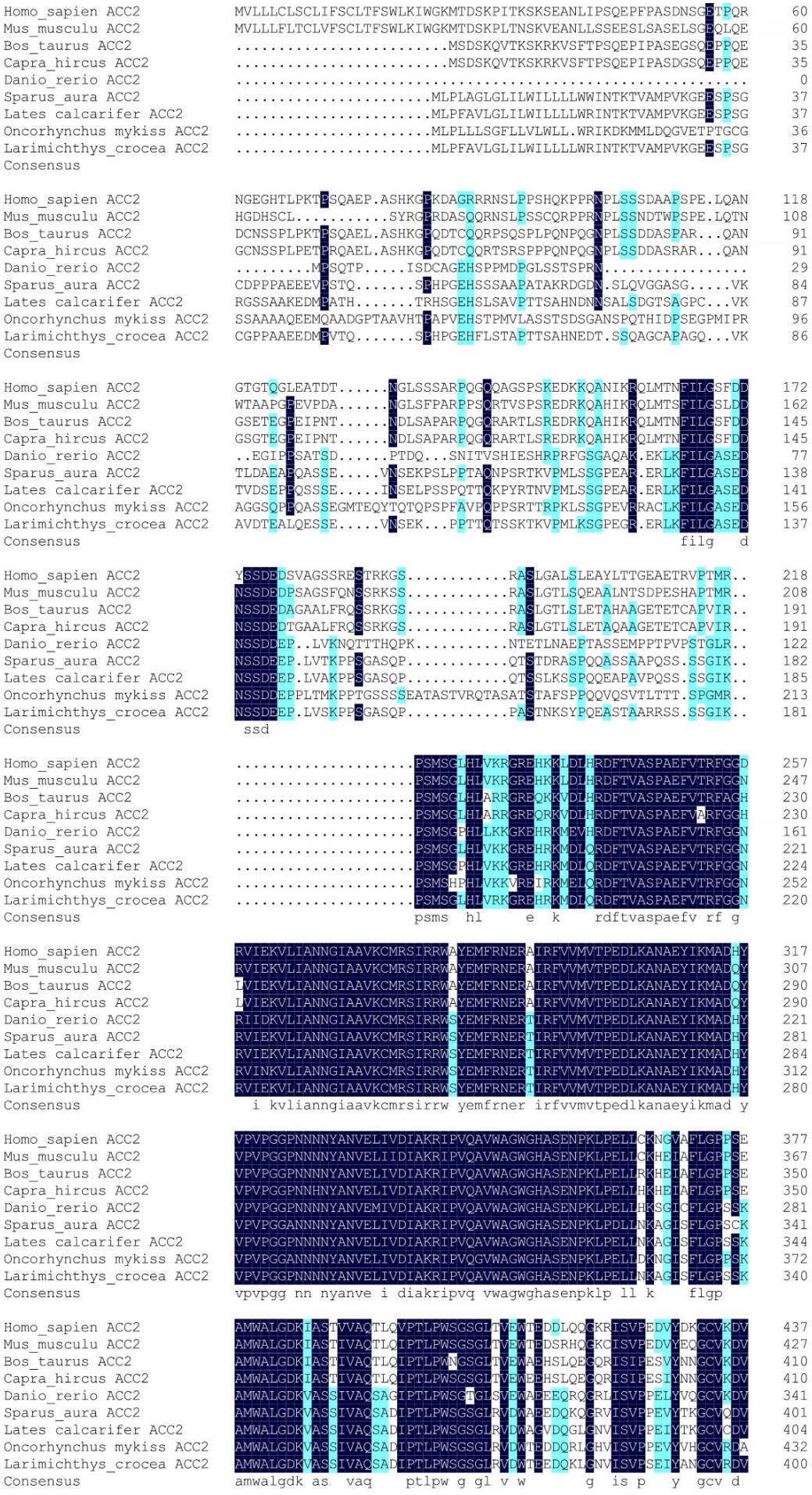
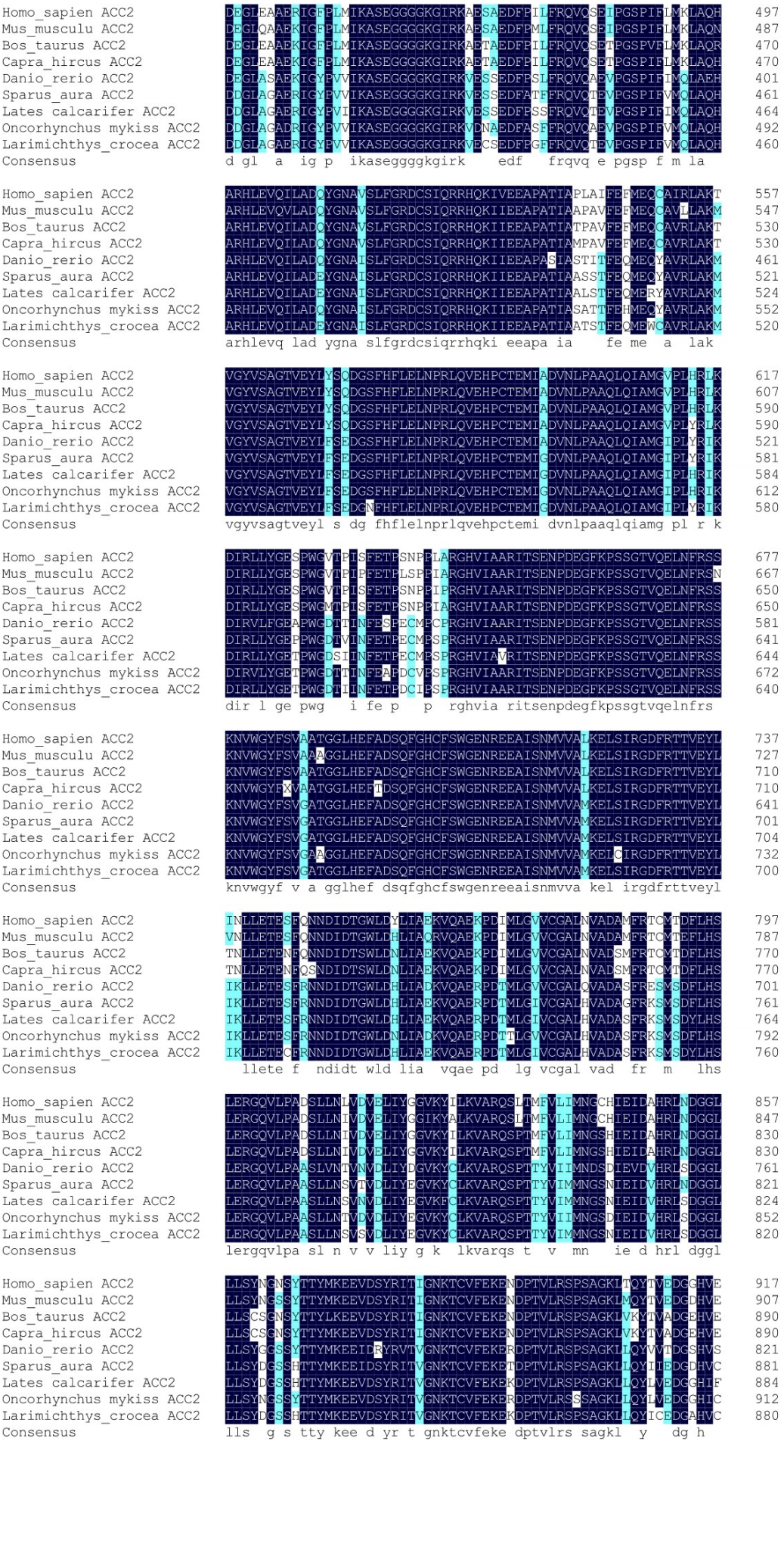
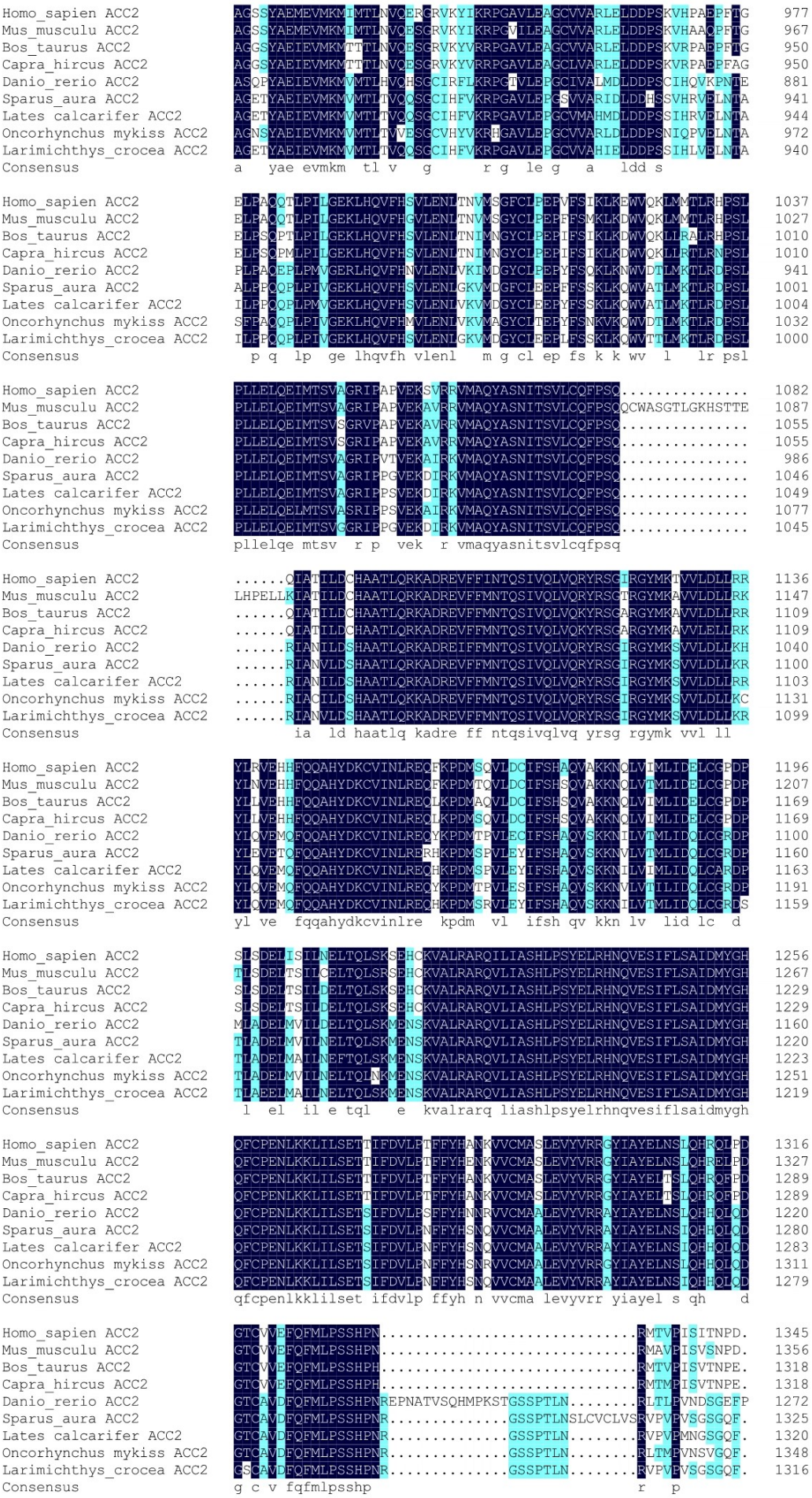
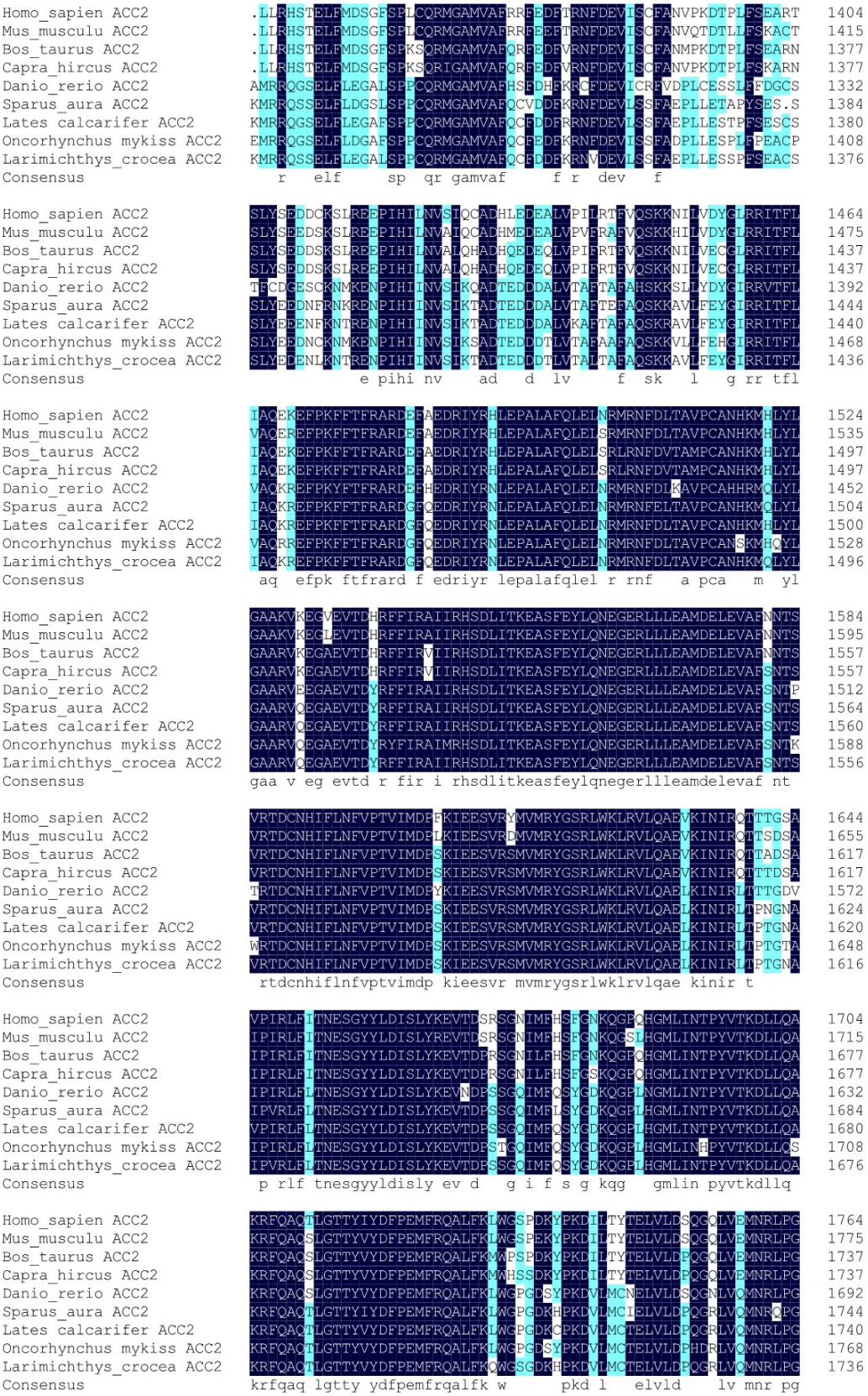


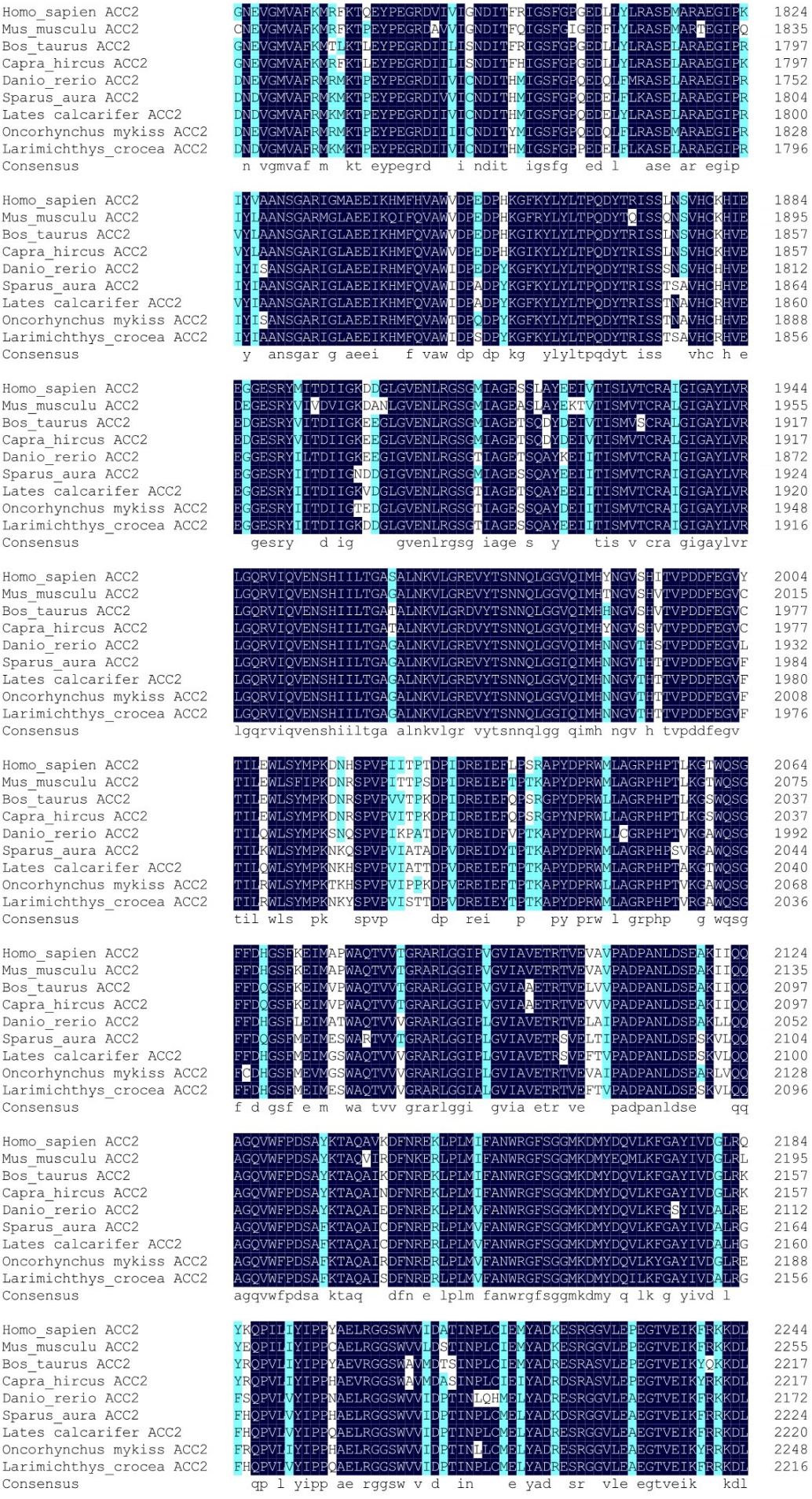
Figure S3 Multiple sequence alignment of the deduced AA sequences of large yellow croaker ACC1 with other fish species or mammals. Sequences comparison was performed using DNAMAN, and the identity/similarity shading is based on a 75% identity threshold. Identical residues are shown in dark blue shading and similar residues are shown in wathet blue shading. The identity shading is based on 89% identity threshold.


Homo_sapien ACC2
Mus_musculu ACC2
Bos_taurus ACC2
Capra_hircus ACC2
Danio_rerio ACC2
Sparus_aura ACC2
Lates calcarifer ACC2
Oncorhynchus mykiss ACC2
Larimichthys_crocea ACC2
Consensus


Homo_sapien ACC2 497
Mus_musculu ACC2 487
Bos_taurus ACC2 470
Capra_hircus ACC2 470
Danio_rerio ACC2 401
Sparus_aura ACC2 461
Lates calcarifer ACC2 464
Oncorhynchus mykiss ACC2 492
Larimichthys_crocea ACC2 460
Consensus
Homo_sapien ACC2 557
Mus_musculu ACC2 547
Bos_taurus ACC2 530
Capra_hircus ACC2 530
Danio_rerio ACC2 461
Sparus_aura ACC2 521
Lates calcarifer ACC2 524
Oncorhynchus mykiss ACC2 552
Larimichthys_crocea ACC2 520
Consensus
Homo_sapien ACC2 617
Mus_musculu ACC2 607
Bos_taurus ACC2 590
Capra_hircus ACC2 590
Danio_rerio ACC2 521
Sparus_aura ACC2 581
Lates calcarifer ACC2 584
Oncorhynchus mykiss ACC2 612
Larimichthys_crocea ACC2 580
Consensus
Homo_sapien ACC2 677
Mus_musculu ACC2 667
Bos_taurus ACC2 650
Capra_hircus ACC2 650
Danio_rerio ACC2 581
Sparus_aura ACC2 641
Lates calcarifer ACC2 644
Oncorhynchus mykiss ACC2 672
Larimichthys_crocea ACC2 640
Consensus
Homo_sapien ACC2 737
Mus_musculu ACC2 727
Bos_taurus ACC2 710
Capra_hircus ACC2 710
Danio_rerio ACC2 641
Sparus_aura ACC2 701
Lates calcarifer ACC2 704
Oncorhynchus mykiss ACC2 732
Larimichthys_crocea ACC2 700
Consensus
Homo_sapien ACC2 797
Mus_musculu ACC2 787
Bos_taurus ACC2 770
Capra_hircus ACC2 770
Danio_rerio ACC2 701
Sparus_aura ACC2 761
Lates calcarifer ACC2 764
Oncorhynchus mykiss ACC2 792
Larimichthys_crocea ACC2 760
Consensus
Homo_sapien ACC2 857
Mus_musculu ACC2 847
Bos_taurus ACC2 830
Capra_hircus ACC2 830
Danio_rerio ACC2 761
Sparus_aura ACC2 821
Lates calcarifer ACC2 824
Oncorhynchus mykiss ACC2 852
Larimichthys_crocea ACC2 820
Consensus
Homo_sapien ACC2 917
Mus_musculu ACC2 907
Bos_taurus ACC2 890
Capra_hircus ACC2 890
Danio_rerio ACC2 821
Sparus_aura ACC2 881
Lates calcarifer ACC2 884
Oncorhynchus mykiss ACC2 912
Larimichthys_crocea ACC2 880
Consensus


Homo_sapien ACC2
Mus_musculu ACC2
Bos_taurus ACC2
Capra_hircus ACC2
Danio_rerio ACC2
Sparus_aura ACC2
Lates calcarifer ACC2
Oncorhynchus mykiss ACC2
Larimichthys_crocea ACC2
Consensus


Homo_sapien ACC2 1404
Mus_musculu ACC2 1415
Bos_taurus ACC2 1377
Capra_hircus ACC2 1377
Danio_rerio ACC2 1332
Sparus_aura ACC2 1384
Lates calcarifer ACC2 1380
Oncorhynchus mykiss ACC2 1408
Larimichthys_crocea ACC2 1376
Consensus
Homo_sapien ACC2 1464
Mus_musculu ACC2 1475
Bos_taurus ACC2 1437
Capra_hircus ACC2 1437
Danio_rerio ACC2 1392
Sparus_aura ACC2 1444
Lates calcarifer ACC2 1440
Oncorhynchus mykiss ACC2 1468
Larimichthys_crocea ACC2 1436
Consensus
Homo_sapien ACC2 1524
Mus_musculu ACC2 1535
Bos_taurus ACC2 1497
Capra_hircus ACC2 1497
Danio_rerio ACC2 1452
Sparus_aura ACC2 1504
Lates calcarifer ACC2 1500
Oncorhynchus mykiss ACC2 1528
Larimichthys_crocea ACC2 1496
Consensus
Homo_sapien ACC2 1584
Mus_musculu ACC2 1595
Bos_taurus ACC2 1557
Capra_hircus ACC2 1557
Danio_rerio ACC2 1512
Sparus_aura ACC2 1564
Lates calcarifer ACC2 1560
Oncorhynchus mykiss ACC2 1588
Larimichthys_crocea ACC2 1556
Consensus
Homo_sapien ACC2 1644
Mus_musculu ACC2 1655
Bos_taurus ACC2 1617
Capra_hircus ACC2 1617
Danio_rerio ACC2 1572
Sparus_aura ACC2 1624
Lates calcarifer ACC2 1620
Oncorhynchus mykiss ACC2 1648
Larimichthys_crocea ACC2 1616
Consensus
Homo_sapien ACC2 1704
Mus_musculu ACC2 1715
Bos_taurus ACC2 1677
Capra_hircus ACC2 1677
Danio_rerio ACC2 1632
Sparus_aura ACC2 1684
Lates calcarifer ACC2 1680
Oncorhynchus mykiss ACC2 1708
Larimichthys_crocea ACC2 1676
Consensus
Homo_sapien ACC2 1764
Mus_musculu ACC2 1775
Bos_taurus ACC2 1737
Capra_hircus ACC2 1737
Danio_rerio ACC2 1692
Sparus_aura ACC2 1744
Lates calcarifer ACC2 1740
Oncorhynchus mykiss ACC2 1768
Larimichthys_crocea ACC2 1736
Consensus


Homo_sapien ACC2 1824
Mus_musculu ACC2 1835
Bos_taurus ACC2 1797
Capra_hircus ACC2 1797
Danio_rerio ACC2 1752
Sparus_aura ACC2 1804
Lates calcarifer ACC2 1800
Oncorhynchus mykiss ACC2 1828
Larimichthys_crocea ACC2 1796
Consensus
Homo_sapien ACC2 1884
Mus_musculu ACC2 1895
Bos_taurus ACC2 1857
Capra_hircus ACC2 1857
Danio_rerio ACC2 1812
Sparus_aura ACC2 1864
Lates calcarifer ACC2 1860
Oncorhynchus mykiss ACC2 1888
Larimichthys_crocea ACC2 1856
Consensus
Homo_sapien ACC2 1944
Mus_musculu ACC2 1955
Bos_taurus ACC2 1917
Capra_hircus ACC2 1917
Danio_rerio ACC2 1872
Sparus_aura ACC2 1924
Lates calcarifer ACC2 1920
Oncorhynchus mykiss ACC2 1948
Larimichthys_crocea ACC2 1916
Consensus
Homo_sapien ACC2 2004
Mus_musculu ACC2 2015
Bos_taurus ACC2 1977
Capra_hircus ACC2 1977
Danio_rerio ACC2 1932
Sparus_aura ACC2 1984
Lates calcarifer ACC2 1980
Oncorhynchus mykiss ACC2 2008
Larimichthys_crocea ACC2 1976
Consensus
Homo_sapien ACC2 2064
Mus_musculu ACC2 2075
Bos_taurus ACC2 2037
Capra_hircus ACC2 2037
Danio_rerio ACC2 1992
Sparus_aura ACC2 2044
Lates calcarifer ACC2 2040
Oncorhynchus mykiss ACC2 2068
Larimichthys_crocea ACC2 2036
Consensus
Homo_sapien ACC2 2124
Mus_musculu ACC2 2135
Bos_taurus ACC2 2097
Capra_hircus ACC2 2097
Danio_rerio ACC2 2052
Sparus_aura ACC2 2104
Lates calcarifer ACC2 2100
Oncorhynchus mykiss ACC2 2128
Larimichthys_crocea ACC2 2096
Consensus
Homo_sapien ACC2 2184
Mus_musculu ACC2 2195
Bos_taurus ACC2 2157
Capra_hircus ACC2 2157
Danio_rerio ACC2 2112
Sparus_aura ACC2 2164
Lates calcarifer ACC2 2160
Oncorhynchus mykiss ACC2 2188
Larimichthys_crocea ACC2 2156
Consensus
Homo_sapien ACC2 2244
Mus_musculu ACC2 2255
Bos_taurus ACC2 2217
Capra_hircus ACC2 2217
Danio_rerio ACC2 2172
Sparus_aura ACC2 2224
Lates calcarifer ACC2 2220
Oncorhynchus mykiss ACC2 2248
Larimichthys_crocea ACC2 2216
Consensus

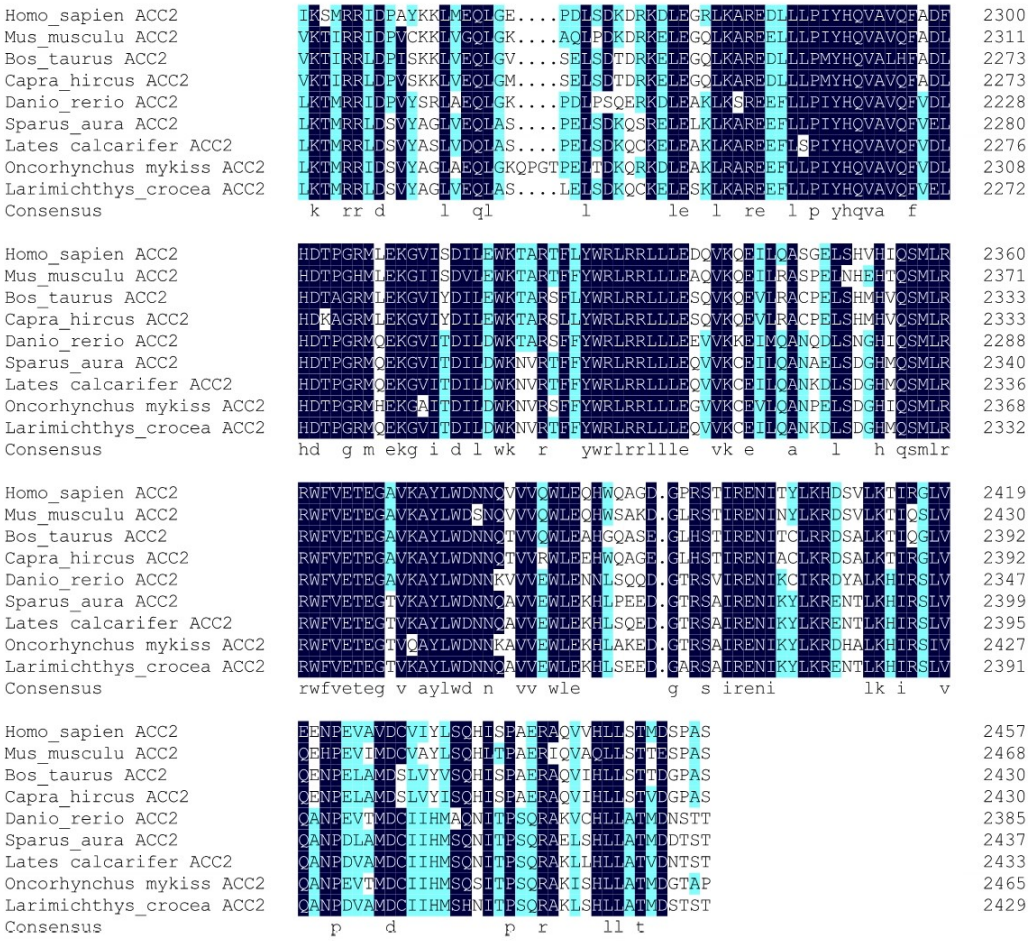


Figure S4 Multiple sequence alignment of the deduced AA sequences of large yellow croaker ACC2 with other fish species or mammals. Sequences comparison was performed using DNAMAN, and the identity/similarity shading is based on a 75% identity threshold. Identical residues are shown in dark blue shading and similar residues are shown in wathet blue shading. The identity shading is based on 81% identity threshold.