

## 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
<i>acc1</i> -F	GACTTGGC GGAATACCTACTGG	qPCR
<i>acc1</i> -R	GCTTGCTGGATGATCTTTGCTT	qPCR
<i>acc2</i> -F	AAAGAATCCCTGTGCAGGCTGTC	qPCR
<i>acc2</i> -R	TCCTCCTCGGTCCAATCCACTC	qPCR
<i>fas</i> -F	CAGCCACAGTGAGGTCATCC	qPCR
<i>fas</i> -R	TGAGGACATTGAGCCAGACAC	qPCR
<i>scd</i> -F	AAAGGACGCAAGCTGGAACT	qPCR
<i>scd</i> -R	CTGGGACGAAGTACGACACC	qPCR
<i>elovl6</i> -F	TCAACGAGGACGAAGCCATACGA	qPCR
<i>elovl6</i> -R	CCCAGTGCGGACAGCACC AAATA	qPCR
<i>dgat2</i> -F	TTCGGTGCTTTCTGCAACTTCG	qPCR
<i>dgat2</i> -R	AAGGATGGGGAAGCGGAAGT	qPCR
<i>cpt1</i> -F	GCTGAGCCTGGTGAAGATGTTC	qPCR
<i>cpt1</i> -R	TCCATTTGGTTGAATTGTTTACTGTCC	qPCR
<i>acads</i> -F	ACGAGTGGGTGCTGAATGG	qPCR
<i>acads</i> -R	TGGATGAGGCTCTGATGCCCAACTT	qPCR
<i>ehhadh</i> -F	CCGTGGAGGTCCCATGTTCT	qPCR
<i>ehhadh</i> -R	GGCTGCCACTGGCCACGAGCCTCCT	qPCR
<i>acat1</i> -F	CGTTGCACCCATTGATTTCC	qPCR
<i>acat1</i> -R	GCCTCGTTGATCTCCACAT	qPCR
<i>acat2</i> -F	CCTGACAGACGCCTTCCAT	qPCR
<i>acat2</i> -R	CCTTCACCTCCACTGAACCTTGTCT	qPCR
<i>cd36</i> -F	GAGCATGATGGAAAATGGTTCAAAG	qPCR
<i>cd36</i> -R	CTCCAGAAACTCCCTTTCACCTTAG	qPCR
<i>mtp</i> -F	CTTGAGTCGCTGATTGCTGC	qPCR
<i>mtp</i> -R	TGAGGTCGCTGTAACCCTTG	qPCR
<i>apob100</i> -F	AGAGTGTTGTCCAGGATAAAGATGC	qPCR
<i>apob100</i> -R	CAGGGCTCAGGGTCTCAGTC	qPCR
<i>fatp1</i> -F	CAACCAGCAGGACCCATTACG	qPCR
<i>fatp1</i> -R	CATCCATCACCAGCACATCACC	qPCR
<i>fabp3</i> -F	CCAAACCCACCACTATCATCTCAG	qPCR
<i>fabp3</i> -R	GCACCATCTTTCCCTCCTCTATTG	qPCR
<i>ogt</i> -F	ACATGGGTCTGCCTGGCTCTC	qPCR

<i>ogt</i> -R	ATGCCTGTAGTGTGACCGTTG	qPCR
<i>oga</i> -F	ACAGCCGACAGGTGCCTCAG	qPCR
<i>oga</i> -R	GCTGCTGGAACACCGTCGTAAC	qPCR
<i>camkk2</i> -F	TCACAGAGTACGAGCCCAGTAGAC	qPCR
<i>camkk2</i> -R	AGCAGGTCGCAGGAAGGAGTC	qPCR
<i>lkb1</i> -F	AAGAAGATCGGGATCAGGGGC	qPCR
<i>lkb1</i> -R	TGAGGGGTTGGATGAAGAGGA	qPCR
<i><math>\beta</math>-actin</i> -F	GACCTGACAGACTACCTCATG	qPCR
<i><math>\beta</math>-actin</i> -R	AGTTGAAGGTGGTCTCGTGGA	qPCR

ATGTTTCCCTGGCTCAGCTTTCGGCGGTGTTTGGCGTCAGTGTCCGGCTGTTTTCTGGTCCCGCAAGCAGCTAACGTCGATAGTATTCCGACGCTGTTCTGTTGCTGCCACCTATGGCA  
M F P P W L T F A A C A 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  
CAGCAGGACGGTGCCCGCCGCGCTAAGAAGAACCCGCGCTTCGCGCGTTGCATCTCTCATTTATCGTGGCTCTGTGTCCGAGGAGAACTCGGAAGATGAAATCCAAGGGAAGCTGAC  
Q Q D G A 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  
GTTTCAGCTGGAGGAAAAGGAGAATCGGTCTTGTGCGCGTCTCCGCTAGCTCAGACAGACACTGTGAAATGGGATTTGATCACCATTGATGCCCCCGTCAGAAATCTAAGCGCGAGCATG  
V Q L E E K E 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  
TCAGGCTGTCAGCTGGTGAGCAAGCAGAGCATCGCGCGCATCGATCTCCAGAGAGACTTCACCGTGGCTTCTCCTGTAATTTGTCAACCGCTTCGGTGGCAATAAAGTTATTCGAG  
S G I 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 T G G K N K V I E  
AAGGTGCTTATCGCCAACAATGGCATTGACAGCAGTCAAATGCATCGCGTCCATCGCGCGTGGGCTATGAGATGTTCCGCAATGAAAGGGCGATCCGCTTCGTGTTATGGTGACCCCA  
K V L L I A N N G I A A V V K C M S I R R W A Y E M F R N R E A I R F V V M V T P  
GAGGACCTGAAAGCCAACCGGAGTACATTAATAGGCAGATCATTAACGTGCTGTCCAGGAGGACTAAACAACAACACTACGCCAACGTGGAGCTCATTTAGACATTCGTAAACCG  
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 T A K I  
ATACCTGTTTCAGGCGGTGTGGCGCGGTGGGTTCATGCTTCAGAGAACCCGAACTTCAGAGCTGCTTCACAAGCAGCGCAITGCTTTCATGGTCCCCCAAGTCAGGCTATGTGGCT  
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 M W A  
CTGGGAGACAAGATGCTTCTGTTATGTGGCTCAGACAGCTGGCATTCGCCACCTGCCATGAGCGCGGACAGGCTTTCGGTAGAATGGACAGAGAACCAACAAAGAAAGATTC  
L G D K I A S S I V I 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  
AACGTCCCTACTGACGTGTATGAGCTTGCTGCATCCAGGATGTGAGGATGGCTTAAAGTCGACAGAGAATCGGCTACCTGTGATGGTGAAGGCTCTGAGGGAGGGCGGCGAAAA  
N V P T L A D 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  
GGCATCCGTAAGTGAAGTCGATGATTTCCCAACCTCTTCGACAGGTGTCAGGAGAGTTCAGGCTCGCTGTTTTGTCATGCGACTAGCCAACACGCGCGCTTCGAGT  
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  
GTCAGATCTTGGCTGATCAGTATGGCAATGCCATTTCCTGTTTGGTCGTGACTGCTCCGTGACGAGCGGCATCAGAAAAATATAGAGGAAGCCCCGCTACCATCGCGACCTCGAT  
V Q I L A D Q Y G N A I S L F R G D C S V Q R R H Q K T I E E A P A T I A T S T S  
GTGTTTGAGGATGGAAGGTTGTCAGTGAAGCTGGCTAAGATGGTGGGATACGTACGCGAGGTACAGTGGAGTACCTCTATAGCCAGGACGGCAGCTTCTACTCTGGAGCTCAAC  
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  
CCCGCTGTCAGGTGGAGCACCCCTGCACCGAGATGGTGGCTGAGCTCAACTTGCTGCTGCCAACTCGCAGTTGCTATGGGTATTCCTCTTCAAAGGATCAAAGACATCAGGATGCTT  
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 C I A M G I P L Q R I K D I R T M L  
TATGAGTTCAGCGCTGGGAGACTACCCATTGACTTCGAGGCTGTGCGACGCCCTGCCACGGGACACGTACTTGCAGCAGTATACCCAGTGAAAAITCCTGATGAGGGTTTC  
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  
AAGCCAAAGCTCCGGAACAGTGAAGATTTGAATTTCCGACGAAATAAAAGCTGTGGGCTACTTCAGCGTGGCAGCGGCTGGAGGCTCCACAGATTTCGCTGACTCCGATTGTGACAC  
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 A S D Q F G H  
TGTTTCTCTTGGGAGAAATCGTGAAGAAGCCATTCCAACATGGTGGTCTCGAAGGAGCTGTCTATCAGAGGAGACTTCAGGACCAAGCTGAATAACCTCATTAAGCTGCTGGAG  
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 F  
ACGAAAGCTTTTCAGCACACAGCATCGACACTGGCTGGCTGGACAGGCTGATCTCAGAGAAGATCAGCGCGAGGCGCCCTGCACCATGCTGGGAATCGTGAGTGGGGCTTTCACGTG  
T E S F G 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  
GCAGATGTCAACTTCAGGAACAGTGTCTCCAACCTTCTGCTGCAITTTCTAGAAAGGGGCGAGGTGCTCGCGGACACACACTACTCAACACTGTGGATGTGGAGCTGATCTATGAAGCACT  
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 I N T V D V E L I Y E G T  
AAGTACGTCTGACGCTGACGGCGCAGTCTCCCAACTCTACGTGGTATCATGAACAACCTCTCCGCTGAGGTGGAGCTCCATCGGCTCAGCGATGGAGGCTCTTTGCTGTCTTATGAC  
K Y V L T V T R Q S P N S Y V V I M N N S A E V D V H R L S D D G G L L S Y D  
GGAAGCAGCTACACTACATACATGAAAGAAAGGAGTGGACAGGTATCGCATCACAATGGGAACAAGACTTGTGTTTCGAAAGGGAGAACGACCTTGGCTGCTACAGTCTTCTCTCAGCG  
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  
GGAACACTTCCAGTACACAGTCGAGGATGGCGGACATGTGTTTTCGCCAGTGTACGCTGAAATAGAGGTGATGAAGTGTAAATGACCTTACGGCTGCAGAGTCTGGATGATT  
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 L T A E A S K I  
CACTATGTGAAGAGAGCTGGAGCGGCACTGGATCGGCTGTGTGATTGCCAAGCTACAGTGGATGCCAACGCGGATGCAACAGGCGAGAGCTGCACACAGGGGCTTGCTTCTATC  
H Y V K R A G A A L D P G C V I A K L Q L D P S R V Q Q A E L H T G A L P S I  
CAGGCAAGTACGCTTGAGAGGAGAGAAGCTGCACAGACTTTCCACAAACACACTGGATCATCTGCTTCACATAATGACAGGCTACTGCTCTCTGAGGCTTTCTTCAGTGTCAAACTGAA  
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 I K  
GAGTGGGTGGAAGGTTGATGAAACCATCGGTGATCCCTCTTGCCACTGTTGGAACCTCAAGACATCATGACCAGTGTGTCTGGTCATCCCTCCTGCGTGGAGAAGGCTATCAAG  
E W V E R L M K T M R D P S L P L L E Q D I M T S V S G R I P P A V E A K A I K  
AAAGAATGGCTCAGTATGCGAGCAACTACCTTCGCTGCTGCACTTTCCAGCCAGCAGATCGCGAACATCCTGGACGCCATCTGCTACTCTCTAAACAAGAGCTCAGAGAGGAGAA  
K E M A Q Y A S N I T S V L C Q F P S Q I A N I L D S H A A T L N K K S E R E  
GTCTCTTTTATGAACACAAAGCATTGTTTCAGCTGGTACAGAAATATCGAGTGGCATCCGAGGTACATGAAGGCCGTGGTGATGGACCTGCTGAGACAGTACCTGAAAGTAGAGATC  
V F F M N T Q S I V Q L V Q K Y R S A A G I R G H M K A V V M D T L R Q Y L K V E I  
CAGTTTTCAGAATGGACACTACGACAAATGTGTGTGCGACTACGTGAGGAAACAAAGCGACATGTCCAATGTGCTCAACTATATCTTCCCAGTCAAGTACCAAGAAAGAACCTG  
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  
CTGGTTACCATGCTGATTGACCAGCTCTGTGGCGCGATCCACGCTGACAGATGAAGTGTGCCATCTTGACTGAACTACCCAGCTCAGACAAAACGACCAACGCGAAGGTGGCACTG  
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  
CGTGCCCGACAGGTGTGATCGCTTCTCATCTCCCTCATACGAGCTACGACACACAGGTTGGAGTCCATCTTCTCTGCCATCGATATGTACGGGACCAGTCTGCGATTGAAAAC  
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  
CTGCAGAAATGATCCTTTCGGAACATCCATCTTTGATGTTCTGCCAACTTCTTACCACAGCAATCAGGTAGTCAGGATGGCTGCCCTTGAGGTGACGTTGCGAGAGCATACATT  
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  
GCGTATGAGCTGAACAGCGTTTCAGCATCGGCGAGCTGAGGACCAACAGTGTATAGTAGTTCAGTTTCATGCTTCCCACCTCGCACCCAAACAGAGGGAACATCCCCACTCTAAACAGG  
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  
ATGTCATTCTCGTCTAACCTAAACCACTACGGCATGGTGCATGTAGCCAGCGTCAGTGACGTTCTGCTTGACACATCTTTTACCACCTTGTACGGCATGGGAGCCATGGTCGTTTC  
M S F S S L N H Y G M V H V A S S S D V L L D T S T F P P C Q R M G M V A F  
CGCTCCTTCAGGAGTTTCAAGAAGCACTCGCAGAGCGTTGTAGCTGTCTTCCGACTCTCTCCCCCAAGTCCAACCTTCCAGAGGGAGGTAATCTGCTGCTGATGGCGAAGAGGAC  
R S F Q E F T R N I A D V L S C F S D S P P S P T F P E G G N P V L Y G E E

AACAAGAGTGTCCAGGACGACCTATCCATATCTTGAATGTGGCTATAAAGACCGACAGCGACATCGACGATGACGGCCTTGACGCCAATTTAGAGAGTTCAGTTCAGTCAAAGAAATCG  
N K S V Q D E P I H I L N V A I K T D S D I D D D G L A A N F R E F T Q S K K S  
CTGCTGTTTGAACACGGAATCCGTAGGCTGACTTTCCTTGTGGCTCAGAAGGATTTCAAGGAAGCAAGTCAACTGTGAGGTGGACCAAGGTTTCATAGAGAATTCACAAATTTTTCACA  
L L F E H G I R R L T F L V A Q K D F R K Q V N C E V D Q R F H R E F P K F F T  
TTCCGCGCCAGAGATAAGTTCGAAGAGGACAGGATCTATCGTCATCTAGAGCGGCGCTCGCTTTCCAGTTGGAGCTCAACCGCATGCGCAATTTGGCTTAAGTCCATCCCGTGGCGC  
F R A R D K F E E D R I Y R H L E P A L A F Q L E L N R M R N F A L T A I P C A  
AACCACAAGATGCACCTGTACCTGGGTGCAGCCCGGTGGAGGTGGGCACAGAGTTACGGACTACCGTTTCTTTGTGCGAGCCATTATCCGCCACTCTGATCTGGTACCAAGGAGGGCC  
N H K M H L Y L G A A R V E V G T E V T D Y R F F V R A I I R H S D L V T K E A  
TCTTTTGAATACCTTCACAATGAGGCAGAGCGTCTGCTGCTGGAAGCCATGGATGAGCTGGAGGTGGCTTTCAACAACACAAGTGTACGGACCGACTGCAATCACATCTTCTCAATTTT  
S F E Y L H N E A E R L L L E A M D E L E V A F N N T T V R T D C N H I F L N F  
GTCCCCACAGTCATTATGGACCCATCAAAGATCGAGGAGTCCGTGCGCTCCATGGTGTGCTTACGGCAGCCGTCTGTGGAAGCTGCGCGTCTGACGGCCGAGCTGAAATCAACATC  
V P T V I M D P S K I E E S V R S M V M R Y G S R L W K L R V L Q A E L K I N I  
CGCCTGACTCCAACAGGAAGCAAAATCCCCATCCGCTCTTCTCACTAATGAATCGGGCTACTATCTAGACATCAGCTTGTACAAGGAGGTCACTGATTTCCCGAACGGGACAGGTGGG  
R L T P T G K Q I P I R L F L T N E S G Y Y L D I S L Y K E V T D S R T G Q V G  
CCCAAGACCGACAGATCATGTTCAAGCATATGGAGACAAGCAGGGTCCGTGGCATGGCATGCTCATCAACACCCCGTATGTACCAAGGATCTGCTGCAITCGAAGCGCTTCCAGGCA  
L H D R H I M D P S K I E E S V R S M V M R Y G S R L W K L R V L Q A E L K I N I  
CAGTCTCTGGGCACCACTACGTCTACGACTTCCAGAAATGTTACAGACAGGCTCTAAAAAGCTGTGGCACTCCAGCCAGGCGCTTGGCCACTTACCCAGATGCCCGCTCCCTTCTGAG  
Q S L G T T Y V Y D F P E M F R Q A L K K L W H S S Q A F A H I L P R C P L P S E  
CTGCTCACATTCACAGAGCTGGTTCGACGCCCAAGGTCAAGTGGTGCAGATGAACCGACTGCCAGGGGGCAACGAGATTGGTATGGTGGCATGGCGGATGACCTTGGCACGCCAGAA  
L L T F E N L K G S A Q I A G E S S L A Y E E I I T M N L V T C R A I G I G A Y  
TATCCGGCGGGACGCGAGATCATCGTCATAAGTAATGACATCAGCACAAGATTGGCTCGTTCGGGCCCCAGGAGGAGTGTCTGCTGCGAGCTTCAGAGATGGCCCGGAGAGCGGC  
Y P A G R E I I V I S N D I T H K I G S F G P Q E D V L F L R A S E M A R E S G  
ATCCCGGGATCTACATCGACGCCAACAGCGGCGCCCGCATCGGGCTGGCAGGAAATCAGACATGTTCCAGTGGCCTGGCAAGATCCAGCTGACCCCTATAAGGGCTCAAGTAT  
I P R I Y I A A N S G A R I G L A E S S L A Y E E I I T M N L V T C R A I G I G A Y  
CTCTACCTCACACCTCAGGATTACAAGAAAGTTTACGGCTGAATCCGTGCATTTGTAACATGTGGAAGATGAGGGAGAATCCAGGTACAAGATCACGACATCATAGGAAAGACGAA  
L Y L T P Q D Y K K V S A L N S V H C E H V E D E G E S R Y K I T D I I G K D E  
GGGCTGGTGTGGAGAATCTGAAGGGTCTGGAATGATTGCGGAGAATCCTCTGCGTTACGAGGAGATCATCACCATGAACCTGGTCACATGCAGAGCCATAGGAATCGGGGCTAT  
G I Q I M H N N G S F M E I M Q P W A Q S V V V G R A R L G G I P T G V V A V E T  
TTGGTGAGGCTCGGGCAGAGAACCATTCAAGTGGAACAATCTCATATTATCTTACTGGAGCTGGAGCACTCAACAAGGTGCTGGGTAGAGAAGTCTACATCAACAACAGGCTGGT  
L V R L G Q R T I Q V D N S H I I L T G A G A L N K V L G R E V Y T S N N Q L G  
GGAATCCAATCATGCACAACAGCGGTGACCCACTGCACCGTTTGTGAGACTTTGAGGGAGTCTTACACTTCTGCAAGTGGCTGTCTACATGCCATGTGCAAAATCTAGTCCGGTG  
Q N G F F D H G S F M E I M Q P W A Q S V V V G R A R L G G I P T G V V A V E T  
CCTATCGTCCATCCAAGGATCCCATAGATCGGCGGTGGAGTTTGTGCTACAAAGGCTCCCTACGACCTCGCTGGATGTTAGCGGGCGTCCAGCCAGACTCCAAAGGGTTCCTGG  
P I V H S K D P I D R P V E F V P T K A P Y D P R W M L A G R P S Q T P K G S W  
CAGAATGGCTTCTTGAACATGGTTCCTCATGGAATCATGCAGCCTTGGGCTCAGAGTGTGGTGGTAGGCAGAGCCAGACTTGGCGGAATACCTACTGGAGTGGTGGCGTGAAACC  
K I D S R G G V L E P E G T V E I K F R R K D L V K T M R R V D P V Y M G L A E K  
AGGTGAGTGGAGTCTCCATCCCCCGATCGGCCAATTTGGACTCAGAAGCAAGATCATCCAGCAAGCAGGACAGGTGTGGTTCAGATTTCTGTTTCAAAACAGCTCAGGCTATT  
R S V E L S I P A D P A N L D S E A K I I Q Q A G Q V W F P D S A F K T A Q A I  
AAGGACCTGAACAGGGAGGGCTACCTCTCATAGTGTGTTGCAACTGGAGGGGCTTTTCTGGAGGAATGAAAGATATGTACGACCAGGTGTGAAGTTCGGGGCTACATCGTGGAGGG  
D T P G R M Q E K G V I T D I L E W Q T S R Q F F Y W R L R R L L L E E T V K R  
TTGAGGAGTACCAGCAGCGGTGCTGTTTATATCCCCCAGGCTGAGCTGAGGGGAGGATCCTGGGTAGTTATAGATCCAACCATCAACCCCTCGTCACATGGAGATGTACGCTGAC  
L R E Y Q Q P V L V Y I P P Q A E L R G G S W V V I D P T I N P R H M E M Y A D  
AAGGACCGCGAGGTGAGTGTGAGCCCGAGGCAACAGTGGAGATCAAGTTTAGGAGGAAGGACCTGGTGAAGACCATGAGAAGAGTATAGTCTGCTACATGGGCTTGGCTGAAAA  
K I D S R G G V L E P E G T V E I K F R R K D L V K T M R R V D P V Y M G L A E K  
TTGGGAACCCAGAGCTGAGTCCCCCGATCGTAAAGAGCTGGAGACCAAGCTGAAGGAGCTGAGGAGTTTCTCTGCCCATCTACCACAGGTGTGTGTGAGTGTGCTGACCTCCAC  
L G T P E L S P P D R K E L E T K L K E R E E F L L P I Y H Q V A V Q F A D L H  
GACACACCGTGCATGCAAGAGAAGGGTGAATAACGACATCCTTGAATGGCAACGTCGCCGTCAGTCTTTTACTGGCGTCTGCGGCGCTGCTGCTGGAGAGACGGTGAAGAGA  
D T P G R M Q E K G V I T D I L E W Q T S R Q F F Y W R L R R L L L E E T V K R  
AAGATCCAAGCGGCCAACAGCGAGCTGACAGACGGTCAGTCCAAGCGATGCTGCGCGCTGGTTCGTAGAGGCCGAGGGTGGGTCAAGGCCTATCTGTGGGATAACAATGAAGAGGTG  
K I Q A A N S E L T D G Q V Q A M L R R W F V E A E G A V K A Y L W D N N E E V  
GTGGGATGGCTGGAGGCACTAGCTGAAGAAGAGGGCGGAGGTCCGTCATCGACGAGAATCAAGTACATCCGCCGAGATCACATCTCAAGCAGATACGCAAGCTTGTCCAAGCC  
V G W L E R Q L A E E E G A R S V I D E N I K Y I R R D H I L K Q I R S L V Q A  
AATCCAGAGGTGCGCATGGATTCCATTGTGCATGACCCAGCACATCTCGCCACGACAGAACCGAGGTGGTACGTATCTGTCCACCATGGAGAGCTGCGCTCTCTTAG  
N P E V A M D S I V H M T Q H I S P T Q R T E V V R I L S T M E T S A S S \*

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



ATGCTCCCTTTTGCAGTTTGGGATTAATCCTATGGATTTCATTGCTACTGTGGAGGATTATCACCAAGGCAGTAGCGATGCCCGTGAAGGAGAGGAATCTCCGCTGGCTGTGGTCCG  
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  
CCTGCAGCTGAGGAGGACATGCCTGTTACACAATCCCCTCATCCAGGCGAACATTCCCTGTCAACAGCCCCCTACTACCTCAGCGCACAAATGAGGATAACAGTTCTCAGGCCGGCTGTGCC  
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  
CCTGCAGGTCAAGTTAAAGCAGTGGACAGAGGCTCTGCAGGAGTCCCTGTAGAGTAAATTCAGAAAACCAACACACAGACATCTTCCAAAACCAAGTGCCAATGGTCAAAATCA  
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  
GGGCTGAGGGAGGGAACGCTCAAGTTCAATCTCGGAGCATCTGAGGATAACTCTTCAGACGAGGAGCCTCTGGTTAGCAAACTCCAAGTGGCGCATCTCAGCCACCGGCTCCACA  
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  
AGCAAACTCTTATCCCAAGGAGGATCCACAGCAGCAGCATCCAGCTCCAGCATCAAGCCTAGCGATGTCTGGTCTTCACTTGGTGAGAAAAGGACGGACACAGAAAGATGGAT  
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  
CTCCAGAGGGGACTTCACTGTGGCTCTCCTGCTGAGTTTGTCACTAGATTGGTGGAACCGTGTTCATTGAAAAGTGCTGATAGCTAACAAATGGCATTGCTCGGTAAAATGTATGCGC  
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  
TCTATCCGTGCTGCTTACGAAATGTTTCGCAACGAGAGGACCATCCGTTTTTGGTGCATGGTAACCCCTGAAGACCTGAAGCAATGCAGAAATACATTAATGGCAGACCAATTAT  
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  
GTTCTCTAGCCGGTGGGCCAACAAATAACAACCTACGCCAGCTAGAGCTGATAGTAGACATTGTAAAGAAATCCCTGTGCAGGCTGTCTGGCTGCATGGGTCATGGCTCTGAAAAT  
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  
CCCAAACTCTTATCCCAAGGAGGATCCACAGCAGCAGCATCCAGCTCCAGCATCAAGCCTAGCGATGTCTGGTCTTCACTTGGTGAGATAAAGTGGCTTCTTATCTATCGGATGCTGACATT  
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  
CCCACTACCTTGGAGCGGATCAGGTCTAAGAGTGGATTGGACGAGGAGGACAAAACCTGGGCAACGTAATCAGTGTCTCCTCAGAGATCTATGCAACAGGCTGTGTTCGGGATGTT  
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  
GATGATGGCTGGCAGGCTGAGAGATTGGTTATCCGTTGTTATCAAGGCTCTGAGGCTGGAGGTTGAAAAGGCAATCCGTAAGTAGAATGCTCTGAGGATTTCCAGGTTCTTT  
D D G L A G A G E R I G Y P 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  
AGACAGGTTACAGACAGAGGTACCGGTTCCCTATCTTCGTCATGCAGCTAGCTCAGCAGCCAGACACCTTGAGGTTAGATACTGGCTGATGAGTATGGAATGCCATCTCTCTGTT  
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  
GGACGAGACTGCTCCATCCAGAGGAGCACCAGAAGATTATAGAGGAGCTCCGGCCACCATTGCTGTACTCAACATTGAGCAAAATGGAATGGTGCTGTGCGCATGGCCAAAGATG  
G R D C S I Q R R H Q K I T 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  
GTTGGCTACGTGAGCGCAGGTACCGTGAATATCTCTCTCTGAAGACGGAATTTCCATTTCCTGGAGCTGAATCCTCGCTGCAGGTGGAACATCCCTGTACAGAGATGATCGGAGAT  
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  
GTAACCTGCCAGCTGCCAGCTTCAGATTGCGATGGGCATCCCCCTTATAGAATTAAGGACATCCGTTACTTATGAGAGACTCCGTGGGTGATACCATCATTAACTTTGAAACT  
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  
CCAGACTGCATACCAAGTCCAAGAGGCGACGTCATAGCTGTGCGATCACCAGTGAGAACCCTGATGAGGGGTTTAAGCCAGTTCGGGCACAGTGCAAGGAGCTGAACCTCCGACGACGT  
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  
AAAAACGTGTGGGTTATTTCAGCGTGGGAGCAACTGGTGGCTGTCATGAATTTGCCGACTCCAGTTTGGACACTGTTTCTCCTGGGAGAGAAATCGTGAAGAAGCAATTCGAACATG  
K N V M G S K V S W G A T G L H E F A D S Q F G H C F S W G E N R E M S D S Y  
GTGCTGGCTATGAAGGAGCTGCCATCAGAGTGACTTCAGGACCACGGTTGAGTACCTCATCAAGTTACTGGAGACAGAATGCTTCAGAAACAATGACATCGACACGGGGTGGCTGGAT  
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  
CATCTGATTGCAGAGAAAGTGACGGCGGAGAGACAGATACGATGCTGGGATTGTTTGTGGGCTTTGTCATGTTGCTGATGCGAGCTTCGAAAGAGCATGTCTGATTACCTGCATCA  
H L I A E K V S I A E R P D T M L K I G T I E E A P A T S T F E Q M E W C A V R L A K M  
CTTGAAGAGGGCAAGTACTGCTCGGGCAGTCTCCTCAACTCTGTACGGTGGACCTAATATATGAAGGAGTCAAGTACTGCCTCAAGGTGGCTCGCCAATCTCCGACAACTTACGTC  
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  
ATCATGATGAACGGCTCCAACATCGAGATAGATGTCCACAGGTTGAGCGACGGTGGCCTTCTGCTGCTTATGACGGCAGCAGCCACACCACCTACATGAAGGAGGAAGTGGACAGCTAC  
I M M N G S I E I D V H R L S D G G L T S Y D G S S H T T Y M K E E V D S Y  
CGCATCACTGTTGGCAACAAGACGTGTGTATTGAGAAGGAGAAGGATCCACGGTGTGAGGTTCGCCCTCTGCTGGCAACTGCTTCAGTACATCTGTGAGGATGGAGCTCACGTTTGT  
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  
GCAGGAGAGACCTACGGCGAGATCGAGGTTCATGAAGATGGTATGACATTGACTGTGACGAGCTGTGGTTGATTCAATTTGTCAAGAGACCTGGAGCTGTTCTGGAGCCGGGCTGTGTG  
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  
GTGGCACAATAGAGCTAGATACCCGAGCAGTATACATCTGGTGGAGCTCAACAGGCCATACTACCACACAGCAACCCCTGCCCATTTGTTGGGGAAGCTTCACCAAGGTGTTTCAC  
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  
AGTGTGCTGGAACCTTGGGTAAGTTCATGGATGTTACTGCTTGGAGAGCCGTTATTACGACGCAAGCTCAAAACAGTGGGTGACTACCTGATGAAGACTTTAAGGGACCCCTCACTA  
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  
CCGCTGCTGGAACCTTCAGGAGATCATGACGAGTGTGGGGGTGGATTCTCCCGGTGTAGAGAAAGATATCCGTAAGTCAATGGCTCAGTATGGCAGCAACATCACCTCTGTCTCTGC  
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  
CAGTTCCTAGCCAAAGGATTGCAACGTTTATGACAGCATGCAGCAACCTGCAGAGGAAGCTGATCGCGAGGTGTTCTTCATGAACACTCAGAGTATTGTTCACTGGTGCAGAGG  
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  
TACCGCAGTGGAACTCCGTGGTTATATGAAGTCTGTGGTTCTCGATCTGCTGAAGCATACCTGCAAGTAGAGATGCAGTTTCAGCAAGCTCACTATGACAAGTGTGTCACTCAACTGAGA  
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  
GAGCAGCACAACCTGACATGAGTCGCGTGTGGAGTACATCTTCTCTCATGCCAAGTCTCCAAGAAGAACATCCTTGTCACAATGCTCATAGACCAGCTGTGTGGAAGAGATTCAACG  
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  
CTAGCAGAAGAGCTATGGCCATTTTGAACGAGCTCACGAGCTTAGCAAGTAGGAACTCAAAGTTGCTTGAAGCCAGACAGGTTTGTATGCTCCCATTTACCATCATACGAA  
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  
CTGAGGCACAACAGGTGGAGTCCATCTTCCTGTACGCTATGACGCGACCAAGTTCTGTCCGAAACTTGAAGAACTTATCCTCTGAAACCTCCATTTTGAAGCTTTTG  
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  
CCCAATTTCTTATCACTCAATCAAGTTGCTGATGGCTGCCCTGAGGTTAGTACGACAGCTTACATCGCCTATGAGCTGAATAGACTCCAGCATCACCAGCTGCAGAGTGCAGAGT  
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  
TCGTGCGCTGATGACTTCCAGTTCATGCTGCCCTCATCATCCGAACAGAGGAGCAGCCCTACTCTGAACAGGGTTCGCCGTGCCAGTCAGTGATCAGCGCAGTTTAAATGAGGCGA  
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

CAGAGCAGTGAGCTTCTCTGGAGGGAGCCTTGCTCCACCTGCCAGCGCATGGGCGCCATGGTGGCTTCCAGTGTTTGATGACTTCAAAAGGAATGTCGATGAAGTTCTCCAGC  
 Q S S E L F L E G A L S P P C Q R M G A M V A F Q C F D D F K R N V D E V L S S  
 TTTCAGAACCACTCTTAGAGAGCTCTCCGTTCTCAGAGGCTGTTCCAGTCTCTATGAGGATGAGAACCTCAAGAATACGAGGGAGAACCCAATCCACATCATTAAATGTGCCATAAAA  
 F A E P L L E S S P F S E A C S S L Y E D E N L K N T R E N P I H I I N V S I K  
 ACAGCCGACACTGAAGATGACGATGCGTTGGTCACAGCCCTCACTGCCTTTGCCAGTCAAAGAAAGCTGCTCTTTGAGTACGGAAATAGGAGAAATCACATTTTGATTGCACAGAAG  
 T A D T E D D D A L V T A L T A F A Q S K K A V L F E Y G I R R I T F L I A Q K  
 AGAGAATTTCCCAAGTTCTTACCTTCAGAGCTAGAGATGGGTTCAGGAGGATCGCATTTATCGTAATCTGGAGCCAGCTTTAGCGTTCCAGCTGGAGCTCAACCGCATGAGGAACCTT  
 R E F P K F F T F R A R D G F Q E D R I Y R N L E P A L A F Q L E L N R M R N F  
 GACCTGACGGCGTTCCCTGCGCAACCAAGATGCAACTCTACCTCGGTGCTGCTGCTGTCAGGAGGGGGCAGAAGTACGGACTACCGATTCTTCATACGAGCTATTATCGCCAC  
 D L T A V P C A N H K M Q L Y L G A A R V Q E G A E V T D Y R F F I R A I I R H  
 TCAGATCTCATTACAAAGAGCGCTCCTTTGAATACCTTCAAAATGAAGGAGAAGCTCCTCTTGGAGGCCATGGATGAGTTGGAGGTGGCTTACAGTAACACCGCGTCCGACAGAC  
 S D L I T K E A S F E Y L Q N E G E R L L L E A M D E L E V A F S N T S V R T D  
 TGCAACCATATCTTCTCAACTTCGTCCCACTGTCATCATGGACCCCTCTAAATAGAGGAGTCTGTTCGCTCCATGGTGATGCGCTATGCGAGCGCTCTTGGAAAGCTGAGGGTCTTG  
 C N H I F L N F V P T V I M D P S K I E E S V R S M V M R Y G S R L W K L R V L  
 CAGGTCAGCTGAGCTAACATACGCTGACACCACTGGGAATGCCATTCCTGTCGCGCTTTCTCACTAATGAATCTGGCTATTACTGTGACATTAGCCTGTATGACAGGAGGTCAC  
 Q A E L K I N I R L T P T G N A I P V R L F L T N E S G Y Y L D I S L Y K E V T  
 GACCCAAGTTCAGGACAGATCATGTTCCAGTCTGACGGAGATAAGCAGGGTCTCTGATGGATGCTGATCAACACTCCATATGTACCAAGACCTCTGCGAGCGCAAGCGTTTCCAG  
 D P S S G Q I M F Q S Y G D K Q G P L H G M L I N T P Y V T K D L L Q A K R F Q  
 GCTCAAACTGAGCTGAGCTACATACGCTACGACTTCCTGAGATGTTCAGAGAGTGTTCGCGCTGTTTAAAGCGTGGGTTTCGGGGACAAACCCCTAAAGAGCTGTGATGACAGGTCG  
 A Q T L G T T Y V Y D F P E M F R Q A L F K Q W G S G D K H P K D V L M C T E L  
 GTTCTGACCTCAAGGTGAGTTGTGACAGATGAATCGCTGCGTGGAGCAATGATGTGGAAATGGTTGCCTTCAGGATGAAGATGAAGACTCCAGAGTACCCAGAGGCGAGAGATATC  
 V L D P Q G R L V Q M N R L P G D N D V G M V A F R M K M K T P E Y P E G R D I  
 ATGCTTATCTAGCAAGATCACTACATGATCGGATCATTGGCCCTCCAGAGGATGAGTGTTCCTTAAGGCGTCAGAGTTGGCTCGGGCTAAAGGCGATCCGCGCATTCAGTCGCA  
 I V I C N D I T H M I G S F G P P E D E L F L K A S E L A R A E G I P R I Y I A  
 GCCAACAGTGGCGCGCATCGGCTCGCTGAAGAGATCAACACATGTTCCAGTGGCTGGATTGACCCCTCTGACCCCTACAAGGGTTCAAGTATCTTACCTGACACCGCAGGAC  
 A N S G A R I G L A E E I K H M F Q V A W I D P S D P Y K G F K Y L Y L T P Q D  
 TACACAGGTATCAGTCCACGGGTGTTCACTGTCGTCACGTAGAGGAAGGTGGAGGATCATCATCATCATCGGGAAGGACATGGCTCTTGGGGTTGAGAACCTTACATCGCA  
 Y T R I S S T G A V H C R H V E E G G E S R Y I I T D I I G K D D G L G V E N L  
 CGAGTCTTGGACCATCGCTGGAGATCCTCTCAGGCTACGAGGAGATTATTACAATTAGTATGGTGACGTGTCGCGCTATTGGAATCGGAGCTATCTGGTGGCTTGGGACAGAGA  
 R G S G T I A G E S S Q A Y E E I I T I S M V T C R A I G I G A Y L V R L G Q R  
 GTGATACAAGTGAAGTCTCATATTATCTGACTGGGGCAGGCGCTCTGAAGAGGTTTGGGCAGAGAGGTCTATACCTCCAACAACGAGCTGGGAGGGATCCAGATCATCACAAC  
 V I Q V E N S H I I L T G A G A L N K V L G R E V Y T S N N Q L G G I Q I M H N  
 AATGGAGTCACACACCACTGTCCAGATGACTTTGAGGCGTCTTACCATCTCCGGTGGCTCTCTATATGCCAAGAACAAATCTCCCGCTGCCTGTTATATCAACTACAGAT  
 N G V T H T T V P D D F E G V F T I L R W L S Y M P K N K Y S P V P V I S T T D  
 CCAGTCAGATCCAGCAACCTGGATTGAGATCTAAGTCTGTCAGCAGGCTGGCCAGGTGTGGTTTCCAGATTGAGCCTTAAACTGCTCAGGCCATTAGTACTCAACCGGAGCGGT  
 P A D P A N L D S E S K V L Q Q A G Q V W F P D S A F K T A Q I S D F N R E R  
 CTGCTCTCATGGTGTTCGCAACTGGAGGGGCTTCTCTGGTGAATGAAGATATGTACGATCAGATATGAAGTTTGGGGCTACATCGTGAGCGCTCGCTGGTGGTTTTCATCAGCGG  
 L P L M V F A N W R G F S G G M K D M Y D Q I L K F G A Y I V D A L R G F H Q P  
 GTGCTGGTGTATCCACCTCAGCTGAGCTAAGAGGAGCTCATGGGTGGTGATAGCCCAACCATCAACCCGTTGTGTATGGAGCTCATGACAGACAGGAGAGCAGAGGTGGTGTG  
 V L V Y I P P Q A E L R G G S W V V I D P T I N P L C M E L Y A D R E S R G G V  
 CTGGAGGCTGAGGTACAGTGGAGATCAAATCAGGAGGAAGGACCTGCTGAAGACAATGAGAAGACTTGATTGAGTTTATGCTGGCCTGGTTGAGCAGCTTGCTTCCCTAGAGCTGTCT  
 L E A E G T V E I K F R R K D L L K T M R R L D S V Y A G L V E Q L A S L E L S  
 GACAAACAGTGAAGAGCTGGAGTCAAAGCTCAAAGCGAGGGAGGAATTCCTGTGGCCATCTACCAACAGGTGGCAGTGCAGTTTGTAGAGCTCCATGACACCCAGGAAGGATGCAG  
 D K Q C K E L E S K L K A R E E F L L P I Y H Q V A V Q F V E L H D T P G R M Q  
 GAGAAGGGTGCATCACTGATATTTGGATTGGAAAAATGTGCGGACCTTCTTCTACTGGCGTCTTCGTCGCTCCTTTTGAACAAGTGGTGAAGTGTGAGATTCTGCAGGCCCAACAAG  
 E K G V I T D I L D W K N V R T F F Y W R L R R L L L E Q V V K C E I L Q A N K  
 GACCTCAGTGACGGGCACATGTCAGTCCATGCTGCGACGCTGGTTTGTGAAACAGAAGAACAGTCAAGGCTTACCTGTGGGATAATAACCAAGCAGTGTGAGTGGCTTGAGAAGCAT  
 D L S D G H M Q S M L R R W F V E T E G T V K A Y L W D N N Q A V V E W L E K H  
 TTGTCTGAAGAGGATGGCGCTCGATCTCGCATCCGAGAGAACATCAAGTACCTGAAAGGGGAAACACTTTGAAACACATCCGAGCGCTGGTGCAGGCCAACCTGACGTAGCCATGGAC  
 L S E E D G A R S A I R E N I K Y L K R E N T L K H I R S L V Q A N P D V A M D  
 TGCATCATCCACATGAGCCATAATATCACTCCATCGCAGAGGGCCAAACTCTCACATTTACTCGCAACTATGGACAGCACCAGCACCAGTTAA  
 C I I H M S H N I T P S Q R A K L S H L L A T M D S T S T S \*

**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	..MWWSTLMSILRARSFWKWISTQTVRIIRAVRAHFGGIMDEPS...PLACFLELNQHSR	55
Mus_musculus ACC1	.....MDEPS...PLAKTLELNQHSR	18
Bos_taurus ACC1	.....MDEPS...SLAKFLELNQHSR	18
Capra_hircus ACC1	..MWWSTLMSILRASSFWKWISAQTIIRIRALRARFEGTMDDEPS...SLAKFLELNQHSR	55
Danio_rerio ACC1	.....MAEQDS...TEKKLPAAVAALHSH	20
Sparus_aurata ACC1	MFPWLTFFVACLTAVLGLFFWSRKQLS.IVFAACSCRPA MAQQDG...AAKKS PAAVAALHSH	57
Lates_calcarifer ACC1	.....MAQQDG.AAAKKN PAAVAALHSH	21
Oncorhynchus_mykiss ACC1	.....MAQQDAPANKAAAPNLAVLHSH	22
Larimichthys_crocea ACC1	MFPWLTFAACLASVLGLFFWSRKQLTSIVFAACSCRPA MAQQDGAAAAKKN PAAVAALHSH	60
Consensus	hs	
Homo_sapiens ACC1	FIIGSVSPDNSEDEISNLVKIDILEE..KEGSLSPAS..VGSDDLSDIGISSLQDGLALH.	111
Mus_musculus ACC1	FIIGSVSPDNSEDEISNLVKIDILEE..KEGSLSPAS..VSSDTLSDLIGISGLQDGLAFH.	73
Bos_taurus ACC1	FIIGSVSPDNSEDEISNLVKIDILEE..KEGSLSPAS..VSSDTLSDLIGISSLQDGLALH.	74
Capra_hircus ACC1	FIIGSVSPDNSEDEISNLVKIDILEE..KEGSLSPAS..VSSDTLSDLIGISSLQDGLALH.	111
Danio_rerio ACC1	FIVGSVSPDNSEDEITAGKLDLQLEBN..PRSLSPSS..VSSDSTYEMGFDSLGLPHN..	74
Sparus_aurata ACC1	FIVGSVSPDNSEDEITQGPDPQLPEKE..TRSLSPSS..GSSDSTFEMGFHDIDGPIHN..	112
Lates_calcarifer ACC1	FIVGSVSPDNSEDEITQGLDVLQLEPEKE..TRSLSPSS..GSSDSTYEMGFHDIDGPMHN..	76
Oncorhynchus_mykiss ACC1	FIIGSVSPDNSEDEITLGLPKDITLGLLEEKERSISPTSLSSSENSSYEMGFHDIDGPHMSCS	82
Larimichthys_crocea ACC1	FIVGSVSPDNSEDEITQGPDPQLPEKE..NRSLSPSS..ASSDSTCEMGFDHIDGPVQN..	115
Consensus	f gsvse nsede l s sp s g	
Homo_sapiens ACC1	IRSSMSGLHLVKQGRDRKKIDISQDFTVASPAEFVTRFGGNKVIEKVLIANNGIAAVKCM	171
Mus_musculus ACC1	MRSSMSGLHLVKQGRDRKKIDISQDFTVASPAEFVTRFGGNKVIEKVLIANNGIAAVKCM	133
Bos_taurus ACC1	MRSSMSGLHLVKQGRDRKKIDISQDFTVASPAEFVTRFGGNKVIEKVLIANNGIAAVKCM	134
Capra_hircus ACC1	MRSSMSGLHLVKQGRDRKKIDISQDFTVASPAEFVTRFGGNKVIEKVLIANNGIAAVKCM	171
Danio_rerio ACC1	MRPSMSGLHLVKQGRDRRRIDLQDFTVASPAEFVTRFGGNKVIEKVLIANNGIAAVKCM	134
Sparus_aurata ACC1	IRPSMSGLHLVKQGRDRRRIDLQDFTVASPAEFVTRFGGNKVIEKVLIANNGIAAVKCM	172
Lates_calcarifer ACC1	IRPSMSGLHLVKQGRDRRRIDLQDFTVASPAEFVTRFGGNKVIEKVLIANNGIAAVKCM	136
Oncorhynchus_mykiss ACC1	HRPSMSGLHLVKQGRDRRRIDLQDFTVASPAEFVTRFGGNKVIEKVLIANNGIAAVKCM	142
Larimichthys_crocea ACC1	IRPSMSGLHLVKQGRDRRRIDLQDFTVASPAEFVTRFGGNKVIEKVLIANNGIAAVKCM	175
Consensus	r smsglhlvkqgrdr id qrdftvaspaefvtrfggnkviekvlianngiaavkcm	
Homo_sapiens ACC1	RSIRRWSEYEMFRNERAIRFVVMVTPEDLKANA EYIKMADHYVPVPGGPNNNNYANVELIL	231
Mus_musculus ACC1	RSIRRWSEYEMFRNERAIRFVVMVTPEDLKANA EYIKMADHYVPVPGGPNNNNYANVELIL	193
Bos_taurus ACC1	RSIRRWSEYEMFRNERAIRFVVMVTPEDLKANA EYIKMADHYVPVPGGPNNNNYANVELIL	194
Capra_hircus ACC1	RSIRRWSEYEMFRNERAIRFVVMVTPEDLKANA EYIKMADHYVPVPGGPNNNNYANVELIL	231
Danio_rerio ACC1	RSIRRWSEYEMFRNERAIRFVVMVTPEDLKANA EYIKMADHYVPVPGGPNNNNYANVELIL	194
Sparus_aurata ACC1	RSIRRWSEYEMFRNERAIRFVVMVTPEDLKANA EYIKMADHYVPVPGGPNNNNYANVELIL	232
Lates_calcarifer ACC1	RSIRRWSEYEMFRNERAIRFVVMVTPEDLKANA EYIKMADHYVPVPGGPNNNNYANVELIL	196
Oncorhynchus_mykiss ACC1	RSIRRWSEYEMFRNERAIRFVVMVTPEDLKANA EYIKMADHYVPVPGGPNNNNYANVELIL	202
Larimichthys_crocea ACC1	RSIRRWSEYEMFRNERAIRFVVMVTPEDLKANA EYIKMADHYVPVPGGPNNNNYANVELIL	235
Consensus	rsirrw yemfrnerairfvmvtpedlkanaeyikmadhyvpvpgg nnnnyanvelil	
Homo_sapiens ACC1	DIAKRIPVQAVWAGWGHAENPKLPPELLKNGIAFMGPPSQAMWALGDKIASSIVAQTAG	291
Mus_musculus ACC1	DIAKRIPVQAVWAGWGHAENPKLPPELLKNGIAFMGPPSQAMWALGDKIASSIVAQTAG	253
Bos_taurus ACC1	DIAKRIPVQAVWAGWGHAENPKLPPELLKNGIAFMGPPSQAMWALGDKIASSIVAQTAG	254
Capra_hircus ACC1	DIARRIPVQAVWAGWGHAENPKLPPELLKNGIAFMGPPSQAMWALGDKIASSIVAQTAG	291
Danio_rerio ACC1	DIAKRIPVQAVWAGWGHAENPKLPPELLKNGIAFMGPPSQAMWALGDKIASSIVAQTAG	254
Sparus_aurata ACC1	DIAKRIPVQAVWAGWGHAENPKLPPELLKNGIAFMGPPSQAMWALGDKIASSIVAQTAG	292
Lates_calcarifer ACC1	DIAKRIPVQAVWAGWGHAENPKLPPELLKNGIAFMGPPSQAMWALGDKIASSIVAQTAG	256
Oncorhynchus_mykiss ACC1	DIAKRIPVQAVWAGWGHAENPKLPPELLKNGIAFMGPPSQAMWALGDKIASSIVAQTAG	262
Larimichthys_crocea ACC1	DIAKRIPVQAVWAGWGHAENPKLPPELLKNGIAFMGPPSQAMWALGDKIASSIVAQTAG	295
Consensus	dia ripqvawagwghasenpklpell k giafmgppsqamw lgdkiasivaqtag	
Homo_sapiens ACC1	IPTLPWSCSGLRVVDQENDFSKRILNVFQELIYERKGYVKDVEDGLKAAEBVGYPVMIKASE	351
Mus_musculus ACC1	IPTLPWSCSGLRVVDQENDFSKRILNVFQELIYERKGYVKDVEDGLKAAEBVGYPVMIKASE	313
Bos_taurus ACC1	IPTLPWSCSGLRVVDQENDFSKRILNVFQELIYERKGYVKDVEDGLKAAEBVGYPVMIKASE	314
Capra_hircus ACC1	IPTLPWSCSGLRVVDQENDFSKRILNVFQELIYERKGYVKDVEDGLKAAEBVGYPVMIKASE	351
Danio_rerio ACC1	IPTLPWSCGTGLVETENDQRRKILNVFQELIYERKGYVKDVEDGLKAAEBVGYPVMIKASE	314
Sparus_aurata ACC1	IPTLPWSCGTGLVETENDQRRKILNVFQELIYERKGYVKDVEDGLKAAEBVGYPVMIKASE	352
Lates_calcarifer ACC1	IPTLPWSCGTGLVETENDQRRKILNVFQELIYERKGYVKDVEDGLKAAEBVGYPVMIKASE	316
Oncorhynchus_mykiss ACC1	IPTLPWSCAGLTVDTESDQRRKILNVFQELIYERKGYVKDVEDGLKAAEBVGYPVMIKASE	322
Larimichthys_crocea ACC1	IPTLPWSCGTGLVETENDQRRKILNVFQELIYERKGYVKDVEDGLKAAEBVGYPVMIKASE	355
Consensus	iptlpwsg l v w e k nvp ye g dv gl aae g p m kase	
Homo_sapiens ACC1	GGGGKGIRKVNADDFPNLFRQVQAEVPGSPIFVMRLAKQSRHLEVQILADQYGNATISLF	411
Mus_musculus ACC1	GGGGKGIRKVNADDFPNLFRQVQAEVPGSPIFVMRLAKQSRHLEVQILADQYGNATISLF	373
Bos_taurus ACC1	GGGGKGIRKVNADDFPNLFRQVQAEVPGSPIFVMRLAKQSRHLEVQILADQYGNATISLF	374
Capra_hircus ACC1	GGGGKGIRKVNADDFPNLFRQVQAEVPGSPIFVMRLAKQSRHLEVQILADQYGNATISLF	411
Danio_rerio ACC1	GGGGKGIRKVNADDFPNLFRQVQAEVPGSPIFVMRLAKQSRHLEVQILADQYGNATISLF	374
Sparus_aurata ACC1	GGGGKGIRKVNADDFPNLFRQVQAEVPGSPIFVMRLAKQSRHLEVQILADQYGNATISLF	412
Lates_calcarifer ACC1	GGGGKGIRKVNADDFPNLFRQVQAEVPGSPIFIMELAKQSRHLEVQILADQYGNATISLF	376
Oncorhynchus_mykiss ACC1	GGGGKGIRKVNADDFPNLFRQVQAEVPGSPIFVMRLAKQSRHLEVQILADQYGNATISLF	382
Larimichthys_crocea ACC1	GGGGKGIRKVNADDFPNLFRQVQAEVPGSPIFVMRLAKQSRHLEVQILADQYGNATISLF	415
Consensus	ggggkgirkvn ddpnl frqvq evpgsp f m lak rhlevq ladqygna islf	
Homo_sapiens ACC1	GRDCSVQRRHQKIEEAPATITATPAVFHMEQCAVKLAKM/GYVSAGTVEYLYSODGSFY	471
Mus_musculus ACC1	GRDCSVQRRHQKIEEAPATITATPAVFHMEQCAVKLAKM/GYVSAGTVEYLYSODGSFY	433
Bos_taurus ACC1	GRDCSVQRRHQKIEEAPATITATPAVFHMEQCAVKLAKM/GYVSAGTVEYLYSODGSFY	434
Capra_hircus ACC1	GRDCSVQRRHQKIEEAPATITATPAVFHMEQCAVKLAKM/GYVSAGTVEYLYSODGSFY	471
Danio_rerio ACC1	GRDCSVQRRHQKIEEAPATITATPAVFHMEQCAVKLAKM/GYVSAGTVEYLYSODGSFY	434
Sparus_aurata ACC1	GRDCSVQRRHQKIEEAPATITATPAVFHMEQCAVKLAKM/GYVSAGTVEYLYSODGSFY	472
Lates_calcarifer ACC1	GRDCSVQRRHQKIEEAPATITATPAVFHMEQCAVKLAKM/GYVSAGTVEYLYSODGSFY	436
Oncorhynchus_mykiss ACC1	GRDCSVQRRHQKIEEAPATITATPAVFHMEQCAVKLAKM/GYVSAGTVEYLYSODGSFY	442
Larimichthys_crocea ACC1	GRDCSVQRRHQKIEEAPATITATPAVFHMEQCAVKLAKM/GYVSAGTVEYLYSODGSFY	475
Consensus	grdcsvqrrhqkieeapa i t vfe me cavkla mvgyvsagtveylysq sfy	



Homo_sapiens ACC1	FLELNPRQLQVEHPCTEMVADVNLPAALQIAMIPIPIYRIKDIRMYGVSPWGLSPIDFED	531
Mus_musculus ACC1	FLELNPRQLQVEHPCTEMVADVNLPAALQIAMIPIPIYRIKDIRMYGVSPWGLDAPIDFEN	493
Bos_taurus ACC1	FLELNPRQLQVEHPCTEMVADVNLPAALQIAMIPIPIYRIKDIRMYGVSPWGLDAPIDFEN	494
Capra_hircus ACC1	FLELNPRQLQVEHPCTEMVADVNLPAALQIAMIPIPIYRIKDIRMYGVSPWGLDAPIDFEN	531
Danio_rerio ACC1	FLELNPRQLQVEHPCTEMVADVNLPAALQIAMIPIPIYRIKDIRVLYGMCPWGLSPIDFEDG	494
Sparus_aurata ACC1	FLELNPRQLQVEHPCTEMVADVNLPAALQIAMIPIPIYRIKDIRMLYGVCPWGLSPIDFEDG	532
Lates_calcarifer ACC1	FLELNPRQLQVEHPCTEMVADVNLPAALQIAMIPIPIYRIKDIRMLYGVCPWGLSPIDFEDG	496
Oncorhynchus_mykiss ACC1	FLELNPRQLQVEHPCTEMVADVNLPAALQIAMIPIPIYRIKDIRMYGVCPWGLSPIDFEDG	502
Larimichthys_crocea ACC1	FLELNPRQLQVEHPCTEMVADVNLPAALQIAMIPIPIYRIKDIRMLYGVCPWGLSPIDFEDG	535
Consensus	flelnprqlqvehpctemvadvnlpaalqiamgipl rikdir yg pwgd idf	
Homo_sapiens ACC1	SAHVFCPRGHVIAARITSENPDGFKPSSSGTVQELNFRSNKNVWGYFSVAAAGGLHEFAD	591
Mus_musculus ACC1	SAHVFCPRGHVIAARITSENPDGFKPSSSGTVQELNFRSNKNVWGYFSVAAAGGLHEFAD	553
Bos_taurus ACC1	SAHVFCPRGHVIAARITSENPDGFKPSSSGTVQELNFRSNKNVWGYFSVAAAGGLHEFAD	554
Capra_hircus ACC1	SAHVFCPRGHVIAARITSENPDGFKPSSSGTVQELNFRSNKNVWGYFSVAAAGGLHEFAD	591
Danio_rerio ACC1	LSTTECPRGHVIAARITSENPDGFKPSSSGTVQELNFRSNKNVWGYFSVAAAGGLHEFAD	554
Sparus_aurata ACC1	LSTAESPRGHVIAARITSENPDGFKPSSSGTVQELNFRSNKNVWGYFSVAAAGGLHEFAD	592
Lates_calcarifer ACC1	LSTAESPRGHVIAARITSENPDGFKPSSSGTVQELNFRSNKNVWGYFSVAAAGGLHEFAD	556
Oncorhynchus_mykiss ACC1	LSTAESPRGHVIAARITSENPDGFKPSSSGTVQELNFRSNKNVWGYFSVAAAGGLHEFAD	562
Larimichthys_crocea ACC1	LSTAESPRGHVIAARITSENPDGFKPSSSGTVQELNFRSNKNVWGYFSVAAAGGLHEFAD	595
Consensus	p prghviaaritsenpdgfkpsssgtvqelnfrsnknvwgyfsvaaagglhefad	
Homo_sapiens ACC1	SQFGHCFWSWGENREEAISNMVVALKELSIKIRGDFRTTVEYLIKLETESFQHNIDITGWLD	651
Mus_musculus ACC1	SQFGHCFWSWGENREEAISNMVVALKELSIKIRGDFRTTVEYLIKLETESFQHNIDITGWLD	613
Bos_taurus ACC1	SQFGHCFWSWGENREEAISNMVVALKELSIKIRGDFRTTVEYLIKLETESFQHNIDITGWLD	614
Capra_hircus ACC1	SQFGHCFWSWGENREEAISNMVVALKELSIKIRGDFRTTVEYLIKLETESFQHNIDITGWLD	651
Danio_rerio ACC1	SQFGHCFWSWGENREEAISNMVVALKELSIKIRGDFRTTVEYLIKLETESFQHNIDITGWLD	614
Sparus_aurata ACC1	SQFGHCFWSWGENREEAISNMVVALKELSIKIRGDFRTTVEYLIKLETESFQHNIDITGWLD	652
Lates_calcarifer ACC1	SQFGHCFWSWGENREEAISNMVVALKELSIKIRGDFRTTVEYLIKLETESFQHNIDITGWLD	616
Oncorhynchus_mykiss ACC1	SQFGHCFWSWGENREEAISNMVVALKELSIKIRGDFRTTVEYLIKLETESFQHNIDITGWLD	622
Larimichthys_crocea ACC1	SQFGHCFWSWGENREEAISNMVVALKELSIKIRGDFRTTVEYLIKLETESFQHNIDITGWLD	655
Consensus	sqfghcfswgenreeaisnmvvalkelsirgdftrttveylikletesfq n i tgwld	
Homo_sapiens ACC1	RLIAEKVQAEPRDTMLGVVCGALHVADVSLRNSVSNFLHSLERGQVLPAAHTLLNTVDVEL	711
Mus_musculus ACC1	RLIAEKVQAEPRDTMLGVVCGALHVADVSLRNSISNFLHSLERGQVLPAAHTLLNTVDVEL	673
Bos_taurus ACC1	RLIAEKVQAEPRDTMLGVVCGALHVADVSLRNSISNFLHSLERGQVLPAAHTLLNTVDVEL	674
Capra_hircus ACC1	RLIAEKVQAEPRDTMLGVVCGALHVADVSLRNSISNFLHSLERGQVLPAAHTLLNTVDVEL	711
Danio_rerio ACC1	RLIAEKVQAEPRDTMLGVVCGALHVADVSLRNSISNFLHSLERGQVLPAAHTLLNTVDVEL	674
Sparus_aurata ACC1	RLIAEKVQAEPRDTMLGVVCGALHVADVSLRNSVSNFLHSLERGQVLPAAHTLLNTVDVEL	712
Lates_calcarifer ACC1	RLIAEKVQAEPRDTMLGVVCGALHVADVSLRNSVSNFLHSLERGQVLPAAHTLLNTVDVEL	676
Oncorhynchus_mykiss ACC1	RLIAEKVQAEPRDTMLGVVCGALHVADVSLRNSVSNFLHSLERGQVLPAAHTLLNTVDVEL	682
Larimichthys_crocea ACC1	RLIAEKVQAEPRDTMLGVVCGALHVADVSLRNSVSNFLHSLERGQVLPAAHTLLNTVDVEL	715
Consensus	rli ek qaerpdtmlg v galhvadv slrns snflhslergqvl ahtllntvdvel	
Homo_sapiens ACC1	IYEGKYVYLVKVTQSPNSYVYVIMNCSAEVDVHRLSDGGLLLSYDGSSYTTYMKKEVDRY	771
Mus_musculus ACC1	IYEGKYVYLVKVTQSPNSYVYVIMNCSAEVDVHRLSDGGLLLSYDGSSYTTYMKKEVDRY	733
Bos_taurus ACC1	IYEGKYVYLVKVTQSPNSYVYVIMNCSAEVDVHRLSDGGLLLSYDGSSYTTYMKKEVDRY	734
Capra_hircus ACC1	IYEGKYVYLVKVTQSPNSYVYVIMNCSAEVDVHRLSDGGLLLSYDGSSYTTYMKKEVDRY	771
Danio_rerio ACC1	IYEGKYVYLVKVTQSPNSYVYVIMNCSAEVDVHRLSDGGLLLSYDGSSYTTYMKKEVDRY	734
Sparus_aurata ACC1	IYEGKYVYLVKVTQSPNSYVYVIMNCSAEVDVHRLSDGGLLLSYDGSSYTTYMKKEVDRY	772
Lates_calcarifer ACC1	IYEGKYVYLVKVTQSPNSYVYVIMNCSAEVDVHRLSDGGLLLSYDGSSYTTYMKKEVDRY	736
Oncorhynchus_mykiss ACC1	IYEGKYVYLVKVTQSPNSYVYVIMNSTAAEVDVHRLSDGGLLLSYDGSSYTTYMKKEVDRY	742
Larimichthys_crocea ACC1	IYEGKYVYLVKVTQSPNSYVYVIMNCSAEVDVHRLSDGGLLLSYDGSSYTTYMKKEVDRY	775
Consensus	iyeg ky l vtrqspnsyvvimn saevdvhrlsdgglllsydgssy t t y m k k e e v d r y	
Homo_sapiens ACC1	RITIGNKTCVFEKENDPSVLRSPSAGKLIQYIVEDGGHVFAQCQYAEIEVMKMVMTLTAV	831
Mus_musculus ACC1	RITIGNKTCVFEKENDPSVLRSPSAGKLIQYIVEDGGHVFAQCQYAEIEVMKMVMTLTAV	793
Bos_taurus ACC1	RITIGNKTCVFEKENDPSVLRSPSAGKLIQYIVEDGGHVFAQCQYAEIEVMKMVMTLTAA	794
Capra_hircus ACC1	RITIGNKTCVFEKENDPSVLRSPSAGKLIQYIVEDGGHVFAQCQYAEIEVMKMVMTLTAA	831
Danio_rerio ACC1	RITIGNKTCVFEKENDPSVLRSPSAGKLIQYIVEDGGHVFAQCQYAEIEVMKMVMTLTAS	794
Sparus_aurata ACC1	RITIGNKTCVFEKENDPSVLRSPSAGKLIQYIVEDGGHVFAQCQYAEIEVMKMVMTLTAA	832
Lates_calcarifer ACC1	RITIGNKTCVFEKENDPSVLRSPSAGKLIQYIVEDGGHVFAQCQYAEIEVMKMVMTLTAA	796
Oncorhynchus_mykiss ACC1	RITIGNKTCVFEKENDPSVLRSPSAGKLIQYIVEDGGHVFAQCQYAEIEVMKMVMTLTAL	802
Larimichthys_crocea ACC1	RITIGNKTCVFEKENDPSVLRSPSAGKLIQYIVEDGGHVFAQCQYAEIEVMKMVMTLTAA	835
Consensus	ri ignkctcvfe endps rpsagk iqy vedgghvf gqcyaievmkmvmtlta	
Homo_sapiens ACC1	ESGCIHYVKRGAALDPGCVIAKMLDNPSPKVVQQAELHTGSLERIQSTALRGEKLRHVHF	891
Mus_musculus ACC1	ESGCIHYVKRGAALDPGCVIAKMLDNPSPKVVQQAELHTGSLERIQSTALRGEKLRHVHF	853
Bos_taurus ACC1	ESGCIHYVKRGAALDPGCVIAKMLDNPSPKVVQQAELHTGSLERIQSTALRGEKLRHVHF	854
Capra_hircus ACC1	ESGCIHYVKRGAALDPGCVIAKMLDNPSPKVVQQAELHTGSLERIQSTALRGEKLRHVHF	891
Danio_rerio ACC1	ESGCIHYVKRGAALDPGCVIAKMLDNPSPKVVQQAELHTGSLERIQSTALRGEKLRHVHF	854
Sparus_aurata ACC1	ESGCIHYVKRGAALDPGCVIAKMLDNPSPKVVQQAELHTGSLERIQSTALRGEKLRHVHF	892
Lates_calcarifer ACC1	ESGCIHYVKRGAALDPGCVIAKMLDNPSPKVVQQAELHTGSLERIQSTALRGEKLRHVHF	856
Oncorhynchus_mykiss ACC1	VSGCIHYVKRGAALDPGCVIAKMLDNPSPKVVQQAELHTGSLERIQSTALRGEKLRHVHF	862
Larimichthys_crocea ACC1	ESGCIHYVKRGAALDPGCVIAKMLDNPSPKVVQQAELHTGSLERIQSTALRGEKLRHVHF	895
Consensus	sgcihyvkr ga l pgc k qld p vqqael g lp iq alrgeklhrvfh	
Homo_sapiens ACC1	YVLDNLVNMNGYCLPDPFFSSRVKDWVERLMKTLRDPSPLELQDINTSVSGRIPENV	951
Mus_musculus ACC1	YVLDNLVNMNGYCLPDPFFSSRVKDWVERLMKTLRDPSPLELQDINTSVSGRIPENV	913
Bos_taurus ACC1	YVLDNLVNMNGYCLPDPFFSSRVKDWVERLMKTLRDPSPLELQDINTSVSGRIPENV	914
Capra_hircus ACC1	YVLDNLVNMNGYCLPDPFFSSRVKDWVERLMKTLRDPSPLELQDINTSVSGRIPENV	951
Danio_rerio ACC1	STLDHLVHIMNGYCLPDPFFSAKLKEWVERLMKTLRDPSPLELQDINTSVSGRIPPAV	914
Sparus_aurata ACC1	NTLDHLVHIMNGYCLPDPFFSAKLKEWVERLMKTLRDPSPLELQDINTSVSGRIPPAV	952
Lates_calcarifer ACC1	NTLDHLVHIMNGYCLPDPFFSAKLKEWVERLMKTLRDPSPLELQDINTSVSGRIPPAV	916
Oncorhynchus_mykiss ACC1	STLDHLVHIMNGYCLPDPFFSAKLKEWVERLMKTLRDPSPLELQDINTSVSGRIPPAV	922
Larimichthys_crocea ACC1	NTLDHLVHIMNGYCLPDPFFSAKLKEWVERLMKTLRDPSPLELQDINTSVSGRIPPAV	955
Consensus	l lv m g clp pffs k wverlmkt rdp spllelq dints vsgrip v	



Homo_sapiens ACC1	EKSIKKEMAQYASNITSVLQCFPSQIQIANILDSHAATLNKKSEREVFFMNTQSIVQLVQR	1011
Mus_musculus ACC1	EKSIKKEMAQYASNITSVLQCFPSQIQIANILDSHAATLNKKSEREVFFMNTQSIVQLVQR	973
Bos_taurus ACC1	EKSIKKEMAQYASNITSVLQCFPSQIQIANILDSHAATLNKKSEREVFFMNTQSIVQLVQR	974
Capra_hircus ACC1	EKSIKKEMAQYASNITSVLQCFPSQIQIANILDSHAATLNKKSEREVFFMNTQSIVQLVQR	1011
Danio_rerio ACC1	EKAIKKEMAQYASNITSVLQCFPSQIQIANILDSHAATLNKKSEREVFFMNTQSIVQLVQR	974
Sparus_aurata ACC1	EKAIKKEMAQYASNITSVLQCFPSQIQIANILDSHAATLNKKSEREVFFMNTQSIVQLVQR	1012
Lates_calcarifer ACC1	EKAIKKEMAQYASNITSVLQCFPSQIQIANILDSHAATLNKKSEREVFFMNTQSIVQLVQR	976
Oncorhynchus_mykiss ACC1	EKAIKKEMAQYASNITSVLQCFPSQIQIANILDSHAATLNKKSEREVFFMNTQSIVQLVQR	982
Larimichthys_crocea ACC1	EKAIKKEMAQYASNITSVLQCFPSQIQIANILDSHAATLNKKSEREVFFMNTQSIVQLVQR	1015
Consensus	ek ikkemaqyasnitsvlcqfpsqqianildshaatl n kserevffmntqsiqlvq	
Homo_sapiens ACC1	YRSGIRGHMKAVVMDLLRQYLRVETQFQNGHYDKCVFALREENKSDMNTVLNYIFSHAQV	1071
Mus_musculus ACC1	YRSGIRGHMKAVVMDLLRQYLRVETQFQNGHYDKCVFALREENKSDMNTVLNYIFSHAQV	1033
Bos_taurus ACC1	YRSGIRGHMKAVVMDLLRQYLRVETQFQNGHYDKCVFALREENKSDMNTVLNYIFSHAQV	1034
Capra_hircus ACC1	YRSGIRGHMKAVVMDLLRQYLRVETQFQNGHYDKCVFALREENKSDMNTVLNYIFSHAQV	1071
Danio_rerio ACC1	YRSGIRGHMKAVVMDLLRQYLRVETQFQNGHYDKCVFALREENKSDMANVLNYIFSHAQV	1034
Sparus_aurata ACC1	YRSGIRGHMKAVVMDLLRQYLRVETQFQNGHYDKCVFALREENKSDMANVLNYIFSHAQV	1072
Lates_calcarifer ACC1	YRSGIRGHMKAVVMDLLRQYLRVETQFQNGHYDKCVFALREENKSDMANVLNYIFSHAQV	1036
Oncorhynchus_mykiss ACC1	YRSGIRGHMKAVVMDLLRQYLRVETQFQNGHYDKCVFALREENKSDMANVLNYIFSHAQV	1042
Larimichthys_crocea ACC1	YRSGIRGHMKAVVMDLLRQYLRVETQFQNGHYDKCVFALREENKSDMANVLNYIFSHAQV	1075
Consensus	yrsgirghmkavvmdllrqyl ve qfq ghy kcvf lreenk dm vlnyifshaqv	
Homo_sapiens ACC1	TKKNLLVTMLIDQLCGRDPTLTDELINILTELTQLSKTTNAKVALRARQVLIASHLPSYE	1131
Mus_musculus ACC1	TKKNLLVTMLIDQLCGRDPTLTDELINILTELTQLSKTTNAKVALRARQVLIASHLPSYE	1093
Bos_taurus ACC1	TKKNLLVTMLIDQLCGRDPTLTDELINILTELTQLSKTTNAKVALRARQVLIASHLPSYE	1094
Capra_hircus ACC1	TKKNLLVTMLIDQLCGRDPTLTDELINILTELTQLSKTTNAKVALRARQVLIASHLPSYE	1131
Danio_rerio ACC1	TKKNLLVTMLIDQLCGRDPTLTDELINILTELTQLSKTTNAKVALRARQVLIASHLPSYE	1094
Sparus_aurata ACC1	TKKNLLVTMLIDQLCGRDPTLTDELINILTELTQLSKTTNAKVALRARQVLIASHLPSYE	1132
Lates_calcarifer ACC1	TKKNLLVTMLIDQLCGRDPTLTDELINILTELTQLSKTTNAKVALRARQVLIASHLPSYE	1096
Oncorhynchus_mykiss ACC1	TKKNLLVTMLIDQLCGRDPTLTDELINILTELTQLSKTTNAKVALRARQVLIASHLPSYE	1102
Larimichthys_crocea ACC1	TKKNLLVTMLIDQLCGRDPTLTDELINILTELTQLSKTTNAKVALRARQVLIASHLPSYE	1135
Consensus	t kn lvtmlidqlcgr ptlt del iteltqlskttnakvalrarqqliashlpsye	
Homo_sapiens ACC1	LRHNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLNPNFFYHSNQVVRMAALEVYV	1191
Mus_musculus ACC1	LRHNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLNPNFFYHSNQVVRMAALEVYV	1153
Bos_taurus ACC1	LRHNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLNPNFFYHSNQVVRMAALEVYV	1154
Capra_hircus ACC1	LRHNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLNPNFFYHSNQVVRMAALEVYV	1191
Danio_rerio ACC1	LRHNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLNPNFFYHSNQVVRMAALEVYV	1154
Sparus_aurata ACC1	LRHNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLNPNFFYHSNQVVRMAALEVYV	1192
Lates_calcarifer ACC1	LRHNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLNPNFFYHSNQVVRMAALEVYV	1156
Oncorhynchus_mykiss ACC1	LRHNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLNPNFFYHSNQVVRMAALEVYV	1162
Larimichthys_crocea ACC1	LRHNQVESIFLSAIDMYGHQFCIENLQKLILSETSIFDVLNPNFFYHSNQVVRMAALEVYV	1195
Consensus	lr nqvesiflsaidmyghqfcienlqklilsetsifdvlpnffyhdsnqvvrmaalevyv	
Homo_sapiens ACC1	RRAYIAYELNSVQHRQLKDNTOVEFQFMLPTSHPNRGNIPTLN.....	1235
Mus_musculus ACC1	RRAYIAYELNSVQHRQLKDNTOVEFQFMLPTSHPNRGNIPTLN.....	1197
Bos_taurus ACC1	RRAYIAYELNSVQHRQLKDNTOVEFQFMLPTSHPNRGNIPTLN.....	1198
Capra_hircus ACC1	RRAYIAYELNSVQHRQLKDNTOVEFQFMLPTSHPNRGNIPTLN.....	1235
Danio_rerio ACC1	RRAYIAYELNSVQHRQLKDNTOVEFQFMLPTSHPNRGNIPTLN.....	1204
Sparus_aurata ACC1	RRAYIAYELNSVQHRQLKDNTOVEFQFMLPTSHPNRGNIPTLN.....	1236
Lates_calcarifer ACC1	RRAYIAYELNSVQHRQLKDNTOVEFQFMLPTSHPNRGNIPTLN.....	1200
Oncorhynchus_mykiss ACC1	RRAYIAYELNSVQHRQLKDNTOVEFQFMLPTSHPNRGNIPTLN.....	1206
Larimichthys_crocea ACC1	RRAYIAYELNSVQHRQLKDNTOVEFQFMLPTSHPNRGNIPTLN.....	1255
Consensus	rrayiayelnsqvhrql dntc vefqfmlptshpnrgniptln	
Homo_sapiens ACC1	.....RMSFSSNLNHYGMVHVASVSDVLLDN	1261
Mus_musculus ACC1	.....RMSFSSNLNHYGMVHVASVSDVLLDN	1223
Bos_taurus ACC1	.....RMSFSSNLNHYGMVHVASVSDVLLDN	1224
Capra_hircus ACC1	.....RMSFSSNLNHYGMVHVASVSDVLLDN	1261
Danio_rerio ACC1	.....IQDYKPPANTANTSGATEAASDAESED.....RMSFSSNLNHYGMVHVASVSDVLLDT	1258
Sparus_aurata ACC1	.....RMSFSSNLNHYGMVHVASVSDVLLDT	1262
Lates_calcarifer ACC1	.....RMSFSSNLNHYGMVHVASVSDVLLDT	1226
Oncorhynchus_mykiss ACC1	.....RMSFSSNLNHYGMVHVASVSDVLLDT	1232
Larimichthys_crocea ACC1	KFQETKPDQLNAQASKSKDDNAEKRNGSDSETVD.....RMSFSSNLNHYGMVHVASVSDVLLDT	1315
Consensus	rmsf snlnhygm h svsdvlld	
Homo_sapiens ACC1	SFTPPCQRMGMVSFRIFEDFVRI FDEVMGCBS DSPPSPTFPPEAGHTSLYDED...KVPR	1319
Mus_musculus ACC1	AFTPPCQRMGMVSFRIFEDFVRI FDEVMGCBS DSPPSPTFPPEAGHTSLYDED...KVPR	1281
Bos_taurus ACC1	AFTPPCQRMGMVSFRIFEDFVRI FDEVMGCBS DSPPSPTFPPEAGHTSLYDED...KVPR	1282
Capra_hircus ACC1	AFTPPCQRMGMVSFRIFEDFVRI FDEVMGCBS DSPPSPTFPPEAGHTSLYDED...KVPR	1319
Danio_rerio ACC1	SFTPPCQRMGMVSFRISFQBFTRNIKDVLSCBS DSPPESTPTFPPECGNPVLYGEEDNKSQV	1318
Sparus_aurata ACC1	SFTPPCQRMGMVSFRISFQBFTRNIKDVLSCBS DSPPESTPTFPPECGNPVLYGEEDNKSQV	1322
Lates_calcarifer ACC1	SFTPPCQRMGMVSFRISFQBFTRNIKDVLSCBS DSPPESTPTFPPECGNPVLYGEEDNKSQV	1286
Oncorhynchus_mykiss ACC1	SFTPPCQRMGMVSFRISFQBFTRNIKDVLSCBS DSPPESTPTFPPECGNPVLYGEEDNKSQV	1292
Larimichthys_crocea ACC1	SFTPPCQRMGMVSFRISFQBFTRNIKDVLSCBS DSPPESTPTFPPECGNPVLYGEEDNKSQV	1375
Consensus	ftppcqrmg mv fr f f r cf dssp ptfpe g ly e k	
Homo_sapiens ACC1	DEPIHILNVAIKTDGDIEDDLAAMFREFTQONKATLVEHGIRRLTFLVAQKDFRKQVNY	1379
Mus_musculus ACC1	DEPIHILNVAIKTDGDIEDDLAAMFREFTQONKATLVEHGIRRLTFLVAQKDFRKQVNC	1341
Bos_taurus ACC1	DEPIHILNVAIKTDGDIEDDLAAMFREFTQONKATLVEHGIRRLTFLVAQKDFRKQVNY	1342
Capra_hircus ACC1	DEPIHILNVAIKTDGDIEDDLAAMFREFTQONKATLVEHGIRRLTFLVAQKDFRKQVNY	1379
Danio_rerio ACC1	DEPIHILNVAIKTDSIDDDGLAAMFREFTQSKKSLLDHGGIRRLTFLVAQKDFRKQINC	1378
Sparus_aurata ACC1	DEPIHILNVAIKTDSIDDDGLAAMFREFTQSKKSLLDHGGIRRLTFLVAQKDFRKQVNC	1382
Lates_calcarifer ACC1	DEPIHILNVAIKTDSIDDDGLAAMFREFTQSKKSLLDHGGIRRLTFLVAQKDFRKQVNC	1346
Oncorhynchus_mykiss ACC1	DEPVHILNVAIKTDGDIEDDLAAMFREFTQSKKSLLDHGGIRRLTFLVAQKDFRKQVNY	1352
Larimichthys_crocea ACC1	DEPIHILNVAIKTDSIDDDGLAAMFREFTQSKKSLLDHGGIRRLTFLVAQKDFRKQVNC	1435
Consensus	dep hilnvaiktd di dd laa fr ftq k l hgirrltflvaqkdfrk n	



Homo_sapiens ACC1	EVDQRFHREFPKFFTFRRDKFEEDRIYRHLEPALAFQLELNMRNFDLTAIPCANHKMH	1439
Mus_musculus ACC1	EVDQRFHREFPKFFTFRRDKFEEDRIYRHLEPALAFQLELNMRNFDLTAIPCANHKMH	1401
Bos_taurus ACC1	EVDQRFHREFPKFFTFRRDKFEEDRIYRHLEPALAFQLELNMRNFDLTAIPCANHKMH	1402
Capra_hircus ACC1	EVDQRFHREFPKFFTFRRDKFEEDRIYRHLEPALAFQLELNMRNFDLTAIPCANHKMH	1439
Danio_rerio ACC1	EVDQRFHREFPKFFTFRRDKFEEDRIYRHLEPALAFQLELNMRNFALTAIPCANHKMH	1438
Sparus_aurata ACC1	EVDQRFHREFPKFFTFRRDKFEEDRIYRHLEPALAFQLELNMRNFALTAIPCANHKMH	1442
Lates_calcarifer ACC1	EVDQRFHREFPKFFTFRRDKFEEDRIYRHLEPALAFQLELNMRNFALTAIPCANHKMH	1406
Oncorhynchus_mykiss ACC1	EVDQRFHREFPKFFTFRRDKFEEDRIYRHLEPALAFQLELNMRNFALTAIPCANHKMH	1412
Larimichthys_crocea ACC1	EVDQRFHREFPKFFTFRRDKFEEDRIYRHLEPALAFQLELNMRNFALTAIPCANHKMH	1495
Consensus	evd rfhrefpkfftfrrdkfeedriyrhlepalafqlelnmrnf ltaipcanhkmh	
Homo_sapiens ACC1	LYLGAARVEVGTEVTDYRFFVRAIIRHSDLVTKASFEYIHNBAERLLEAMDELEVAFN	1499
Mus_musculus ACC1	LYLGAARVEVGTEVTDYRFFVRAIIRHSDLVTKASFEYIHNBAERLLEAMDELEVAFN	1461
Bos_taurus ACC1	LYLGAARVEVGTEVTDYRFFVRAIIRHSDLVTKASFEYIHNBAERLLEAMDELEVAFN	1462
Capra_hircus ACC1	LYLGAARVEVGTEVTDYRFFVRAIIRHSDLVTKASFEYIHNBAERLLEAMDELEVAFN	1499
Danio_rerio ACC1	LYLGAARVEVGTEVTDYRFFVRAIIRHSDLVTKASFEYIHNBAERLLEAMDELEVAFN	1498
Sparus_aurata ACC1	LYLGAARVEVGTEVTDYRFFVRAIIRHSDLVTKASFEYIHNBAERLLEAMDELEVAFN	1502
Lates_calcarifer ACC1	LYLGAARVEVGTEVTDYRFFVRAIIRHSDLVTKASFEYIHNBAERLLEAMDELEVAFN	1466
Oncorhynchus_mykiss ACC1	LYLGAARVEVGTEVTDYRFFVRAIIRHSDLVTKASFEYIHNBAERLLEAMDELEVAFN	1472
Larimichthys_crocea ACC1	LYLGAARVEVGTEVTDYRFFVRAIIRHSDLVTKASFEYIHNBAERLLEAMDELEVAFN	1555
Consensus	lylgaa vevgtevtdyrffvrairrhdsdlvtkeasfeyl ne erllleamdelevafn	
Homo_sapiens ACC1	NTNVRTDCNHIFLNFVPTVIMDPSK.....	1524
Mus_musculus ACC1	NTNVRTDCNHIFLNFVPTVIMDPSK.....	1486
Bos_taurus ACC1	NTNVRTDCNHIFLNFVPTVIMDPSK.....	1487
Capra_hircus ACC1	NTNVRTDCNHIFLNFVPTVIMDPSK.....	1524
Danio_rerio ACC1	NTTVRTDCNHIFLNFVPTVIMDPSKHSAPISIQITILKTTLAEMQPPQTRTNQRLQHVSLKA	1558
Sparus_aurata ACC1	NTTVRTDCNHIFLNFVPTVIMDPSK.....	1527
Lates_calcarifer ACC1	NTTVRTDCNHIFLNFVPTVIMDPSK.....	1491
Oncorhynchus_mykiss ACC1	NTTVRTDCNHIFLNFVPTVIMDPSK.....	1497
Larimichthys_crocea ACC1	NTTVRTDCNHIFLNFVPTVIMDPSK.....	1580
Consensus	nt vrtcdcnhiflnfvptvimdpsk	
Homo_sapiens ACC1	IEESVSRMVMRYGSRLWKLRLVLAELKINIRLTPTGKAIPIRLFLTNEGGYLLDISLYKE	1584
Mus_musculus ACC1	IEESVSRMVMRYGSRLWKLRLVLAELKINIRLTPTGKAIPIRLFLTNEGGYLLDISLYKE	1546
Bos_taurus ACC1	IEESVSRMVMRYGSRLWKLRLVLAELKINIRLTPTGKAIPIRLFLTNEGGYLLDISLYKE	1547
Capra_hircus ACC1	IEESVSRMVMRYGSRLWKLRLVLAELKINIRLTPTGKAIPIRLFLTNEGGYLLDISLYKE	1584
Danio_rerio ACC1	IEESVSRMVMRYGSRLWKLRLVLAELKINIRLTPTGKQIPIRLFLTNEGGYLLDISLYKE	1618
Sparus_aurata ACC1	IEESVSRMVMRYGSRLWKLRLVLAELKINIRLTPTGKQIPIRLFLTNEGGYLLDISLYKE	1587
Lates_calcarifer ACC1	IEESVSRMVMRYGSRLWKLRLVLAELKINIRLTPTGKQIPIRLFLTNEGGYLLDISLYKE	1551
Oncorhynchus_mykiss ACC1	IEESVSRMVMRYGSRLWKLRLVLAELKINIRLTPTGKQIPIRLFLTNEGGYLLDISLYKE	1557
Larimichthys_crocea ACC1	IEESVSRMVMRYGSRLWKLRLVLAELKINIRLTPTGKQIPIRLFLTNEGGYLLDISLYKE	1640
Consensus	ieesvrsrmvmrygsrlwklrlvlqaelkinirilt tgc ipirflftnesgyylldislyke	
Homo_sapiens ACC1	VTDSRT.....AQIMFQAYGDKQGPLHGMLINTPYVTKDLLQSKRFQAQSLGTTYIYD	1637
Mus_musculus ACC1	VTDSRT.....AQIMFQAYGDKQGPLHGMLINTPYVTKDLLQSKRFQAQSLGTTYIYD	1599
Bos_taurus ACC1	VTDSRT.....AQIMFQAYGDKQGPLHGMLINTPYVTKDLLQSKRFQAQSLGTTYIYD	1600
Capra_hircus ACC1	VTDSRT.....AQIMFQAYGDKQGPLHGMLINTPYVTKDLLQSKRFQAQSLGTTYIYD	1637
Danio_rerio ACC1	VTDSRTGQVGHKDRQIMFQAYGDKQGPLHGMLINTPYVTKDLLQSKRFQAQSLGTTYIYD	1678
Sparus_aurata ACC1	VTDSRTGQVGPKDRQIMFQAYGDKQGPLHGMLINTPYVTKDLLQSKRFQAQSLGTTYIYD	1647
Lates_calcarifer ACC1	VTDSRTGQVGPKDRQIMFQAYGDKQGPLHGMLINTPYVTKDLLQSKRFQAQSLGTTYIYD	1611
Oncorhynchus_mykiss ACC1	VTDSRTGQVGPKDRQIMFQAYGDKQGPLHGMLINTPYVTKDLLQSKRFQAQSLGTTYIYD	1617
Larimichthys_crocea ACC1	VTDSRTGQVGPKDRQIMFQAYGDKQGPLHGMLINTPYVTKDLLQSKRFQAQSLGTTYIYD	1700
Consensus	vtdsrt qimfqaygd qgplhgmlintpyvtkd lqskrfqaqslgtty yd	
Homo_sapiens ACC1	TPEMFROSLIKLWBSMSTQAFLEPPLPSDILTYTELVLDDQGQLVHNMRLPGGNEIGMV	1697
Mus_musculus ACC1	TPEMFROSLIKLWBSMSTQAFLEPPLPSDILTYTELVLDDQGQLVHNMRLPGGNEIGMV	1659
Bos_taurus ACC1	TPEMFROSLIKLWBSMSTQAFLEPPLPSDILTYTELVLDDQGQLVHNMRLPGGNEIGMV	1660
Capra_hircus ACC1	TPEMFROSLIKLWBSMSTQAFLEPPLPSDILTYTELVLDDQGQLVHNMRLPGGNEIGMV	1697
Danio_rerio ACC1	TPEMFROALKKLMSSQAFLEPPLPSDILTYTELVLDDQGQLVHNMRLPGGNEIGMV	1738
Sparus_aurata ACC1	TPEMFROALKKLMSSQAFLEPPLPSDILTYTELVLDDQGQLVHNMRLPGGNEIGMV	1707
Lates_calcarifer ACC1	TPEMFROALKKLMSSQAFLEPPLPSDILTYTELVLDDQGQLVHNMRLPGGNEIGMV	1671
Oncorhynchus_mykiss ACC1	TPEMFROALKKLMSSQAFLEPPLPSDILTYTELVLDDQGQLVHNMRLPGGNEIGMV	1677
Larimichthys_crocea ACC1	TPEMFROALKKLMSSQAFLEPPLPSDILTYTELVLDDQGQLVHNMRLPGGNEIGMV	1760
Consensus	pem rq l k w s a lp plps lt telvld qgqlv mnrlpggneigmv	
Homo_sapiens ACC1	AWKMTFKSPPEYDGRDIIIVICNDITYRIGSFGPQEDLFLRASELARAEGIPRIYVAANS	1757
Mus_musculus ACC1	AWKMTFKSPPEYDGRDIIIVICNDITYRIGSFGPQEDLFLRASELARAEGIPRIYVAANS	1719
Bos_taurus ACC1	AWKMTFKSPPEYDGRDIIIVICNDITYRIGSFGPQEDLFLRASELARAEGIPRIYVAANS	1720
Capra_hircus ACC1	AWKMTFKSPPEYDGRDIIIVICNDITYRIGSFGPQEDLFLRASELARAEGIPRIYVAANS	1757
Danio_rerio ACC1	AWRMTLRTPEYPAGREIIVISNDITHKIGSFGPQEDVLFQASEMARESGIPRIYVAANS	1798
Sparus_aurata ACC1	AWRMTLRTPEYPAGREIIVISNDITHKIGSFGPQEDVLFQASEMARESGIPRIYVAANS	1767
Lates_calcarifer ACC1	AWRMTLRTPEYPAGREIIVISNDITHKIGSFGPQEDVLFQASEMARESGIPRIYVAANS	1731
Oncorhynchus_mykiss ACC1	AWRMTLRTPEYPAGREIIVISNDITHKIGSFGPQEDLFLQASEMARESGIPRIYVAANS	1737
Larimichthys_crocea ACC1	AWRMTLRTPEYPAGREIIVISNDITHKIGSFGPQEDVLFQASEMARESGIPRIYVAANS	1820
Consensus	aw m peyp gr lii v ndit igsfgpqed lf ase r gipriy ans	
Homo_sapiens ACC1	GARIGLAEIIRHMFHVAVWDPEDPYKGYKYLILTPQDYKRVSAALNSVHCEHVEDEGESRY	1817
Mus_musculus ACC1	GARIGLAEIIRHMFHVAVWDPEDPYKGYKYLILTPQDYKRVSAALNSVHCEHVEDEGESRY	1779
Bos_taurus ACC1	GARIGLAEIIRHMFHVAVWDPEDPYKGYKYLILTPQDYKRVSAALNSVHCEHVEDEGESRY	1780
Capra_hircus ACC1	GARIGLAEIIRHMFHVAVWDPEDPYKGYKYLILTPQDYKRVSAALNSVHCEHVEDEGESRY	1817
Danio_rerio ACC1	GARIGLAEIIRHMFHVAVWDPEDPYKGYKYLILTPQDYKRVSAALNSVHCEHVEDEGESRY	1858
Sparus_aurata ACC1	GARIGLAEIIRHMFHVAVWDPEDPYKGYKYLILTPQDYKRVSAALNSVHCEHVEDEGESRY	1827
Lates_calcarifer ACC1	GARIGLAEIIRHMFHVAVWDPEDPYKGYKYLILTPQDYKRVSAALNSVHCEHVEDEGESRY	1791
Oncorhynchus_mykiss ACC1	GARIGLAEIIRHMFHVAVWDPEDPYKGYKYLILTPQDYKRVSAALNSVHCEHVEDEGESRY	1797
Larimichthys_crocea ACC1	GARIGLAEIIRHMFHVAVWDPEDPYKGYKYLILTPQDYKRVSAALNSVHCEHVEDEGESRY	1880
Consensus	gariglaeiirhmfhvw d dpykgylyltpdykkrvsalnsvhcehveedgesry	



Homo_sapiens ACC1	KITDIIGKEEGIGENIRGSGMIAGESSLAYNEIITISLVTORAIIGIGAYLVRLGORTIQ	1877
Mus_musculus ACC1	KITDIIGKEEGIGENIRGSGMIAGESSLAYDEVIITISLVTORAIIGIGAYLVRLGORTIQ	1839
Bos_taurus ACC1	KITDIIGKEEGIGENIRGSGMIAGESSLAYDEIITISLVTORAIIGIGAYLVRLGORTIQ	1840
Capra_hircus ACC1	KITDIIGKEEGIGENIRGSGMIAGESSLAYDEIITISLVTORAIIGIGAYLVRLGORTIQ	1877
Danio_rerio ACC1	KITDIIGKEEGIGENIRGSGMIAGESSLAYDEIITMNLVTORAIIGIGAYLVRLGORTIQ	1918
Sparus_aurata ACC1	KITDIIGKDEGLGVENIRGSGMIAGESSLAYEIIITMNLVTORAIIGIGAYLVRLGORTIQ	1887
Lates_calcarifer ACC1	KITDIIGKDEGLGVENIRGSGMIAGESSLAYEIIITMNLVTORAIIGIGAYLVRLGORTIQ	1851
Oncorhynchus_mykiss ACC1	KITDIIGKEEGIGENIRGSGMIAGESSLAYDOVIITMNLVTORAIIGIGAYLVRLGORTIQ	1857
Larimichthys_crocea ACC1	KITDIIGKDEGLGVENIRGSGMIAGESSLAYEIIITMNLVTORAIIGIGAYLVRLGORTIQ	1940
Consensus	kitdiigk eg g enl gsgmiageSSLay it lvtcraigigaylvrlgqrtiq	
Homo_sapiens ACC1	VENSHILITGAGALNKVLGREVYTSNNQLGGIQIMHNNGVTHSTVCDDFEGVFTVLHWLS	1937
Mus_musculus ACC1	VENSHILITGAGALNKVLGREVYTSNNQLGGIQIMHNNGVTHSTVCDDFEGVFTVLHWLS	1899
Bos_taurus ACC1	VENSHILITGAGALNKVLGREVYTSNNQLGGIQIMHNNGVTHSTVCDDFEGVFTVLHWLS	1900
Capra_hircus ACC1	VENSHILITGAGALNKVLGREVYTSNNQLGGIQIMHNNGVTHSTVCDDFEGVFTVLHWLS	1937
Danio_rerio ACC1	VENSHILITGAGALNKVLGREVYTSNNQLGGVQIMHNNGVTHSTVCDDFEGVFTVLHWLS	1978
Sparus_aurata ACC1	VDNSHILITGAGALNKVLGREVYTSNNQLGGIQIMHNNGVTHSTVCDDFEGVFTVLHWLS	1947
Lates_calcarifer ACC1	VDNSHILITGAGALNKVLGREVYTSNNQLGGIQIMHNNGVTHSTVCDDFEGVFTVLHWLS	1911
Oncorhynchus_mykiss ACC1	VENSHILITGAGALNKVLGREVYTSNNQLGGIQIMHNNGVTHSTVCDDFEGVFTVLHWLS	1917
Larimichthys_crocea ACC1	VDNSHILITGAGALNKVLGREVYTSNNQLGGIQIMHNNGVTHSTVCDDFEGVFTVLHWLS	2000
Consensus	v nsh iltgagalnkvlgrevytsnnqlgg qimhnngvth vccdfegv l wls	
Homo_sapiens ACC1	YMPKSVHSSVPEILNSKDPIDRIIEFVPTKPYDPRWMLAGRPHPTQKQWLSGGFFDYGSF	1997
Mus_musculus ACC1	YMPKSVHSSVPEILNSKDPIDRIIEFVPTKPYDPRWMLAGRPHPTQKQWLSGGFFDYGSF	1959
Bos_taurus ACC1	YMPKSVYSSVPEILNSKDPIDRVIEFVPTKPYDPRWMLAGRPHPTQKQWLSGGFFDYGSF	1960
Capra_hircus ACC1	YMPKSVYSSVPEILNSKDPIDRVIEFVPTKPYDPRWMLAGRPHPTQKQWLSGGFFDYGSF	1997
Danio_rerio ACC1	YMPKNNSSVPEILSAKDPIDRAIEFVPTKPYDPRWMLAGRPHPTQKQWLSGGFFDYGSF	2038
Sparus_aurata ACC1	YMEFNKASVPEILNAKDPIDRLVEFVPTKPYDPRWMLAGRPHPTQKQWLSGGFFDYGSF	2007
Lates_calcarifer ACC1	YMPKCKSSVPEILSAKDPIDRPVEFVPTKPYDPRWMLAGRPHPTQKQWLSGGFFDYGSF	1971
Oncorhynchus_mykiss ACC1	YMPKDRSSVPEILNAKDPIDRLVEFVPTKPYDPRWMLAGRPHPTQKQWLSGGFFDYGSF	1977
Larimichthys_crocea ACC1	YMECKSSVPEILVHSDPIDRPVEFVPTKPYDPRWMLAGRPHPTQKQWLSGGFFDYGSF	2060
Consensus	ymp s vp kdpidr ef ptk pydprwm agrp kg w gffd gsf	
Homo_sapiens ACC1	SEIMQPWAQIVVVGARLGGIPGVVAVETRTVELSIPADPANLDSEAKIIQQAGQVWF	2057
Mus_musculus ACC1	SEIMQPWAQIVVVGARLGGIPGVVAVETRTVELSIPADPANLDSEAKIIQQAGQVWF	2019
Bos_taurus ACC1	SEIMQPWAQIVVVGARLGGIPGVVAVETRTVELSIPADPANLDSEAKIIQQAGQVWF	2020
Capra_hircus ACC1	SEIMQPWAQIVVVGARLGGIPGVVAVETRTVELSIPADPANLDSEAKIIQQAGQVWF	2057
Danio_rerio ACC1	IEIMQPWAQIVVVGARLGGIPGVVAVETRSVELSIPADPANLDSEAKIIQQAGQVWF	2098
Sparus_aurata ACC1	MEIMQPWAQIVVVGARLGGIPGVVAVETRSVELSIPADPANLDSEAKIIQQAGQVWF	2067
Lates_calcarifer ACC1	MEIMQPWAQIVVVGARLGGIPGVVAVETRSVELSIPADPANLDSEAKIIQQAGQVWF	2031
Oncorhynchus_mykiss ACC1	MEIMQPWAQIVVVGARLGGIPGVVAVETRSVELSIPADPANLDSEAKIIQQAGQVWF	2037
Larimichthys_crocea ACC1	MEIMQPWAQIVVVGARLGGIPGVVAVETRSVELSIPADPANLDSEAKIIQQAGQVWF	2120
Consensus	eimqpwaq vvvgarlggip gvvavetr velsipadpanldseakiqqagqvwf	
Homo_sapiens ACC1	DSAFKTYQAIKDENREGLPLIVFANWRGFGSGMKMDYDQVLKFGAYIVDGLRECSQPVIV	2117
Mus_musculus ACC1	DSAFKTYQAIKDENREGLPLIVFANWRGFGSGMKMDYDQVLKFGAYIVDGLRECSQPVIV	2079
Bos_taurus ACC1	DSAFKTYQAIKDENREGLPLIVFANWRGFGSGMKMDYDQVLKFGAYIVDGLRECSQPVIV	2080
Capra_hircus ACC1	DSAFKTYQAIKDENREGLPLIVFANWRGFGSGMKMDYDQVLKFGAYIVDGLRECSQPVIV	2117
Danio_rerio ACC1	DSAFKTYQAIKDENREGLPLIVFANWRGFGSGMKMDYDQVLKFGAYIVDGLREYKQPVIV	2158
Sparus_aurata ACC1	DSAFKTYQAIKDENREGLPLIVFANWRGFGSGMKMDYDQVLKFGAYIVDGLREYKQPVIV	2127
Lates_calcarifer ACC1	DSAFKTYQAIKDENREGLPLIVFANWRGFGSGMKMDYDQVLKFGAYIVDGLREYKQPVIV	2091
Oncorhynchus_mykiss ACC1	DSAFKTYQAIKDENREGLPLIVFANWRGFGSGMKMDYDQVLKFGAYIVDGLREYKQPVIV	2097
Larimichthys_crocea ACC1	DSAFKTYQAIKDENREGLPLIVFANWRGFGSGMKMDYDQVLKFGAYIVDGLREYKQPVIV	2180
Consensus	dsafkt qaikd nreglpl vfanwrgfsggmkm dydqlvkfgayivdglre qpv v	
Homo_sapiens ACC1	YIPPOAELRGGSWVVIDSSINPRHMEMYADRESRGSVLEPEGTVEIKFRKDLVKTMRV	2177
Mus_musculus ACC1	YIPPOAELRGGSWVVIDPTINPRHMEMYADRESRGSVLEPEGTVEIKFRKDLVKTMRV	2139
Bos_taurus ACC1	YIPPOAELRGGSWVVIDPTINPRHMEMYADRESRGSVLEPEGTVEIKFRKDLVKTMRV	2140
Capra_hircus ACC1	YIPPOAELRGGSWVVIDPTINPRHMEMYADRESRGSVLEPEGTVEIKFRKDLVKTMRV	2177
Danio_rerio ACC1	YIPPOAELRGGSWVVIDPTINPRHMEMYADKDSRGSVLEPEGTVEIKFRKDLVKTMRV	2218
Sparus_aurata ACC1	YIPPOAELRGGSWVVIDPTINPRHMEMYADKDSRGSVLEPEGTVEIKFRKDLVKTMRV	2187
Lates_calcarifer ACC1	YIPPOAELRGGSWVVIDPTINPRHMEMYADKDSRGSVLEPEGTVEIKFRKDLVKTMRV	2151
Oncorhynchus_mykiss ACC1	YIPPOAELRGGSWVVIDPTINPRHMEMYADKDSRGSVLEPEGTVEIKFRKDLVKTMRV	2157
Larimichthys_crocea ACC1	YIPPOAELRGGSWVVIDPTINPRHMEMYADKDSRGSVLEPEGTVEIKFRKDLVKTMRV	2240
Consensus	yippoaelrggswvvid inprhmemyad srg vlepegtveikfr kdlvktmrv	
Homo_sapiens ACC1	DPVYIHLAERLGTPELSPTBRKELESKLKEREFLPIYHQVAVQFADLHDTPGRMQEK	2237
Mus_musculus ACC1	DPVYIHLAERLGTPELSPTBRKELESKLKEREFLPIYHQVAVQFADLHDTPGRMQEK	2199
Bos_taurus ACC1	DPVYIHLAERLGTPELSVABRKELESKLKEREFLPIYHQVAVQFADLHDTPGRMQEK	2200
Capra_hircus ACC1	DPVYIHLAERLGTPELSAABRKELESKLKEREFLPIYHQVAVQFADLHDTPGRMQEK	2237
Danio_rerio ACC1	DPVYIMGLAERLGTPELSVBRKELESKLKEREFLPIYHQVAVQFADLHDTPGRMQEK	2278
Sparus_aurata ACC1	DPVYIHLAERLGTPELSPTBRKELESKLKEREFLPIYHQVAVQFADLHDTPGRMQEK	2247
Lates_calcarifer ACC1	DPVYIHLAERLGTPELSPTBRKELESKLKEREFLPIYHQVAVQFADLHDTPGRMQEK	2211
Oncorhynchus_mykiss ACC1	DPVYIMGLAERLGTPELSPTBRKELESKLKEREFLPIYHQVAVQFADLHDTPGRMQEK	2217
Larimichthys_crocea ACC1	DPVYIMGLAERLGTPELSPTBRKELESKLKEREFLPIYHQVAVQFADLHDTPGRMQEK	2300
Consensus	dpvy lae lgtpel rkele klkereeflpi yhqvavqfadhdtpgrmqekg	
Homo_sapiens ACC1	VISDILDWKTSRTFFYWLRLRLLEDIVKVKIHNANPELTDGQIQAMLRWFVEVEGVK	2297
Mus_musculus ACC1	VINDILDWKTSRTFFYWLRLRLLEDIVKVKIHNANPELTDGQIQAMLRWFVEVEGVK	2259
Bos_taurus ACC1	VINDILDWKTSRTFFYWLRLRLLEDIVKVKIHNANPELTDGQIQAMLRWFVEVEGVK	2260
Capra_hircus ACC1	VINDILDWKTSRTFFYWLRLRLLEDIVKVKIHNANPELTDGQIQAMLRWFVEVEGVK	2297
Danio_rerio ACC1	VITDILEWTSRQFFYWLRLRLLEDIVKVKIQANSELTDGQVQAMLRWFVEVEGVK	2338
Sparus_aurata ACC1	VITDILEWTSRQFFYWLRLRLLEDIVKVKIQANSELTDGQVQAMLRWFVEVEGVK	2307
Lates_calcarifer ACC1	VITDILEWTSRQFFYWLRLRLLEDIVKVKIQANSELTDGQIQAMLRWFVEVEGVK	2271
Oncorhynchus_mykiss ACC1	VITDILEWTSRQFFYWLRLRLLEDIVKVKIQANSELTDGQIQAMLRWFVEVEGVK	2277
Larimichthys_crocea ACC1	VITDILEWTSRQFFYWLRLRLLEDIVKVKIQANSELTDGQVQAMLRWFVEVEGVK	2360
Consensus	vi dil w tsr ffywlrlrlle vk ki an eltdgq qamlrrwve eg vk	

Homo_sapiens ACC1	AYVWDNNKDLAEWLEKQLTEEDGVHSEENIKYISRDYVLKQIRSLVQANPEVAMDSIT	2357
Mus_musculus ACC1	AYVWDNNKDLAEWLEKQLTEEDGVRSVIEENIKYISRDYVLKQIRSLVQANPEVAMDSIV	2319
Bos_taurus ACC1	AYVWDNNKDLAEWLEKQLTEEDGVRSVIEENIKYISRDYVLKQIRSLVQANPEVAMDSIV	2320
Capra_hircus ACC1	AYVWDNNKDLAEWLEKQLTEEDGVRSVIEENIKYISRDYVLKQIRSLVQANPEVAMDSIV	2357
Danio_rerio ACC1	AYLWLSNEDVVEWLEKQLAEPEGARSVIDENIKYIRRDHILKQIRSLVQANPEVAMDSIV	2398
Sparus_aurata ACC1	AYLWDNNEEVVAWLEKQLAEPEGARSVIDENIKYIRRDHILKQIRSLVQANPEVAMDSIV	2367
Lates_calcarifer ACC1	AYLWDNNEEVVAWLEKQLAEPEGARSVIDENIKYIRRDHILKQIRSLVQANPEVAMDSIV	2331
Oncorhynchus_mykiss ACC1	AYLWLSNEDVVEWLEKQLKEPEGARSVIDENIKYIRRDHILKQIRSLVQANPEVAMDSIV	2337
Larimichthys_crocea ACC1	AYLWDNNEEVVAWLEKQLAEPEGARSVIDENIKYIRRDHILKQIRSLVQANPEVAMDSIV	2420
Consensus	ay wd n        wle ql ee g   s        enik i rd   lkqirslvqanpevamdsi	
Homo_sapiens ACC1	HMTQHISPTQRAEVIRILSTMDSPT.	2383
Mus_musculus ACC1	HMTQHISPTQRAEVVIRILSTMDSPT.	2345
Bos_taurus ACC1	HMTQHISPTQRAEVVIRILSTMDSPT.	2346
Capra_hircus ACC1	HMTQHISPTQRAEVVIRILSTMDSPT.	2383
Danio_rerio ACC1	HMTQHISPTQRAEVVIRILSTMDSPT.	2425
Sparus_aurata ACC1	HMTQHISATQRAEVVIRILSTMDSASS	2394
Lates_calcarifer ACC1	HMTQHISPTQRAEVVIRILSTMDSAPS	2358
Oncorhynchus_mykiss ACC1	HMTQHISPTQRAEVVIRILSTMDSAPAA	2364
Larimichthys_crocea ACC1	HMTQHISPTQRAEVVIRILSTMDSASS	2447
Consensus	hmtqhis tqr ev rilstm	

**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	MVLLLCLSCLIFSCLTFSWLKIWKMTDSKPITKSKSEANLIPSEQEPPASDNGSGTTPQR	60
Mus_musculu ACC2	MVLLLFLLTCLVFSCLTFSWLKIWKMTDSKPLTNSKVEANLLSSEESLSASELSQEQLOQE	60
Bos_taurus ACC2	.....MSDSKQVTKSKRKVSFTSPSQEPIPASEGSQPPQE	35
Capra_hircus ACC2	.....MSDSKQVTKSKRKVSFTSPSQEPIPAASDGSQPPQE	35
Danio_rerio ACC2	.....	0
Sparus_aura ACC2	.....MLPLAGLGLILWILLLLWINTKTVPMPVKGEPSPSG	37
Lates calcarifer ACC2	.....MLPFAVLGLILWILLLLWRINTKTVPMPVKGEPSPSG	37
Oncorhynchus mykiss ACC2	.....MLPPLLSGFLLVLWLL.WRIKDKMMLDQGVETPTGCG	36
Larimichthys crocea ACC2	.....MLPFAVLGLILWILLLLWRINTKTVPMPVKGEPSPSG	37
Consensus		
Homo_sapien ACC2	NGEGHTLPKTESSQAEP.ASHKGPDKAGRRRNSLPSSHQKPPRNPLSSSDAAPSPE.LQAN	118
Mus_musculu ACC2	HGDHSCLE.....SYRGPRDASQQRNSLPSSCQRPPRNPLSSNDTWPSPE.LQTN	108
Bos_taurus ACC2	DCNSSPLPKTESQAEL.ASHKGPQDTCQQRPSQSLPQNPPQNPLSSDDASPAR...QAN	91
Capra_hircus ACC2	GCNSSPLPETERQAEL.ASHKGPQDTCQQRPSPPQNPPQNPLSSDDASRAR...QAN	91
Danio_rerio ACC2	.....MPSQTP.....ISDCAGEHSPPMDFGLSSTSPRN.....	29
Sparus_aura ACC2	CDPPPAEEVEESTQ.....SPHPGEHSSSAAPATAKRDGN.SLQVGGASG....VK	84
Lates calcarifer ACC2	RGSSAAKEDMETH.....TRHSGEHSLSAVETTSAHNDNNSALSDGTSAGPC...VK	87
Oncorhynchus mykiss ACC2	SSAAAAQEEMQAADGPTAAVHTAPVHEHSTPMVLASSTSDSGANSPTHTIDPSEGPMIPR	96
Larimichthys crocea ACC2	CGPPAAEEDMEVTQ.....SPHPGEHFLSTAEETSAHNEDT.SSQAGCAPAGQ...VK	86
Consensus		
Homo_sapien ACC2	GTGTGLEATDT.....NGLSSSARPOGQAGSPSKEDKKQANIKRQOLMTNFILGSFDD	172
Mus_musculu ACC2	WTAAPGEVPPDA.....NGLSFPARPPSRTVSPSREDRKQAHIKRQOLMTNFILGSFDD	162
Bos_taurus ACC2	GSETEGEIPNT.....NDLSAPARPOGQARTLSREDRKQAHIKRQOLMTNFILGSFDD	145
Capra_hircus ACC2	GSGETEGEIPNT.....NDLSAPARPOGQARTLSREDRKQAHIKRQOLMTNFILGSFDD	145
Danio_rerio ACC2	..EGIPESATSD.....PTDQ...SNITVSHIESHRPFGSGAQAK.EKLKFIICASD	77
Sparus_aura ACC2	TLDAAEPQASSE.....VNSEKPSLPPTACNPSTRKVPMLSSGPEAR.ERLKFILCASD	138
Lates calcarifer ACC2	TVDSEEPQSSSE.....INSELPSSPQTTCKPYRTNVPMLSSGPEAR.ERLKFILCASD	141
Oncorhynchus mykiss ACC2	AGGSQPPQASSEGMEQYQTQPSPFVPPPPSRTTRPKLSSGPEVFRACLKFIICASD	156
Larimichthys crocea ACC2	AVDTEALQESSE.....VNSEK...PPTTTSKTKVPMKSGPEGR.ERLKFILCASD	137
Consensus	filg d	
Homo_sapien ACC2	YSSDEDSVAGSSRESSTRKGS.....RASLGALSLEAYLTGEAETRVPTMR..	218
Mus_musculu ACC2	NSSDEDPAGSFQNSSSRKSS.....RASLGTLSEQEALNTSDPESHAPTMR..	208
Bos_taurus ACC2	NSSDEPDAGALFRQSSSRKGS.....RASLGTLSLETAHAAGETETCAPVIR..	191
Capra_hircus ACC2	NSSDEDTGAALFRQSSSRKGS.....RASLGTLSLETAQAAGETETCAPVIR..	191
Danio_rerio ACC2	NSSDDEP..LVKNQTTTHQPK.....NTETLNAEPTASSEMPPTFPVSTGLR..	122
Sparus_aura ACC2	NSSDDEP.LVTKPESGASQP.....QTSDRASPPQASSAAPQSS..SSGIK..	182
Lates calcarifer ACC2	NSSDDEP.LVAKPESGASQP.....QTSSLKSSPPQEPAPVQSS..SSGIK..	185
Oncorhynchus mykiss ACC2	NSSDDEPPLTMKPPTGSSSSSEATASTVRQTASATSTAFSPPPQVQSVTLTTT.SPGMR..	213
Larimichthys crocea ACC2	NSSDDEP.LVSKPESGASQP.....PASTNKSYPOEASTAARRSS..SSGIK..	181
Consensus	ssd	
Homo_sapien ACC2	.....PSMSGHLVKRGREHKKLDLHRDFTVASPAEFVTRFGGD	257
Mus_musculu ACC2	.....PSMSGHLVKRGREHKKLDLHRDFTVASPAEFVTRFGGN	247
Bos_taurus ACC2	.....PSMSGHLARRGREQKKVLDLHRDFTVASPAEFVTRFAGH	230
Capra_hircus ACC2	.....PSMSGHLARRGREQKKVLDLHRDFTVASPAEFVTRFAGH	230
Danio_rerio ACC2	.....PSMSGHLLKKGKEHRKMEVHRDFTVASPAEFVTRFGGN	161
Sparus_aura ACC2	.....PSMSGHLVKKGREHRKMDLORDFTVASPAEFVTRFGGN	221
Lates calcarifer ACC2	.....PSMSGHLLVKKGREHRKMDLORDFTVASPAEFVTRFGGN	224
Oncorhynchus mykiss ACC2	.....PSMSHHLVKKREIRKMDLORDFTVASPAEFVTRFGGN	252
Larimichthys crocea ACC2	.....PSMSGHLVKRGREHRKMDLORDFTVASPAEFVTRFGGN	220
Consensus	psms hl e k rdtvaspaefv rf g	
Homo_sapien ACC2	RVIEKVLIANNGIAAVKCMRSIRRWAYEMFRNERAIRFVVMVTPEDLKANAeyIKMADHY	317
Mus_musculu ACC2	RVIEKVLIANNGIAAVKCMRSIRRWAYEMFRNERAIRFVVMVTPEDLKANAeyIKMADHY	307
Bos_taurus ACC2	IVIEKVLIANNGIAAVKCMRSIRRWAYEMFRNERAIRFVVMVTPEDLKANAeyIKMADHY	290
Capra_hircus ACC2	IVIEKVLIANNGIAAVKCMRSIRRWAYEMFRNERAIRFVVMVTPEDLKANAeyIKMADHY	290
Danio_rerio ACC2	RIIDKVLIANNGIAAVKCMRSIRRWAYEMFRNERTIRFVVMVTPEDLKANAeyIKMADHY	221
Sparus_aura ACC2	RVIEKVLIANNGIAAVKCMRSIRRWAYEMFRNERTIRFVVMVTPEDLKANAeyIKMADHY	281
Lates calcarifer ACC2	RVIEKVLIANNGIAAVKCMRSIRRWAYEMFRNERTIRFVVMVTPEDLKANAeyIKMADHY	284
Oncorhynchus mykiss ACC2	RVINKVLIANNGIAAVKCMRSIRRWAYEMFRNERTIRFVVMVTPEDLKANAeyIKMADHY	312
Larimichthys crocea ACC2	RVIEKVLIANNGIAAVKCMRSIRRWAYEMFRNERTIRFVVMVTPEDLKANAeyIKMADHY	280
Consensus	i kvlianngiaavkcmrsirrw yemfrner irfvvmvtpedlkanaeyikmad y	
Homo_sapien ACC2	VPVPGGPNNNNYANVELIVDIAKRIPVQAVWAGWGHAENPKLPELLCKNGVAFGLGPPSE	377
Mus_musculu ACC2	VPVPGGPNNNNYANVELIIDIAKRIPVQAVWAGWGHAENPKLPELLCKHEIAFLGPPSE	367
Bos_taurus ACC2	VPVPGGPNNNNYANVELIVDIAKRIPVQAVWAGWGHAENPKLPELLRKHEIAFLGPPSE	350
Capra_hircus ACC2	VPVPGGPNNNNYANVELIVDIAKRIPVQAVWAGWGHAENPKLPELLHKHEIAFLGPPSE	350
Danio_rerio ACC2	VPVPGGPNNNNYANVEMIVDIAKRIPVQAVWAGWGHAENPKLPELLHKSGICFLGPPSK	281
Sparus_aura ACC2	VPVPGGPNNNNYANVELIVDIAKRIPVQAVWAGWGHAENPKLPDLNKAIGISFLGPPSK	341
Lates calcarifer ACC2	VPVPGGPNNNNYANVELIVDIAKRIPVQAVWAGWGHAENPKLPELLNKAIGISFLGPPSK	344
Oncorhynchus mykiss ACC2	VPVPGGPNNNNYANVELIVDIAKRIPVQGVWAGWGHAENPKLPELLDKNGISFLGPPSK	372
Larimichthys crocea ACC2	VPVPGGPNNNNYANVELIVDIAKRIPVQAVWAGWGHAENPKLPELLNKAIGISFLGPPSK	340
Consensus	vpvpgg nn nyanve i diakripvq vwagwghasenpklp ll k flgp	
Homo_sapien ACC2	AMWALGDKIASTVVAQTLQVPTLPWSGSLTIVETEDDLQQCKRISVPEDVYDKGCVKQDV	437
Mus_musculu ACC2	AMWALGDKIASTVVAQTLQIPTLPWSGSLTIVETEDDSRHQCKCISVPEDVYEQGCVKQDV	427
Bos_taurus ACC2	AMWALGDKIASTVVAQTLQIPTLPWNGSLTIVETAEHSLQEQRISIPESVYNNNGCVKQDV	410
Capra_hircus ACC2	AMWALGDKIASTVVAQTLQIPTLPWSGSLTIVETEEHSLQEQRISIPESVYNNNGCVKQDV	410
Danio_rerio ACC2	AMWALGDKVASSIVAQSAGIPTLPWSCTGLSVTADEEQRQRLISVPPELVYQGCVKQDV	341
Sparus_aura ACC2	AMWALGDKVASSIVAQSADIPTLPWSGSLRVDAEDQKQGRVIVSVPPEVYTKGCVQDV	401
Lates calcarifer ACC2	AMWALGDKVASSIVAQSADIPTLPWSGSLRVDAAGVDQGLGNVIVSVPPEIYTKGCVQDV	404
Oncorhynchus mykiss ACC2	AMWALGDKVASSIVAQSADIPTLPWSGSLRVDAEDDDQRLGHVIVSVPPEVYVHGCVRDA	432
Larimichthys crocea ACC2	AMWALGDKVASSIVAQSADIPTLPWSGSLRVDAEDDQKLGNIIVSVPPEIYANGCVQDV	400
Consensus	amwalgdk as vaq ptlpw g gl v w g is p y gcv d	



Homo_sapien ACC2	DEGLEAABRIKGFPLMIKASEGGGKGIRKAESAEEDFHLFROVQSETPGSPHFLMLKLAQH	497
Mus_musculu ACC2	DEGLQAABKIKGFPLMIKASEGGGKGIRKAESAEEDFHLFROVQSETPGSPHFLMLKLAQN	487
Bos_taurus ACC2	DEGLEAABKIKGFPLMIKASEGGGKGIRKAETAEEDFHLFROVQSETPGSPHFLMLKLAQH	470
Capra_hircus ACC2	DEGLEAABKIKGFPLMIKASEGGGKGIRKAETAEEDFHLFROVQSETPGSPHFLMLKLAQH	470
Danio_rerio ACC2	DEGLASABKICYPVVIKASEGGGKGIRKVESSEDFHSLFROVQAEVPGSPHIFIMOLAHEH	401
Sparus_aura ACC2	DDGLAGABRICYPVVIKASEGGGKGIRKVESSEDFATFFROVQTEVPGSPHIFIMOLAQH	461
Lates_calcarifer ACC2	DDGLAGABRICYPVVIKASEGGGKGIRKVESSEDFSSFRVQVQTEVPGSPHIFIMOLAQH	464
Oncorhynchus mykiss ACC2	DDGLAGADRICYPVVIKASEGGGKGIRKVDNAEDFASFROVQAEVPGSPHIFIMOLAQH	492
Larimichthys_crocea ACC2	DDGLAGABRICYPVVIKASEGGGKGIRKVECSDFEGFRVQVQTEVPGSPHIFIMOLAQH	460
Consensus	d gl a ig p ikasegggkgirk edf frqvq e pgsp f m la	
Homo_sapien ACC2	ARHLEVQILADQYGNVSLFGRDCSIQRRHQKIVEEAPATIAPLAIFEEMEQCAIRLAKT	557
Mus_musculu ACC2	ARHLEVQVLADQYGNVSLFGRDCSIQRRHQKIEEAPATIAAPAVFEEMEQCAVRLAKM	547
Bos_taurus ACC2	ARHLEVQILADQYGNVSLFGRDCSIQRRHQKIEEAPATIAAPAVFEEMEQCAVRLAKT	530
Capra_hircus ACC2	ARHLEVQILADQYGNVSLFGRDCSIQRRHQKIEEAPATIAAPAVFEEMEQCAVRLAKT	530
Danio_rerio ACC2	ARHLEVQILADQYGNVSLFGRDCSIQRRHQKIEEAPASIASTITFEQMEQCAVRLAKM	461
Sparus_aura ACC2	ARHLEVQILADEYGNVSLFGRDCSIQRRHQKIEEAPATIAASSTFEQMEQCAVRLAKM	521
Lates_calcarifer ACC2	ARHLEVQILADEYGNVSLFGRDCSIQRRHQKIEEAPATIAALSTFEQMERVAVRLAKM	524
Oncorhynchus mykiss ACC2	ARHLEVQILADQYGNVSLFGRDCSIQRRHQKIEEAPATIASATTFEEMEQCAVRLAKM	552
Larimichthys_crocea ACC2	ARHLEVQILADEYGNVSLFGRDCSIQRRHQKIEEAPATIAATSTFEQMEQCAVRLAKM	520
Consensus	arhlevq lad ygna slfgrdcsiqrrhqki eeapa ia fe me a lak	
Homo_sapien ACC2	VGYVSAGTVEYLYSCDGSFHFLELNPRLQVEHPCTEMIADVNLPAAQQLIAMCVPIHRRK	617
Mus_musculu ACC2	VGYVSAGTVEYLYSCDGSFHFLELNPRLQVEHPCTEMIADVNLPAAQQLIAMCVPIHRRK	607
Bos_taurus ACC2	VGYVSAGTVEYLYSCDGSFHFLELNPRLQVEHPCTEMIADVNLPAAQQLIAMCVPIHRRK	590
Capra_hircus ACC2	VGYVSAGTVEYLYSCDGSFHFLELNPRLQVEHPCTEMIADVNLPAAQQLIAMCVPIHRRK	590
Danio_rerio ACC2	VGYVSAGTVEYLFSEDDGSFHFLELNPRLQVEHPCTEMIADVNLPAAQQLIAMCPIPIHRRK	521
Sparus_aura ACC2	VGYVSAGTVEYLFSEDDGSFHFLELNPRLQVEHPCTEMIGDVNLPAAQQLIAMCPIPIHRRK	581
Lates_calcarifer ACC2	VGYVSAGTVEYLFSEDDGSFHFLELNPRLQVEHPCTEMIGDVNLPAAQQLIAMCPIPIHRRK	584
Oncorhynchus mykiss ACC2	VGYVSAGTVEYLFSEDDGSFHFLELNPRLQVEHPCTEMIGDVNLPAAQQLIAMCPIPIHRRK	612
Larimichthys_crocea ACC2	VGYVSAGTVEYLFSEDDGFHFLELNPRLQVEHPCTEMIGDVNLPAAQQLIAMCPIPIHRRK	580
Consensus	vgyvsagtvey l s dg fhflelnprlqvehpctemi dvnlpaaqlqiamg pl r k	
Homo_sapien ACC2	DIRLLYGBSPWGVTFISFETESNPFLARGHVIAARITSENPDGFKPSSSGTVQELNFRSS	677
Mus_musculu ACC2	DIRLLYGBSPWGVTFEFTFLSPFIARGHVIAARITSENPDGFKPSSSGTVQELNFRSN	667
Bos_taurus ACC2	DIRLLYGBSPWGVTFISFETESNPFIARGHVIAARITSENPDGFKPSSSGTVQELNFRSS	650
Capra_hircus ACC2	DIRLLYGBSPWGVTFISFETESNPFIARGHVIAARITSENPDGFKPSSSGTVQELNFRSS	650
Danio_rerio ACC2	DIRVLFGBAPWGDITINFESECMCFPRGHVIAARITSENPDGFKPSSSGTVQELNFRSS	581
Sparus_aura ACC2	DIRLLYGBPPWGDITVINFEETECMPSRGRHVIAARITSENPDGFKPSSSGTVQELNFRSS	641
Lates_calcarifer ACC2	DIRLLYGBTPWGDITINFEETECMPSRGRHVIAARITSENPDGFKPSSSGTVQELNFRSS	644
Oncorhynchus mykiss ACC2	DIRVLYGBTPWGDITINFEADCVESRGRHVIAARITSENPDGFKPSSSGTVQELNFRSS	672
Larimichthys_crocea ACC2	DIRLLYGBTPWGDITINFEETHDCIPSRGRHVIAARITSENPDGFKPSSSGTVQELNFRSS	640
Consensus	dir l ge pwg i fe p p rghvia ritsenpdgfkpsssgtvqelnfrs	
Homo_sapien ACC2	KNVWGYFSVAATGGLHEFADSQFGHCFSWGENREEAISNMVVALKELIRGDFRTTVEYL	737
Mus_musculu ACC2	KNVWGYFSVAAGGLHEFADSQFGHCFSWGENREEAISNMVVALKELIRGDFRTTVEYL	727
Bos_taurus ACC2	KNVWGYFSVAATGGLHEFADSQFGHCFSWGENREEAISNMVVALKELIRGDFRTTVEYL	710
Capra_hircus ACC2	KNVWGYFXVAATGGLHEFTDSQFGHCFSWGENREEAISNMVVALKELIRGDFRTTVEYL	710
Danio_rerio ACC2	KNVWGYFSVCGATGGLHEFADSQFGHCFSWGENREEAISNMVVAMKELIRGDFRTTVEYL	641
Sparus_aura ACC2	KNVWGYFSVCGATGGLHEFADSQFGHCFSWGENREEAISNMVVAMKELIRGDFRTTVEYL	701
Lates_calcarifer ACC2	KNVWGYFSVCGATGGLHEFADSQFGHCFSWGENREEAISNMVVAMKELIRGDFRTTVEYL	704
Oncorhynchus mykiss ACC2	KNVWGYFSVCAAGGLHEFADSQFGHCFSWGENREEAISNMVVAMKELIRGDFRTTVEYL	732
Larimichthys_crocea ACC2	KNVWGYFSVCGATGGLHEFADSQFGHCFSWGENREEAISNMVVAMKELIRGDFRTTVEYL	700
Consensus	knvwgyf v a gglhef dsqfghcfswgenreeaisnmvva kel irgdftrttvey l	
Homo_sapien ACC2	TNLLLETESFQNNNDIDTGWLDHLIAEKVQAEKPDITMLGVVCGALNVADAMFRTQMTDFLHS	797
Mus_musculu ACC2	VNLLLETESFQNNNDIDTGWLDHLIAORVQAEKPDITMLGVVCGALNVADAMFRTQMTDFLHS	787
Bos_taurus ACC2	TNLLLETENFQNNNDIDTSWLDNLIAEKVQAEKPDITMLGVVCGALNVADSMFRTQMTDFLHS	770
Capra_hircus ACC2	TNLLLETENFQNNNDIDTSWLDNLIAEKVQAEKPDITMLGVVCGALNVADSMFRTQMTDFLHS	770
Danio_rerio ACC2	TKLLETESFRNNNDIDTGWLDHLIAADKVQAEKPDITMLGVVCGALNVADASFRESMSDFLHS	701
Sparus_aura ACC2	TKLLETESFRNNNDIDTGWLDHLIAEKVQAEKPDITMLGVVCGALNVADAFRKSMSDFLHS	761
Lates_calcarifer ACC2	TKLLETESFRNNNDIDTGWLDHLIAEKVQAEKPDITMLGVVCGALNVADAFRKSMSDFLHS	764
Oncorhynchus mykiss ACC2	TKLLETESFRNNNDIDTGWLDHLIAADKVQAEKPDITMLGVVCGALNVADAFRKSMSDFLHS	792
Larimichthys_crocea ACC2	TKLLETESFRNNNDIDTGWLDHLIAEKVQAEKPDITMLGVVCGALNVADAFRKSMSDFLHS	760
Consensus	llete f ndidt wld lia vqae pd lg vvgal vad fr m lhs	
Homo_sapien ACC2	LERGOVLPADSLNLIVDVELIYGGVKYILKVARQSPITMFVLIIMNGCHIEIDAHRLINDGGL	857
Mus_musculu ACC2	LERGOVLPADSLNLIVDVELIYGGIKYALKVARQSPITMFVLIIMNGCHIEIDAHRLINDGGL	847
Bos_taurus ACC2	LERGOVLPADSLNLIVDVELIYGGVKYILKVARQSPITMFVLIIMNGSHIEIDAHRLINDGGL	830
Capra_hircus ACC2	LERGOVLPADSLNLIVDVELIYGGVKYILKVARQSPITMFVLIIMNGSHIEIDAHRLINDGGL	830
Danio_rerio ACC2	LERGOVLPASLVNTVNVLDLIYDGVKYCLKVARQSPITYVIMMNGSDIEVDVHRLSDGGL	761
Sparus_aura ACC2	LERGOVLPASSLNLSVTVLDLIYEGVKYCLKVARQSPITYVIMMNGSNIEIDVHRLINDGGL	821
Lates_calcarifer ACC2	LERGOVLPASSLNLSVNVLDLIYEGVKCLKVARQSPITYVIMMNGSNIEIDVHRLSDGGL	824
Oncorhynchus mykiss ACC2	LERGOVLPASLLNTVVDLIYEGVKYCLKVARQSPITYVIMMNGSDIEIDVHRLSDGGL	852
Larimichthys_crocea ACC2	LERGOVLPASSLNLSVVDLIYEGVKYCLKVARQSPITYVIMMNGSNIEIDVHRLSDGGL	820
Consensus	lergqvlpa sl n v v liy g k lkvarqs t v mn ie d hrl dgg l	
Homo_sapien ACC2	LLSYNGSSYTTYMKEEVDSYRITIGNKTCVFEKENDPVTVLRSPSAGKLYOYITVEDGGHVE	917
Mus_musculu ACC2	LLSYNGSSYTTYMKEEVDSYRITIGNKTCVFEKENDPVTVLRSPSAGKLYOYITVEDGDHVE	907
Bos_taurus ACC2	LLSCSGNSYTTYMKEEVDSYRITIGNKTCVFEKENDPVTVLRSPSAGKLYKYITVADGEHVE	890
Capra_hircus ACC2	LLSCSGNSYTTYMKEEVDSYRITIGNKTCVFEKENDPVTVLRSPSAGKLYKYITVADGEHVE	890
Danio_rerio ACC2	LLSYGSSSYTTYMKEEIDRYRVTVGNKTCVFEKERDPTVLRSPSAGKLYOYVITDGSVHS	821
Sparus_aura ACC2	LLSYDGSSHTTYMKEEIDSYRITVGNKTCVFEKETDPTVLRSPSAGKLYOYITVEDGDHVC	881
Lates_calcarifer ACC2	LLSYDGSSHTTYMKEEVDSYRITVGNKTCVFEKETDPTVLRSPSAGKLYOYITVEDGGHIF	884
Oncorhynchus mykiss ACC2	LLSYNGSSYTTYMKEEVDSYRITVGNKTCVFEKERDPTVLRSPSAGKLYOYITVEDGGHIF	912
Larimichthys_crocea ACC2	LLSYDGSSHTTYMKEEVDSYRITVGNKTCVFEKETDPTVLRSPSAGKLYOYITCEDGAHVC	880
Consensus	lls g s tty kee d yr t gntctvfeke dptvlrs sagkl y dg h	



Homo_sapien ACC2	AGSSYAEMEVMKMTITINVOESGRVKYIKRPGAVLEBAGCVVARLELDDPSKVHPAEPTFG	977
Mus_musculu ACC2	AGSSYAEMEVMKMTITINVOESGRVKYIKRPGVILEBAGCVVARLELDDPSKVHAACTPTFG	967
Bos_taurus ACC2	AGGSYAIEIEMKMTITINVOESGRVKYVRRPGAVLEBAGCVVARLELDDPSKVHPAEPTFG	950
Capra_hircus ACC2	AGGSYAIEIEMKMTITINVOESGRVKYVRRPGAVLEBAGCVVARLELDDPSKVHPAEPTFG	950
Danio_rerio ACC2	ASQBYAEIEVMKMTITLHVHSGCIRFLKRPGLVLEBGCIVALMDLDDPSCHIQVKPNTIE	881
Sparus_aura ACC2	AGETYAEIEVMKMTITITVQSGCIHFVKRPGAVLEBGCVVVARILDHSSVHRVELNITA	941
Lates_calcarifer ACC2	AGETYAEIEVMKMTITITVQSGCIHFVKRPGAVLEBGCVMHMDLDDPSSIHRVELNITA	944
Oncorhynchus mykiss ACC2	AGNSYAIEIEMKMTITITVESGCVHYVKRHGAVLEBGCVVVARILDHDDPSNIQPVLENTA	972
Larimichthys_crocea ACC2	AGETYAEIEVMKMTITITVQSGCIHFVKRPGAVLEBGCVVVARILDHDDPSSIHLVELNITA	940
Consensus	a yae evmkm tlv g r g le g a ldd s	

Homo_sapien ACC2	BLPACQTLPLTIGEKLVHVFHVSLENLTNVMGFCLEPEPFSSIKLKEWVKQLMMLTLRHPSL	1037
Mus_musculu ACC2	BLPACQTLPLTIGEKLVHVFHVSLENLTNVMGFCLEPEPFSSIKLKEWVKQLMMLTLRHPSL	1027
Bos_taurus ACC2	BLPSCPTPLTIGEKLVHVFHVSLENLTNVMGFCLEPEPFSSIKLKEWVKQLMMLTLRHPSL	1010
Capra_hircus ACC2	BLPSCPTPLTIGEKLVHVFHVSLENLTNVMGFCLEPEPFSSIKLKEWVKQLMMLTLRHPSL	1010
Danio_rerio ACC2	BLPACQPLPMVGERLVHVFHVSLENLTNVMGFCLEPEPFSSIKLKEWVKQLMMLTLRHPSL	941
Sparus_aura ACC2	ALPFCQPLPMVGERLVHVFHVSLENLTNVMGFCLEPEPFSSIKLKEWVKQLMMLTLRHPSL	1001
Lates_calcarifer ACC2	ILPFCQPLPMVGERLVHVFHVSLENLTNVMGFCLEPEPFSSIKLKEWVKQLMMLTLRHPSL	1004
Oncorhynchus mykiss ACC2	SFPACQPLPMVGERLVHVFHVSLENLTNVMGFCLEPEPFSSIKLKEWVKQLMMLTLRHPSL	1032
Larimichthys_crocea ACC2	ILPFCQPLPMVGERLVHVFHVSLENLTNVMGFCLEPEPFSSIKLKEWVKQLMMLTLRHPSL	1000
Consensus	p q lp ge lhqvfh vlenl m g cl ep fs k k wv l lr psl	

Homo_sapien ACC2	PLLELQEIMTSVAGRIEAPVEKSVRRVMAQYASNITSVLCQFPSC.....	1082
Mus_musculu ACC2	PLLELQEIMTSVAGRIEAPVEKSVRRVMAQYASNITSVLCQFPSCQCWASGTLGKHSTTE	1087
Bos_taurus ACC2	PLLELQEIMTSVSGRVEAPVEKSVRRVMAQYASNITSVLCQFPSC.....	1055
Capra_hircus ACC2	PLLELQEIMTSVSGRVEAPVEKSVRRVMAQYASNITSVLCQFPSC.....	1055
Danio_rerio ACC2	PLLELQEIMTSVAGRIEAPVEKSVRRVMAQYASNITSVLCQFPSC.....	986
Sparus_aura ACC2	PLLELQEIMTSVAGRIEAPVEKSVRRVMAQYASNITSVLCQFPSC.....	1046
Lates_calcarifer ACC2	PLLELQEIMTSVAGRIEAPVEKSVRRVMAQYASNITSVLCQFPSC.....	1049
Oncorhynchus mykiss ACC2	PLLELQEIMTSVAGRIEAPVEKSVRRVMAQYASNITSVLCQFPSC.....	1077
Larimichthys_crocea ACC2	PLLELQEIMTSVAGRIEAPVEKSVRRVMAQYASNITSVLCQFPSC.....	1045
Consensus	pllelqe mtsv r p vek r vmaqyasnitsvlcqfpsq	

Homo_sapien ACC2	.....CIATILDCHAATLQKADREFFINTQSIQVLQYRSGIRGYMKSVVLDLIR	1136
Mus_musculu ACC2	LHPELLKIATILDCHAATLQKADREFFINTQSIQVLQYRSGIRGYMKSVVLDLIR	1147
Bos_taurus ACC2	.....CIATILDCHAATLQKADREFFINTQSIQVLQYRSGIRGYMKSVVLDLIR	1109
Capra_hircus ACC2	.....CIATILDCHAATLQKADREFFINTQSIQVLQYRSGIRGYMKSVVLDLIR	1109
Danio_rerio ACC2	.....RIANILDSHAATLQKADREFFINTQSIQVLQYRSGIRGYMKSVVLDLIR	1040
Sparus_aura ACC2	.....RIANILDSHAATLQKADREFFINTQSIQVLQYRSGIRGYMKSVVLDLIR	1100
Lates_calcarifer ACC2	.....RIANILDSHAATLQKADREFFINTQSIQVLQYRSGIRGYMKSVVLDLIR	1103
Oncorhynchus mykiss ACC2	.....RIANILDSHAATLQKADREFFINTQSIQVLQYRSGIRGYMKSVVLDLIR	1131
Larimichthys_crocea ACC2	.....RIANILDSHAATLQKADREFFINTQSIQVLQYRSGIRGYMKSVVLDLIR	1099
Consensus	ia ld haatlq kadre ff ntqsiqlvq yrsq rgymk vvl ll	

Homo_sapien ACC2	YLRVHHFQQAHYDKCVINLRECHKPDMSQVLDLIFSHAOVAKKNOLVIMLIDELCGPDP	1196
Mus_musculu ACC2	YLRVHHFQQAHYDKCVINLRECHKPDMSQVLDLIFSHAOVAKKNOLVIMLIDELCGPDP	1207
Bos_taurus ACC2	YLLVHHFQQAHYDKCVINLRECHKPDMSQVLDLIFSHAOVAKKNOLVIMLIDELCGPDP	1169
Capra_hircus ACC2	YLLVHHFQQAHYDKCVINLRECHKPDMSQVLDLIFSHAOVAKKNOLVIMLIDELCGPDP	1169
Danio_rerio ACC2	YLOVEMCFQQAHYDKCVINLRECHKPDMSQVLDLIFSHAOVAKKNOLVIMLIDELCGPDP	1100
Sparus_aura ACC2	YLEVEVTFQQAHYDKCVINLRECHKPDMSQVLDLIFSHAOVAKKNOLVIMLIDELCGPDP	1160
Lates_calcarifer ACC2	YLOVEMCFQQAHYDKCVINLRECHKPDMSQVLDLIFSHAOVAKKNOLVIMLIDELCGPDP	1163
Oncorhynchus mykiss ACC2	YLOVEMCFQQAHYDKCVINLRECHKPDMSQVLDLIFSHAOVAKKNOLVIMLIDELCGPDP	1191
Larimichthys_crocea ACC2	YLOVEMCFQQAHYDKCVINLRECHKPDMSQVLDLIFSHAOVAKKNOLVIMLIDELCGPDP	1159
Consensus	yl ve fqqahydkcvinlre ch kpdms vl ifsh qv kkn lv lid lc d	

Homo_sapien ACC2	SLSDELTSLDELTLQLSKSEPHCKVALRARQVLIASHLPSYELRHNQVESIFLSAIDMYGH	1256
Mus_musculu ACC2	SLSDELTSLDELTLQLSKSEPHCKVALRARQVLIASHLPSYELRHNQVESIFLSAIDMYGH	1267
Bos_taurus ACC2	SLSDELTSLDELTLQLSKSEPHCKVALRARQVLIASHLPSYELRHNQVESIFLSAIDMYGH	1229
Capra_hircus ACC2	SLSDELTSLDELTLQLSKSEPHCKVALRARQVLIASHLPSYELRHNQVESIFLSAIDMYGH	1229
Danio_rerio ACC2	TLADELMVILDELTLQLSKSEPHCKVALRARQVLIASHLPSYELRHNQVESIFLSAIDMYGH	1160
Sparus_aura ACC2	TLADELMVILDELTLQLSKSEPHCKVALRARQVLIASHLPSYELRHNQVESIFLSAIDMYGH	1220
Lates_calcarifer ACC2	TLADELMVILDELTLQLSKSEPHCKVALRARQVLIASHLPSYELRHNQVESIFLSAIDMYGH	1223
Oncorhynchus mykiss ACC2	TLADELMVILDELTLQLSKSEPHCKVALRARQVLIASHLPSYELRHNQVESIFLSAIDMYGH	1251
Larimichthys_crocea ACC2	TLADELMVILDELTLQLSKSEPHCKVALRARQVLIASHLPSYELRHNQVESIFLSAIDMYGH	1219
Consensus	l el il e tql e kvalrarq liashlpsyelrhqnqvesiflsaidmygh	

Homo_sapien ACC2	QFCPENLKKLILSETTIFDVLPTFFYHANKVVCMAALEVYVRRGYIAYELNSTQHROLOD	1316
Mus_musculu ACC2	QFCPENLKKLILSETTIFDVLPTFFYHANKVVCMAALEVYVRRGYIAYELNSTQHROLOD	1327
Bos_taurus ACC2	QFCPENLKKLILSETTIFDVLPTFFYHANKVVCMAALEVYVRRGYIAYELNSTQHROLOD	1289
Capra_hircus ACC2	QFCPENLKKLILSETTIFDVLPTFFYHANKVVCMAALEVYVRRGYIAYELNSTQHROLOD	1289
Danio_rerio ACC2	QFCPENLKKLILSETTIFDVLPTFFYHANKVVCMAALEVYVRRGYIAYELNSTQHROLOD	1220
Sparus_aura ACC2	QFCPENLKKLILSETTIFDVLPTFFYHANKVVCMAALEVYVRRGYIAYELNSTQHROLOD	1280
Lates_calcarifer ACC2	QFCPENLKKLILSETTIFDVLPTFFYHANKVVCMAALEVYVRRGYIAYELNSTQHROLOD	1283
Oncorhynchus mykiss ACC2	QFCPENLKKLILSETTIFDVLPTFFYHANKVVCMAALEVYVRRGYIAYELNSTQHROLOD	1311
Larimichthys_crocea ACC2	QFCPENLKKLILSETTIFDVLPTFFYHANKVVCMAALEVYVRRGYIAYELNSTQHROLOD	1279
Consensus	qfcpenlkkilset ifdvlp ffyh n vvcmaalevyvrrgyiayelns qh d	

Homo_sapien ACC2	GTCVVEFQFMLPSSHNP.....RMTVEISITNPD.	1345
Mus_musculu ACC2	GTCVVEFQFMLPSSHNP.....RMAVEISVSNPD.	1356
Bos_taurus ACC2	GTCVVEFQFMLPSSHNP.....RMTVEISVTNPE.	1318
Capra_hircus ACC2	GTCVVEFQFMLPSSHNP.....RMTVEISVTNPE.	1318
Danio_rerio ACC2	GTCVVEFQFMLPSSHNP.....RMTVEISVTNPE.	1272
Sparus_aura ACC2	GTCVVEFQFMLPSSHNP.....GSSPTLNSLCVCLVSRVFPVSGSGQF.	1325
Lates_calcarifer ACC2	GTCVVEFQFMLPSSHNP.....GSSPTLNSLCVCLVSRVFPVSGSGQF.	1320
Oncorhynchus mykiss ACC2	GTCVVEFQFMLPSSHNP.....GSSPTLNSLCVCLVSRVFPVSGSGQF.	1348
Larimichthys_crocea ACC2	GTCVVEFQFMLPSSHNP.....GSSPTLNSLCVCLVSRVFPVSGSGQF.	1316
Consensus	g c v fqfmlpsshnp.....r p	



Homo_sapien ACC2	.LLRHSTELFMDSGFSPLCORMGAMVAFRFEEDFTRNFDEVISCFANVPKDTPLFSEART	1404
Mus_musculu ACC2	.LLRHSTELFMDSGFSPLCORMGAMVAFRFEEDFTRNFDEVISCFANVQDTLLFSKACT	1415
Bos_taurus ACC2	.LLRHSTELFMDSGFSPLCORMGAMVAFRFEEDFTRNFDEVISCFANMPKDTPLFSEARN	1377
Capra_hircus ACC2	.LLRHSTELFMDSGFSPLCORMGAMVAFRFEEDFTRNFDEVISCFANVPKDTPLFSEARN	1377
Danio_rerio ACC2	AMRRQGSSEFLLEGALSPFCORMGAMVAFHSEDFHKKCFDEVICRFVDPCESSLEFDGCS	1332
Sparus_aura ACC2	KMRQSSSEFLDGLSLSPFCORMGAMVAFCVDDFKRNFDEVLSFAEPILLETAPYSES.S	1384
Lates calcarifer ACC2	KMRQGSSEFLLEGALSPFCORMGAMVAFCFDDFKRNFDEVLSFAEPILLETAPYSES.S	1380
Oncorhynchus mykiss ACC2	EMRRQGSSEFLDGAFSPPFCORMGAMVAFCFDDFKRNFDEVLSFAEPILLESPLFEACP	1408
Larimichthys_crocea ACC2	KMRQSSSEFLLEGALSPFCORMGAMVAFCFDDFKRNFDEVLSFAEPILLESPLFEACPS	1376
Consensus	r elf sp qr gamvaf f r dev f	
Homo_sapien ACC2	SLYSEDDCKSIREDPIHILNVSTOCADHLDEALVPILRTFVQSKKNIIVDYGLRRITFL	1464
Mus_musculu ACC2	SLYSEDDCKSIREDPIHILNVSTOCADHLDEALVPVFAFVQSKKNIIVDYGLRRITFL	1475
Bos_taurus ACC2	SLYSEDDCKSIREDPIHILNVSTOCADHLDEALVPILRTFVQSKKNIIVDYGLRRITFL	1437
Capra_hircus ACC2	SLYSEDDCKSIREDPIHILNVSTOCADHLDEALVPILRTFVQSKKNIIVDYGLRRITFL	1437
Danio_rerio ACC2	TFCDGESCKNMKENPIHITINVSTKQADTEDDDALVTAFTAFASKKSLIYDYGIIRRVTF	1392
Sparus_aura ACC2	SLYSEDDCKSIREDPIHITINVSTKQADTEDDDALVTAFTAFASKKSLIYDYGIIRRVTF	1444
Lates calcarifer ACC2	SLYSEDDCKSIREDPIHITINVSTKQADTEDDDALVTAFTAFASKKSLIYDYGIIRRVTF	1440
Oncorhynchus mykiss ACC2	SLYSEDDCKSIREDPIHITINVSTKQADTEDDDALVTAFTAFASKKSLIYDYGIIRRVTF	1468
Larimichthys_crocea ACC2	SLYSEDDCKSIREDPIHITINVSTKQADTEDDDALVTAFTAFASKKSLIYDYGIIRRVTF	1436
Consensus	e pihi nv ad d lv f sk l g rr tfl	
Homo_sapien ACC2	IAQKEFFPKFFTFRARDGFEDRIYRNLEPALAFQLELNMRNFDLTAVPCANHKMHLYL	1524
Mus_musculu ACC2	IAQKEFFPKFFTFRARDGFEDRIYRNLEPALAFQLELNMRNFDLTAVPCANHKMHLYL	1535
Bos_taurus ACC2	IAQKEFFPKFFTFRARDGFEDRIYRNLEPALAFQLELNMRNFDLTAVPCANHKMHLYL	1497
Capra_hircus ACC2	IAQKEFFPKFFTFRARDGFEDRIYRNLEPALAFQLELNMRNFDLTAVPCANHKMHLYL	1497
Danio_rerio ACC2	IAQKEFFPKFFTFRARDGFEDRIYRNLEPALAFQLELNMRNFDLTAVPCANHKMHLYL	1452
Sparus_aura ACC2	IAQKEFFPKFFTFRARDGFEDRIYRNLEPALAFQLELNMRNFDLTAVPCANHKMHLYL	1504
Lates calcarifer ACC2	IAQKEFFPKFFTFRARDGFEDRIYRNLEPALAFQLELNMRNFDLTAVPCANHKMHLYL	1500
Oncorhynchus mykiss ACC2	IAQKEFFPKFFTFRARDGFEDRIYRNLEPALAFQLELNMRNFDLTAVPCANHKMHLYL	1528
Larimichthys_crocea ACC2	IAQKEFFPKFFTFRARDGFEDRIYRNLEPALAFQLELNMRNFDLTAVPCANHKMHLYL	1496
Consensus	aq efpk ftfrard f edriyr lepalafql el r rnf a pca m yl	
Homo_sapien ACC2	GAARVQEGAEVTDYRFFIRAIIRHSDLTITKEASFEYLQNEGERLLLEAMDELEVAHNTS	1584
Mus_musculu ACC2	GAARVQEGAEVTDYRFFIRAIIRHSDLTITKEASFEYLQNEGERLLLEAMDELEVAHNTS	1595
Bos_taurus ACC2	GAARVQEGAEVTDYRFFIRAIIRHSDLTITKEASFEYLQNEGERLLLEAMDELEVAHNTS	1557
Capra_hircus ACC2	GAARVQEGAEVTDYRFFIRAIIRHSDLTITKEASFEYLQNEGERLLLEAMDELEVAHNTS	1557
Danio_rerio ACC2	GAARVQEGAEVTDYRFFIRAIIRHSDLTITKEASFEYLQNEGERLLLEAMDELEVAHNTS	1512
Sparus_aura ACC2	GAARVQEGAEVTDYRFFIRAIIRHSDLTITKEASFEYLQNEGERLLLEAMDELEVAHNTS	1564
Lates calcarifer ACC2	GAARVQEGAEVTDYRFFIRAIIRHSDLTITKEASFEYLQNEGERLLLEAMDELEVAHNTS	1560
Oncorhynchus mykiss ACC2	GAARVQEGAEVTDYRFFIRAIIRHSDLTITKEASFEYLQNEGERLLLEAMDELEVAHNTS	1588
Larimichthys_crocea ACC2	GAARVQEGAEVTDYRFFIRAIIRHSDLTITKEASFEYLQNEGERLLLEAMDELEVAHNTS	1556
Consensus	gaa v eg evt d r fir i r hsdltitkeasfeylqnegerllleamdelevaf nt	
Homo_sapien ACC2	VRTDCNHIFLNFVPTVIMDPKIEESVSRMVMRYGSRLWKLRLVLAQELKINIRLTPTGSA	1644
Mus_musculu ACC2	VRTDCNHIFLNFVPTVIMDPKIEESVSRMVMRYGSRLWKLRLVLAQELKINIRLTPTGSA	1655
Bos_taurus ACC2	VRTDCNHIFLNFVPTVIMDPKIEESVSRMVMRYGSRLWKLRLVLAQELKINIRLTPTGSA	1617
Capra_hircus ACC2	VRTDCNHIFLNFVPTVIMDPKIEESVSRMVMRYGSRLWKLRLVLAQELKINIRLTPTGSA	1617
Danio_rerio ACC2	VRTDCNHIFLNFVPTVIMDPKIEESVSRMVMRYGSRLWKLRLVLAQELKINIRLTPTGSA	1572
Sparus_aura ACC2	VRTDCNHIFLNFVPTVIMDPKIEESVSRMVMRYGSRLWKLRLVLAQELKINIRLTPTGSA	1624
Lates calcarifer ACC2	VRTDCNHIFLNFVPTVIMDPKIEESVSRMVMRYGSRLWKLRLVLAQELKINIRLTPTGSA	1620
Oncorhynchus mykiss ACC2	VRTDCNHIFLNFVPTVIMDPKIEESVSRMVMRYGSRLWKLRLVLAQELKINIRLTPTGSA	1648
Larimichthys_crocea ACC2	VRTDCNHIFLNFVPTVIMDPKIEESVSRMVMRYGSRLWKLRLVLAQELKINIRLTPTGSA	1616
Consensus	rtcdcnhiflnfvptvimdp kieesvr mvmrygsrlwklrlvlae kinir t	
Homo_sapien ACC2	VPILRLFTNESGGYLDISLYKEVTDPSGQIMFQSYGDKQGPITHGMLINTPVYTKDLLQA	1704
Mus_musculu ACC2	VPILRLFTNESGGYLDISLYKEVTDPSGQIMFQSYGDKQGPITHGMLINTPVYTKDLLQA	1715
Bos_taurus ACC2	VPILRLFTNESGGYLDISLYKEVTDPSGQIMFQSYGDKQGPITHGMLINTPVYTKDLLQA	1677
Capra_hircus ACC2	VPILRLFTNESGGYLDISLYKEVTDPSGQIMFQSYGDKQGPITHGMLINTPVYTKDLLQA	1677
Danio_rerio ACC2	VPILRLFTNESGGYLDISLYKEVTDPSGQIMFQSYGDKQGPITHGMLINTPVYTKDLLQA	1632
Sparus_aura ACC2	VPILRLFTNESGGYLDISLYKEVTDPSGQIMFQSYGDKQGPITHGMLINTPVYTKDLLQA	1684
Lates calcarifer ACC2	VPILRLFTNESGGYLDISLYKEVTDPSGQIMFQSYGDKQGPITHGMLINTPVYTKDLLQA	1680
Oncorhynchus mykiss ACC2	VPILRLFTNESGGYLDISLYKEVTDPSGQIMFQSYGDKQGPITHGMLINTPVYTKDLLQA	1708
Larimichthys_crocea ACC2	VPILRLFTNESGGYLDISLYKEVTDPSGQIMFQSYGDKQGPITHGMLINTPVYTKDLLQA	1676
Consensus	p rlf tnesggyldislye v d g i f s g kgg gmlin pyvtkdllq	
Homo_sapien ACC2	KRFQAQSLGTTYVYDFPEMFQALFKLWGPDKYPKDILTYTELVLDSQGQLVEMNRLPG	1764
Mus_musculu ACC2	KRFQAQSLGTTYVYDFPEMFQALFKLWGPDKYPKDILTYTELVLDSQGQLVEMNRLPG	1775
Bos_taurus ACC2	KRFQAQSLGTTYVYDFPEMFQALFKLWGPDKYPKDILTYTELVLDSQGQLVEMNRLPG	1737
Capra_hircus ACC2	KRFQAQSLGTTYVYDFPEMFQALFKLWGPDKYPKDILTYTELVLDSQGQLVEMNRLPG	1737
Danio_rerio ACC2	KRFQAQSLGTTYVYDFPEMFQALFKLWGPDKYPKDILTYTELVLDSQGQLVEMNRLPG	1692
Sparus_aura ACC2	KRFQAQSLGTTYVYDFPEMFQALFKLWGPDKYPKDILTYTELVLDSQGQLVEMNRLPG	1744
Lates calcarifer ACC2	KRFQAQSLGTTYVYDFPEMFQALFKLWGPDKYPKDILTYTELVLDSQGQLVEMNRLPG	1740
Oncorhynchus mykiss ACC2	KRFQAQSLGTTYVYDFPEMFQALFKLWGPDKYPKDILTYTELVLDSQGQLVEMNRLPG	1768
Larimichthys_crocea ACC2	KRFQAQSLGTTYVYDFPEMFQALFKLWGPDKYPKDILTYTELVLDSQGQLVEMNRLPG	1736
Consensus	krfqaq lgtty ydfpemfraq lfk w pkd l elvld lv mnr pg	



Homo_sapien ACC2	CNEVGMVAFKMRFKTQEYPEGRDVIIVICNDITFRIGSFGEEDLLYLRASEARAEGLIK	1824
Mus_musculu ACC2	CNEVGMVAFKMRFKTPEYPEGRDVIIVICNDITFRIGSFGEEDLLYLRASEARAEGLIK	1835
Bos_taurus ACC2	CNEVGMVAFKMRFKTILEYPEGRDIIILISNDITFRIGSFGEEDLLYLRASEARAEGLIK	1797
Capra_hircus ACC2	CNEVGMVAFKMRFKTILEYPEGRDIIILISNDITFRIGSFGEEDLLYLRASEARAEGLIK	1797
Danio_rerio ACC2	DNEVGMVAFKMRFKTPEYPEGRDIIIVICNDITHMIGSFGEEDLLYLRASEARAEGLIK	1752
Sparus_aura ACC2	DNDVGMVAFKMRFKTPEYPEGRDIIIVICNDITHMIGSFGEEDLLYLRASEARAEGLIK	1804
Lates calcarifer ACC2	DNDVGMVAFKMRFKTPEYPEGRDIIIVICNDITHMIGSFGEEDLLYLRASEARAEGLIK	1800
Oncorhynchus mykiss ACC2	DNEVGMVAFKMRFKTPEYPEGRDIIIVICNDITHMIGSFGEEDLLYLRASEARAEGLIK	1828
Larimichthys_crocea ACC2	DNDVGMVAFKMRFKTPEYPEGRDIIIVICNDITHMIGSFGEEDLLYLRASEARAEGLIK	1796
Consensus	n vgm vaf m kt eypegrd i ndit igsfg ed l ase ar egip	
Homo_sapien ACC2	TYVAANSGARIGMAEEIKHMFHVAVWDPEDPHGKFKYLYLTPQDYTRISSLSNVHCKHIE	1884
Mus_musculu ACC2	TYLAANSGARIGMAEEIKQIFQVAVWDPEDPHGKFRYLYLTPQDYTRISSLSNVHCKHIE	1895
Bos_taurus ACC2	VYLAANSGARIGLAEEIKHMFQVAVWDPEDPHGKIKYLYLTPQDYTRISSLSNVHCKHVE	1857
Capra_hircus ACC2	VYLAANSGARIGLAEEIKHMFQVAVWDPEDPHGKIKYLYLTPQDYTRISSLSNVHCKHVE	1857
Danio_rerio ACC2	TYISANSGARIGLAEEIRHMFQVAVWDPEDPYKGFYLYLTPQDYTRISSLSNVHCHHVE	1812
Sparus_aura ACC2	TYIAANSGARIGLAEEIKHMFQVAVWDPADPYKGFYLYLTPQDYTRISSTSAVHCHHVE	1864
Lates calcarifer ACC2	VYIAANSGARIGLAEEIKHMFQVAVWDPADPYKGFYLYLTPQDYTRISSTSAVHORHVE	1860
Oncorhynchus mykiss ACC2	TYISANSGARIGLAEEIRHMFQVAVWDPEDPYKGFYLYLTPQDYTRISSTSAVHCHHVE	1888
Larimichthys_crocea ACC2	TYIAANSGARIGLAEEIKHMFQVAVWDPEDPYKGFYLYLTPQDYTRISSTSAVHCHHVE	1856
Consensus	y ansgar g aeel f vaw dp dp kg ylyltpqdyt iss vhc h e	
Homo_sapien ACC2	EGGESRYVITDIIIGKDDGLGVENLRGSGMTAGESSLAYEFTVTISVMTCRALGIGAYLVR	1944
Mus_musculu ACC2	EGGESRYVITDVIGKDDANLGVENLRGSGMTAGESSLAYEFTVTISVMTCRALGIGAYLVR	1955
Bos_taurus ACC2	EDGESRYVITDIIIGKEEGLGVENLRGSGMTAGETSQAYDEIVTISVMTCRALGIGAYLVR	1917
Capra_hircus ACC2	EDGESRYVITDIIIGKEEGLGVENLRGSGMTAGETSQAYDEIVTISVMTCRALGIGAYLVR	1917
Danio_rerio ACC2	EGGESRYVITDIIIGKEEGLGVENLRGSGMTAGETSQAYKEIITISVMTCRALGIGAYLVR	1872
Sparus_aura ACC2	EGGESRYVITDIIIGKDDGIGVENLRGSGMTAGESSQAYEIIITISVMTCRALGIGAYLVR	1924
Lates calcarifer ACC2	EGGESRYVITDIIIGKDDGLGVENLRGSGMTAGETSQAYEIIITISVMTCRALGIGAYLVR	1920
Oncorhynchus mykiss ACC2	EGGESRYVITDIIIGKDDGLGVENLRGSGMTAGESSQAYEIIITISVMTCRALGIGAYLVR	1948
Larimichthys_crocea ACC2	EGGESRYVITDIIIGKDDGLGVENLRGSGMTAGESSQAYEIIITISVMTCRALGIGAYLVR	1916
Consensus	gesry d ig gvenlrsgs iage s y tis v cra gigaylvr	
Homo_sapien ACC2	LGQRVIQVENSIIILTGASALNKVLGREVYTSNNQLGGVQIMHNGVSHITVPDDFEGVY	2004
Mus_musculu ACC2	LGQRVIQVENSIIILTGAGALNKVLGREVYTSNNQLGGVQIMHNGVSHITVPDDFEGVC	2015
Bos_taurus ACC2	LGQRVIQVENSIIILTGATALNKVLGRDVYTSNNQLGGVQIMHNGVSHITVPDDFEGVC	1977
Capra_hircus ACC2	LGQRVIQVENSIIILTGATALNKVLGRDVYTSNNQLGGVQIMHNGVSHITVPDDFEGVC	1977
Danio_rerio ACC2	LGQRVIQVENSIIILTGAGALNKVLGREVYTSNNQLGGVQIMHNGVTHITVPDDFEGVL	1932
Sparus_aura ACC2	LGQRVIQVENSIIILTGAGALNKVLGREVYTSNNQLGGVQIMHNGVTHITVPDDFEGVF	1984
Lates calcarifer ACC2	LGQRVIQVENSIIILTGAGALNKVLGREVYTSNNQLGGVQIMHNGVTHITVPDDFEGVF	1980
Oncorhynchus mykiss ACC2	LGQRVIQVENSIIILTGAGALNKVLGREVYTSNNQLGGVQIMHNGVTHITVPDDFEGVF	2008
Larimichthys_crocea ACC2	LGQRVIQVENSIIILTGAGALNKVLGREVYTSNNQLGGVQIMHNGVTHITVPDDFEGVF	1976
Consensus	lgqrviqvenshiiltga alnkvlgr vytsnnqlgg qimh ngv h tvpddfegv	
Homo_sapien ACC2	TILEWLSYMPKDNHSPVPIITTPDPIREIEFTETRAPYDPRWMLAGRPHPTLKGWQSG	2064
Mus_musculu ACC2	TILEWLSFIPKDNHSPVPIITTPDPIREIEFTETRAPYDPRWMLAGRPHPTLKGWQSG	2075
Bos_taurus ACC2	TILEWLSYMPKDNHSPVPIITPKDPIREIEFTETSRGPYDPRWMLAGRPHPTLKGWQSG	2037
Capra_hircus ACC2	TILEWLSYMPKDNHSPVPIITPKDPIREIEFTETSRGPYNPRWMLAGRPHPTLKGWQSG	2037
Danio_rerio ACC2	TILEWLSYMPKSNHSPVPIKPATDPVDREIDFETRAPYDPRWMLAGRPHPTLKGWQSG	1992
Sparus_aura ACC2	TILEWLSYMPKKNHSPVPIATADPDREIDYETRAPYDPRWMLAGRPHPTLKGWQSG	2044
Lates calcarifer ACC2	TILEWLSYMPKKNHSPVPIATDPDREIEFTETRAPYDPRWMLAGRPHPTLKGWQSG	2040
Oncorhynchus mykiss ACC2	TILEWLSYMPKTHHSPVPIITPKDPIREIEFTETRAPYDPRWMLAGRPHPTLKGWQSG	2068
Larimichthys_crocea ACC2	TILEWLSYMPKKNHSPVPIITDTPDREIEFTETRAPYDPRWMLAGRPHPTLKGWQSG	2036
Consensus	til wls pk spvp dp rei p py prw l grphp g wqsg	
Homo_sapien ACC2	FFDHGSFKEIMAPNAQTVVIGRARLGGIPLGVIAVETRTVEVAVPADPANLDSEAKIIQQ	2124
Mus_musculu ACC2	FFDHGSFKEIMAPNAQTVVIGRARLGGIPLGVIAVETRTVEVAVPADPANLDSEAKIIQQ	2135
Bos_taurus ACC2	FFDHGSFKEIMVPAQTVVIGRARLGGIPLGVIAAETRTVELVVPADPANLDSEAKIIQQ	2097
Capra_hircus ACC2	FFDHGSFKEIMVPAQTVVIGRARLGGIPLGVIAAETRTVEVAVPADPANLDSEAKIIQQ	2097
Danio_rerio ACC2	FFDHGSFKEIMATNAQTVVIGRARLGGIPLGVIAVETRTVELAIPADPANLDSEAKLIQQ	2052
Sparus_aura ACC2	FFDHGSFKEIMESNAQTVVIGRARLGGIPLGVIAVETRSVELTIPADPANLDSEAKVLQQ	2104
Lates calcarifer ACC2	FFDHGSFKEIMGSNAQTVVIGRARLGGIPLGVIAVETRSVEFTVPADPANLDSEAKVLQQ	2100
Oncorhynchus mykiss ACC2	FFDHGSFKEIMVGSNAQTVVIGRARLGGIPLGVIAVETRTVEVAIPADPANLDSEAKVLQQ	2128
Larimichthys_crocea ACC2	FFDHGSFKEIMESNAQTVVIGRARLGGIPLGVIAVETRTVEFTVPADPANLDSEAKVLQQ	2096
Consensus	f d gsf e m wa tvv grarlggi gv ia etr ve padpanldse qq	
Homo_sapien ACC2	AGQVWFPSAANKTAQATDFNREKPLPLMIFANWRGFSGGMKDMYDQVLKFGAYIVDGLRQ	2184
Mus_musculu ACC2	AGQVWFPSAANKTAQATDFNREKPLPLMIFANWRGFSGGMKDMYEQMLKFGAYIVDGLRL	2195
Bos_taurus ACC2	AGQVWFPSAANKTAQATDFNREKPLPLMIFANWRGFSGGMKDMYDQVLKFGAYIVDGLRK	2157
Capra_hircus ACC2	AGQVWFPSAANKTAQATDFNREKPLPLMIFANWRGFSGGMKDMYDQVLKFGAYIVDGLRK	2157
Danio_rerio ACC2	AGQVWFPSAANKTAQATDFNREKPLPLMIFANWRGFSGGMKDMYDQVLKFGAYIVDALRE	2112
Sparus_aura ACC2	AGQVWFPSAANKTAQATDFNREKPLPLMIFANWRGFSGGMKDMYDQVLKFGAYIVDALRG	2164
Lates calcarifer ACC2	AGQVWFPSAANKTAQATDFNREKPLPLMIFANWRGFSGGMKDMYDQVLKFGAYIVDALRG	2160
Oncorhynchus mykiss ACC2	AGQVWFPSAANKTAQATDFNREKPLPLMIFANWRGFSGGMKDMYDQVLKFGAYIVDGLRE	2188
Larimichthys_crocea ACC2	AGQVWFPSAANKTAQATDFNREKPLPLMIFANWRGFSGGMKDMYDQILKFGAYIVDALRG	2156
Consensus	agqvwpfda ktaq dfn e lplm fanwrgfsggm kdm y q lk g yivd l	
Homo_sapien ACC2	YKQPILYIYPFAELRGGSWVVIDPTINPLCIEMYADKESRGVLEBEGTVEIKRKKDL	2244
Mus_musculu ACC2	YEQPILYIYPFAELRGGSWVVLDSTINPLCIEMYADKESRGVLEBEGTVEIKRKKDL	2255
Bos_taurus ACC2	YRQPVLIIYPFAEVRGGSWAVDTSINPLCIEMYADRESRASVLEBEGTVEIKYQKKDL	2217
Capra_hircus ACC2	YRQPVLIIYPFAEVRGGSWAVDASINPLCIEMYADRDSRASVLEBEGTVEIKYRKKDL	2217
Danio_rerio ACC2	FSQPVLIIYPFAELRGGSWVVIDPTINLQHMELYADRESRGVLEBEGTVEIKRKKDL	2172
Sparus_aura ACC2	FHQPVLIIYPFAELRGGSWVVIDPTINPLCMELYADKDSRGVLEBEGTVEIKRKKDL	2224
Lates calcarifer ACC2	FHQPVLIIYPFAELRGGSWVVIDPTINPLCMELYADRESRGVLEBEGTVEIKRKKDL	2220
Oncorhynchus mykiss ACC2	FRQPVLIIYPFAELRGGSWVVIDPTINLQHMELYADRESRGVLEBEGTVEIKRKKDL	2248
Larimichthys_crocea ACC2	FHQPVLIIYPFAELRGGSWVVIDPTINPLCMELYADRESRGVLEBEGTVEIKRKKDL	2216
Consensus	qp l yipp ae rggs w v d in e yad sr vle egtveik kdl	



Homo_sapien ACC2	IKSMRRIDPAYKKIMEOLGE....PDLSCKDRKDLBGRLKAREDLLLPYHQVAVQFADF	2300
Mus_musculu ACC2	VKTIRRIDPVCCKIVGQIGK....AQLPKDRKLEBGLKAREELLPLPYHQVAVQFADL	2311
Bos_taurus ACC2	VKTIRRIDPISKKIVEOLGV....SELSDTRKLEBGLKAREDLLLPYHQVAVQFADL	2273
Capra_hircus ACC2	VKTIRRIDPVSKKIVEOLGM....SELSDTRKLEBGLKAREDLLLPYHQVAVQFADL	2273
Danio_rerio ACC2	LKTMRRIDPVYSRLAEQLGK....PDIPSQERKDLBAKLKAREELLPLPYHQVAVQFVDL	2228
Sparus_aura ACC2	LKTMRRIDSVYAGIVEQLAS....PBLSDKQSRLEBLKLKAREELLPLPYHQVAVQFVEL	2280
Lates calcarifer ACC2	LKTMRRIDSVYASIVDQLAS....PBLSDKQCKELBAKLKAREELLPLPYHQVAVQFVDL	2276
Oncorhynchus mykiss ACC2	LKTMRRIDSVYAGIAEQKQPGTPEITDKQRKDLBAKLKAREELLPLPYHQVAVQFVDL	2308
Larimichthys_crocea ACC2	LKTMRRIDSVYAGIVEQLAS....LPLSDKQCKELBSKLKAREELLPLPYHQVAVQFVEL	2272
Consensus	k rr d l ql l le l re l p yhqva f	
Homo_sapien ACC2	HDTFGRMLEKGVISDILEWKTARTFFLYWRLRRLLEDOVKCEILCASGELSHVHIQSMLR	2360
Mus_musculu ACC2	HDTPGHMLEKGITSDVLEWKTARTFFLYWRLRRLLEBAQVKCEILRASPEINHEHIQSMLR	2371
Bos_taurus ACC2	HDTAGRMLEKGVINDILEWKTARSTFFLYWRLRRLLEBQVKCEILRACPELSHMHVQSMLR	2333
Capra_hircus ACC2	HDKAGRMLEKGVINDILEWKTARSTFFLYWRLRRLLEBQVKCEILRACPELSHMHVQSMLR	2333
Danio_rerio ACC2	HDTFGRMCEKGVITDILDWKTARSTFFLYWRLRRLLEBQVKCEILCANQELSDGHVQSMLR	2288
Sparus_aura ACC2	HDTFGRMCEKGVITDILDWKNVRTFFLYWRLRRLLEBQVKCEILCANAEISDGHVQSMLR	2340
Lates calcarifer ACC2	HDTFGRMCEKGVITDILDWKNVRTFFLYWRLRRLLEBQVKCEILCANKLSDGHVQSMLR	2336
Oncorhynchus mykiss ACC2	HDTFGRMHEKGAITDILDWKNVSTFFLYWRLRRLLEBQVKCEILCANPEISDGHVQSMLR	2368
Larimichthys_crocea ACC2	HDTFGRMCEKGVITDILDWKNVRTFFLYWRLRRLLEBQVKCEILCANKLSDGHVQSMLR	2332
Consensus	hd g m ekg i d l wk r ywrlrrllle vke a l h qsmrlr	
Homo_sapien ACC2	RWFVETEGAVKAYLWDNNQVAVVWLEBQHQAQGLGERSITIRENITYLKHDSVLKTIIRGLV	2419
Mus_musculu ACC2	RWFVETEGAVKAYLWDSNQVAVVWLEBQHWSAKDGLRSTIRENINYLKRDSVLKTIQSLV	2430
Bos_taurus ACC2	RWFVETEGAVKAYLWDNNQVAVVWLEBAHQASGLHSTIRENITCLRRDSALKTIQGLV	2392
Capra_hircus ACC2	RWFVETEGAVKAYLWDNNQVAVVWLEBHQAGGLHSTIRENIACLKRDALKTIIRGLV	2392
Danio_rerio ACC2	RWFVETEGAVKAYLWDNNKAVVWLEPNNSQDGLTRSVIRENICKIKRDYALKHIRSLV	2347
Sparus_aura ACC2	RWFVETEGTVKAYLWDNNQAVVWLEBKHLPEDGLTRSAIRENICKYLRKRENTLKHIRSLV	2399
Lates calcarifer ACC2	RWFVETEGTVKAYLWDNNQAVVWLEBKHLSQBDGLTRSAIRENICKYLRKRENTLKHIRSLV	2395
Oncorhynchus mykiss ACC2	RWFVETEGTVKAYLWDNNKAVVWLEBKHLLAKEDGLTRSAIRENICKYLRDHALKHIRSLV	2427
Larimichthys_crocea ACC2	RWFVETEGTVKAYLWDNNQAVVWLEBKHLSSEEDGLTRSAIRENICKYLRKRENTLKHIRSLV	2391
Consensus	rwfveteg v aylwd n vv wle g s ireni lk i v	
Homo_sapien ACC2	BENFEVAVDCVIYILSCHISFAERAQVHLLSTMDSPAS	2457
Mus_musculu ACC2	QEHFEVIMDCVAYILSCHLTFEAETIQVAQLLSTTESPAS	2468
Bos_taurus ACC2	QENPELAMDSLVIYISCHISFAERAQVIHLLSTTDGPAS	2430
Capra_hircus ACC2	QENPELAMDSLVIYISCHISFAERAQVIHLLSTVDGPAS	2430
Danio_rerio ACC2	QANPEVTMDCIHMAQNITFSQRAKVCHLLATMDNSTT	2385
Sparus_aura ACC2	QANPDLAMDCIHHMSQNTFSQRAELSHLLATMDDTST	2437
Lates calcarifer ACC2	QANPDVAMDCIHHMSQNTFSQRAKLHLLATVDNTST	2433
Oncorhynchus mykiss ACC2	QANPEVTMDCIHMSQNTFSQRAKISHLLATMDGTAP	2465
Larimichthys_crocea ACC2	QANPDVAMDCIHHMSHNTFSQRAKLSHLLATMDSTST	2429
Consensus	p d p r ll t	

**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.