Figure S2 *COLQ* CDS and protein sequence. Presented are the feline wild-type and mutated CDS and amino acid *COLQ* sequences. Boldface indicates the base substitution in the CDS (c.1190G>A) and the associated amino acid substitution (p.397C>Y).

```
CDS wild-type
ATGGTTGTCCTGAATCCAGTGACTTTGGGAATCTATCTGCAGCTTTTCTTCCGCTTTATC
CDS mutated    ------------------------------------------------------------
Prot wild-type M  V  V  L  N  P  V  T  L  G  I  Y  L  Q  L  F  F  R  F  I
Prot mutated  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -

CDS wild-type
GTGTCTCAGCCTACTTTCGTCAACAGCGTCCTCCCAATTTCAGCAGCTCTTCCCGGCCTG
CDS mutated    ------------------------------------------------------------
Prot wild-type V  S  Q  P  T  F  V  N  S  V  L  P  I  S  A  A  L  P  G  L
Prot mutated  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -

CDS wild-type
GATCAGAAGAAGCGTGGCAGCCACAGAGCATGCTGCCTCCTGACGCCCCCTCCACCCCCG
CDS mutated    ------------------------------------------------------------
Prot wild-type D  Q  K  K  R  G  S  H  R  A  C  C  L  L  T  P  P  P  P  P
Prot mutated  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -

CDS wild-type
CTGTTCCCACCACCATTCTTCAGAGGAGGCCGAAGCCTGCTTCTCTCCCCAGACATGAAG
CDS mutated    ------------------------------------------------------------
Prot wild-type L  F  P  P  P  F  F  R  G  G  R  S  L  L  L  S  P  D  M  K
Prot mutated  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -

CDS wild-type
AATTTCATCCTGGAACTGGAGACCTCACAGTCCTCATGTGTGCAAGGATCACTCGGCTCC
CDS mutated    ------------------------------------------------------------
Prot wild-type N  F  I  L  E  L  E  T  S  Q  S  S  C  V  Q  G  S  L  G  S
Prot mutated  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -

CDS wild-type
CCTGGGCCCCCTGGCCCCCAGGGTCCACCGGGACTTCCTGGCAAGATAGGACCAAAGGGA
CDS mutated    ------------------------------------------------------------
Prot wild-type P  G  P  P  G  P  Q  G  P  P  G  L  P  G  K  I  G  P  K  G
Prot mutated  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -

CDS wild-type
GAAAAGGGGGGAGCTTGGCCTACCAGGAAGAAAGGGTAGACCTGGCCCCCCGGGTGTTCCT
CDS mutated    ------------------------------------------------------------
Prot wild-type E  K  G  E  L  G  L  P  G  R  K  G  R  P  G  P  P  G  V  P
Prot mutated  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -
```

CDS wild-type
GGCATGCCTGGGCCAGTCGGCCCTGAAGGACCCAGGGGGTGAAAAAGGTGACCTGGGTGTG
CDS mutated   --
Prot wild-type G M P G P V G P E G P R G E K G D L G V
Prot mutated   -

CDS wild-type
ATGGGCTTGCCAGGGTCAAGAGGACCAATGGGCTTCAAGGGCTACCCTGGATCCAGAGGG
CDS mutated   --
Prot wild-type M G L P G S R G P M G F K G Y P G S R G
Prot mutated   -

CDS wild-type
GAAAAGGGATCCAGAGGTGAAAGGGGTGACTTGGGTCCCAAAGGAGAAAAGGGTTTCCCG
CDS mutated   --
Prot wild-type E K G S R G E R G D L G P K G E K G F P
Prot mutated   -

CDS wild-type
GGATTTCCTGGAATGTTGGGGCAGAAAGGTGAAATGGGTCCAAAGGGTGAGCCTGGGATA
CDS mutated   --
Prot wild-type G F P G M L G Q K G E M G P K G E P G I
Prot mutated   -

CDS wild-type
GCAGGACACAGGGGACCCAGAGGAAGACCAGGAAAACGAGGCAAGCAGGGGCAGAAGGG
A
CDS mutated   --
Prot wild-type A G H R G P R G R P G K R G K Q G Q K G
Prot mutated   -

CDS wild-type
GATAGTGGAGTAATGGGCCCACCAGGCAAGCCTGGGCCTTCTGGTCAACCTGGCCGTCCA
CDS mutated   --
Prot wild-type D S G V M G P P G K P G P S G Q P G R P
Prot mutated   -

CDS wild-type
GGTCCCCCAGGCCCCCCGGGCCCCCGATCCGCAGGACAACTTGTGATGGGACCCAAAGGG
CDS mutated   --
Prot wild-type G P P G P P G P R S A G Q L V M G P K G
Prot mutated   -

CDS wild-type
GACAGAGGATTTCCCGGGCCTCCAGGAAGTTGTCTTTGTGGAACCCCTACGAATGTGAAT
CDS mutated   --
Prot wild-type D R G F P G P P G S C L C G T P T N V N
Prot mutated   -

CDS wild-type
AACCCTTCCTACAGGGAATCCATGTATGGGTCCAGCTCCCCTCATGTTCCTGTGATTTTT
CDS mutated   --
Prot wild-type N P S Y R E S M Y G S S S P H V P V I F
Prot mutated   -

CDS wild-type
GTGGTCAACAACCAGGAGGAGCTCGAGAGGCTGAACACCCAAAACGCCATTGCCTTCCGC
CDS mutated   --
Prot wild-type V V N N Q E E L E R L N T Q N A I A F R
Prot mutated   -

CDS wild-type
AAAGATCAGAGATCTCTGTACTTCAAGGACAGCCTTGGCTGGCTCCCCATCCAGGTGACC
CDS mutated   --
Prot wild-type K D Q R S L Y F K D S L G W L P I Q V T
Prot mutated   -

CDS wild-type
CCTTTCCACCCTCTGGACTATACTGTGGACCACCGTGGCTCCTGCGGGGATGGAGTCCTG
CDS mutated   --
Prot wild-type P F H P L D Y T V D H R G S C G D G V L
Prot mutated   -

CDS wild-type
CAGCCCGGGGAGGAGTGTGATGACGGAAATGATGACGTGGGTGACAGCT**G**CATCAGCTGT
CDS mutated   ---**A**----------
Prot wild-type Q P G E E C D D G N D D V G D S **C** I S C
Prot mutated   - - - - - - - - - - - - - - - **Y** - - -

CDS wild-type
CACCGGGCCTACTGTGGAGATGGTCACCAGCACAAGGGAGTGGAGGACTGCGACGGCTCT
CDS mutated   --
Prot wild-type H R A Y C G D G H Q H K G V E D C D G S
Prot mutated   -

CDS wild-type
GACTTTGGCCACCTGACCTGCGAGACCTATCTCCCTGGGTCATATGGGGACCTGCAGTGC
CDS mutated   --
Prot wild-type D F G H L T C E T Y L P G S Y G D L Q C
Prot mutated   -

CDS wild-type ACCCCCTACTGCTACATCGACTCCACGTCCTGCCGCTACTTCACGTGA
CDS mutated   --
Prot wild-type T P Y C Y I D S T S C R Y F T X
Prot mutated   - - - - - - - - - - - - - - - -