

Specifications:

Gene:	<i>ferretACE2</i>
Accession:	NP_001297119.1
Insert size:	3153bp
Concentration:	10µg at 0.2µg/µL

**ferretACE-2 cDNA
Plasmid**

ACE2 angiotensin I converting enzyme 2 [*Mustela putorius furo* (domestic ferret)]

Summary:

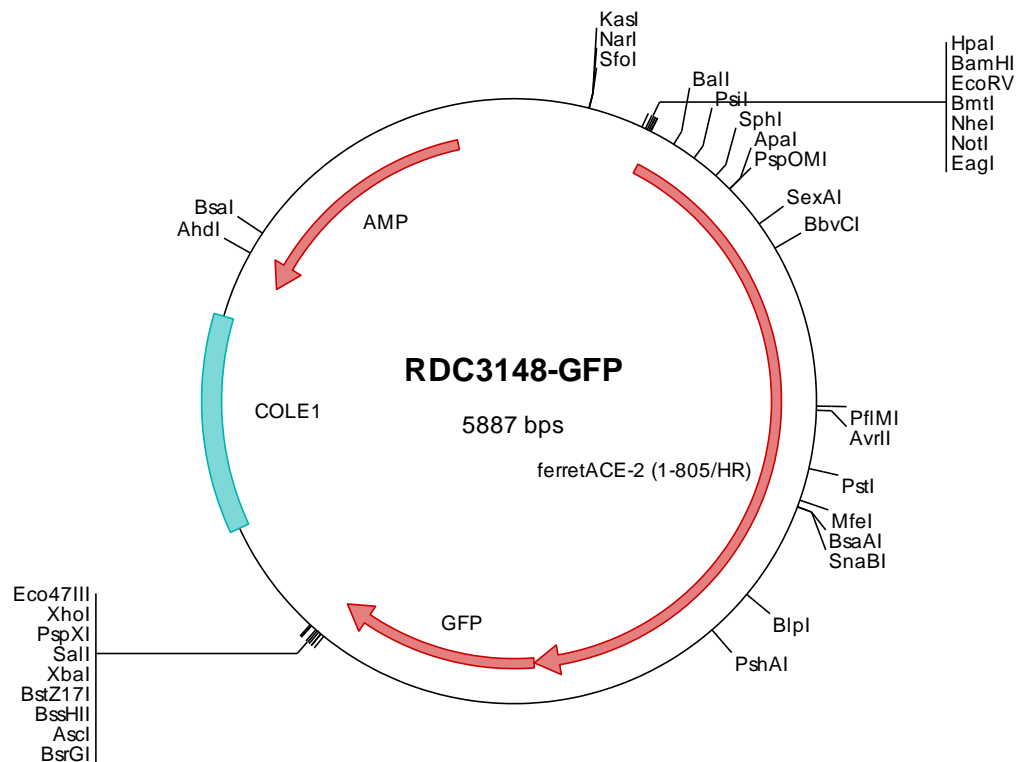
ACE-2 belongs to the angiotensin-converting enzyme family of dipeptidyl carboxypeptidases. It is a secreted protein that catalyzes the cleavage of angiotensin I into angiotensin 1-9, and angiotensin II into the vasodilator angiotensin 1-7. The organ- and cell-specific expression of ACE-2 suggests that it may play a role in the regulation of cardiovascular and renal function, as well as fertility. In addition, ACE-2 is a functional receptor for the spike glycoprotein of the human coronavirus HCoV-NL63 and the human severe acute respiratory syndrome coronaviruses, SARS-CoV and SARS-CoV-2 (COVID-19 virus).

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

Formulation cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping Ships at ambient temperature
Stability 1 year from date of receipt when stored at -20°C to -80°C
Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.



> RDC3148-GFP Plasmid DNA Sequence

```

1   tcgcgcgcttt  cggatgatgac  ggtgaaaacc  tctgacacat  gcagctcccc  gagacgggtca  cagcttgtct  gtaagcggat  gccgggagca  gacaagcccc
101  tcagggcgccg  tcagcgggtg  ttggcgggtg  tcggggctgg  cttactatg  cggcatcaga  gcagattgta  ctgagagtgc  accatattgc  gtgtgaaata
201  ccgcacacgat  gcgtaaggag  aaaataccgc  atcaggcgcc  attcgcatt  caggctcgc  aactgttggg  aagggcgatc  ggtcgggcc  tcttcgctat
301  tacgcccagct  ggcgaaaagg  ggatgtgctg  caaggcgatt  aagttgggta  agccagggt  ttcccgatc  acgacgttgt  aaaacgacg  ccagtgaatt
401  ggagacgtgt  taacaagctt  ggatccgata  tcgctagcgc  ggccgcaacc  atgttaggct  ctccctggct  ccttctcagc  ctgcgtctc  taactgtctc
501  tcagtcocacc  actgaggatc  tggccaagac  atttttggag  aagttaaact  atgaagccga  agaactgtct  tatcaaaatt  cacttctct  ttggaattat
601  aacaccaata  ttaccagcga  gaataacca  aagatgaata  ttgtctgggc  caagtgtct  gcctttatg  aagaagatc  ccagatgcc  aaaacctacc
701  cactagaaga  aatacaggca  cctataatca  agcgtcagtt  gcgggccctt  cagcagagt  ggtcatccgt  gctctcagca  gacaagcgt  aacgactgaa
801  cacaaatccta  aatgccaatg  gcactatcta  cagtactgga  aaagcttcta  accocaaata  tccacaggag  tgtttattac  ttgaaccag  tttgtagtac
901  ataatggaaa  acagcaaaag  ctacaatgag  aggctctggg  cctgggaagg  ctggaggtct  gaggtcggca  agcagctgag  gccattat  gaagagtatg
1001  tggccctgaa  aatgagatg  gcaagagcca  acaattatga  ggactatggg  gattattgga  gaggagacta  tgaagaggag  tgggcagatg  gctatagcta
1101  cagccgcacc  cagctgattg  aagatgtgga  acacaccttc  acacagatta  aaccactgta  tgaacatctt  catgcttatg  tgagggcaaa  gctgatggac
1201  gcttaacctt  cccgtatcag  ccaactgga  tgctcccg  cccatttct  ttggcagata  tgggctgat  tttggacaaa  cctgtacct  ctgatggctc
1301  ccttagaca  aaaaccaaac  atagatgtca  ctgtagtgca  ctgtagtgca  ctgtagtgca  ccaggaggat  tttcgaggag  cctgagacat  tctttgtatc
1401  tgtttggcctt  cccaacatga  ctgaaaggtt  ctggcaaaac  tccatgtctaa  cggagccagg  cgacaaccgg  aaagtgtct  gccacccccc  agcttgggac
1501  ctagggaagc  gtgacttcag  gatcaagatg  tgccaaaagg  tgacgatgga  tgacttctct  acagccatc  acagatggg  acacatccc  tatgacatgg
1601  catatgccga  acaacccttc  ctctagaa  atggagatga  atggagctg  gacagatctg  tgggggaaat  catgtcaact  tctcagccta  caccacaaca
1701  tttgaaaaac  atgtgtctc  tgccactgga  tttttctgaa  gacagatgaa  cagacataaa  ctctctactc  aaacaagcac  ttacaattgt  tggaaactta
1801  ccattactgt  aactgttaga  aaagtggaga  tggatgtct  taagggtgga  aatctccaaa  gacagtgga  tgcagaaatg  tggggagatg  aagcagata
1901  tagtcggggt  gcttgaaacc  ttgcccactg  atgagacata  ctgtgacct  ctgtgacct  tccatgtttg  taacgattac  tcattctaca  gatattacac
2001  aaggaccatt  taccaattcc  agtttcaaga  agccctttgt  caaatagcta  acaatgaagg  tccccatac  aaatgtgaca  tctccaattc  cagtgaagct
2101  gggcagaagc  tgcagaagt  gctgacact  ggaagatcaa  aacctggac  ctctgcctt  gaactgtgt  taggagcaa  gcagatggt  gtaagaacc
2201  tttcaactca  ccttcagccc  ttgtttacct  ggtgaaaga  gcaaaaacag  aattctctct  tgggttggaa  cactgactgg  agtcaatg  gctgacaaag
2301  cattaagtgt  aggataaac  ataaatcagc  tcttggagaa  aaagcatatg  aatggaaatg  caatgaaat  tacttctcc  agtgcctat  tgcatatgcc
2401  atgagagagt  attttcaaaa  taacaaaaac  caaacgatcc  cttttgtggg  caaagatgtg  aggttgagcg  atttgaaacc  agtaactcc  tccaacttca
2501  ttgtcaact  acctgaaat  atgtctgaca  tcaatccag  agctgacct  gaagaagcta  tcaggaaatc  cggggccctg  atcaatgatg  ctttccgct
2601  ggatgacaac  agctggagt  ttctgggat  tcaoccaaca  ctggaaccac  ctaccagcc  aactgtcaac  atattggctga  ttgtgttgg  ggtctgtatg
2701  ggagtgtgtg  tgggtggcat  ttctctctc  atttctctc  ggtcagaaga  tcaaggaag  aacaaatca  ccagaatgta  agaaaatcct  taocctctc
2801  tggacttgag  taaaggagaa  aataactccg  gcttcaaaa  ttgtgatgat  gttcagact  cattedatc  catgttgag  aagggcgagg  agctgttacc
2901  cggggtgtgt  ccaactctgt  tcagatgga  cggcgactga  aacggccaac  agttcagct  gtccggcgag  gggcagggcg  atgccacct  cggcaagctc
3001  accctgaagt  tcatctgac  caocggcaag  ctgcccgtgc  cctggcccac  ctctgtgacc  acactgacc  acggcgtgca  acggatcagc  cgttaaccg
3101  accacatgaa  gcagcacgac  ttcttcaagt  ccgccatgcc  cgaaggctac  gtccaggagc  gcacatctt  ctcaaggac  gacggcaact  acaagaccg
3201  ccgcgaggtg  aagtctgag  gcgacacct  ggtgaaaccg  atcagatgca  agggcatoga  ctccaaggag  gacggcaaca  tcttggggca  caagctggag
3301  tcaactaca  acgccaacaa  cgtctatct  atggccgaca  atggccgaca  atggccgaca  gtgaaactca  gtaacttca  agatccgca  caactcagc
3401  tgcagctcgc  cgaccactac  cagcagaaca  cccccatcgg  cgaaggcccc  gtgctgtct  ccgacaacca  ctacctgagc  acccagtcg  ccttgagcaa
3501  agaccccaac  gagaagcgg  atcaactggt  cctgtctgag  ttctgtgacc  ccgcccggat  cactctcggc  atggacgagc  tgtacaagta  aggcggcca
3601  gtataactcta  gactcagcac  ccggggaatt  cctcagcgc  tctctctag  cttggcgtaa  tcaatgctat  agctgtttcc  tgtgtgaaat  tgttatccg
3701  tcacaattcc  acacaacata  cgagccggaa  gcataaagt  taaagcctg  ggtgcctaat  gactgagcta  actcacatta  attgcttgc  gctcactgcc
3801  cgcctttccag  tcgggaaacc  tctcgtgcca  gctgcattaa  tgaatcgcc  taactcggcg  gagaggcgt  ttgcgtattg  ggcctcttc  cgttctccg
3901  ctcaactgact  cgtcgcctc  ctgcgctcgg  ctgcgctcag  cggtaatac  cactcaaaag  gcggtataac  ggttatccac  agaactcagg  gataccgag
4001  gaaagaacat  gtgagcaaaa  ggccagcaaa  aggccaggaa  ccgtaaaaag  gcccgcttgc  tggcgctttt  ccataggctc  cgccccctg  acgagcatca
4101  caaaaaatcga  cgtcctcagc  agaggtggcg  aaaccgcaca  cctctataaa  ggcgctttct  gataaccagc  gtttccccct  ggaagctccc  tctgtctccg
4201  accctggcgc  ttaccggata  cctgtccgcc  ttctccctt  cgggaactgt  agcgccttct  caatgctcac  gctgtaggta  tctcagttcg  tctcagttcg
4301  ttctctcaca  gctggctgt  gtgcacgac  cccccgttca  gcccgaccg  tgcgcttat  ccgtaacta  tctgtctgag  tccaaccgg  taagacacga
4401  ctctatcgcca  ctggcagcag  ccaactgtta  caggattagc  agagcaggt  atgttagcgg  gtctacagag  ttcttgaagt  gttggcctaa  ctccgctac
4501  actagaagga  cagtatttgg  ctgtcgcgt  ctgtctgagc  cagttacct  cggaaaaaga  ctgttagct  ttgttagct  atttagctcg  caaacaacc
4601  cgggtggttt  tttgtttgc  aagcagcaga  ttacgcccag  aaaaaaagga  tctcaagaag  atcctttgat  cttttctag  gggctctgac  ctcagtggaa
4701  cgaaaactca  cgttaaggga  ttttgtctat  gaattatca  aaaaagatct  tcaactagat  ccttttaaat  taaaaatgaa  gttttaaat  aatcctaaat
4801  atatatgag  aaacttggct  ttgactgtac  ttgactgtac  caatgcttaa  caatgcttaa  gcgactctgc  taatttctgc  taatttctgc  attttctgc
4901  ccgtcgtgta  gataactac  atacgggag  gcttaccat  tggcccagt  gctgcaatga  taccgcgaga  cccacgctca  ccgctccag  atttatcagc
5001  aataaacag  ccagccggaa  ggccgagcgc  cagaagtggt  cctcgaact  ctacgcaact  tatccgctc  catccagct  attaattgt  gccgggaaag
5101  agttcgcag  ttaatagtt  ggcgaactgt  gttgcaattg  ctacagcgt  ctgggtgtca  cctcgtcgt  ttggtatgag  ttcattcagc  agtgcctatc
5201  aacgatcaag  gcgagttaca  tgatcccca  tgttgtcaa  aaaagcgggt  agctcctct  gtctccgat  cgttgtcaga  agtaagtgg  ccgagtggt
5301  atcaactcat  gttatggcag  cactgcata  ttctctact  gtcatgccat  ccgtaagat  cttttctgt  actggtgag  actcaaccaa  gtcattctga
5401  gaatagtgta  tgcggcgacc  gagtttctct  tgcccggct  caataccgg  taataccgg  ccacatagca  gaactttaa  agtgcctatc  attgaaaaac
5501  gttctcggg  gcgaaaact  tcaaggatct  taccgtgtt  gagatccagt  tgatgtaac  ccactcgtc  acccaactga  tcttcagcat  cttttacttt
5601  caccagcgtt  tctggtgag  caaaaacag  aaggcaaat  gccgcataaa  agggaataag  ggcgacacgg  aaatgttgaa  tactcatac  cttctctttt
5701  caatattatt  gaagcattta  tcagggttat  tgtctcact  ctgataacat  atttgaaaa  atttgaaaa  atttgaaaa  aggggttccg  cgcaamcgtc
5801  cccgaaaagt  gccacctgac  gtctaagaaa  ccattattat  catgacatta  acctataaaa  ataggcgtat  cagaggccc  tttcgtc

```

> RDC3148-GFP Translated Insert Sequence

```

1   mlgsswllls  laalaaqst  tedlaktfle  kfnyeaels  yqnslaswny  ntnitdeniq  kmniagakws  afyeesqha  ktypleeiqd  piikrqlral
101  qsgsssvlsa  dkrrerlnt  namstlystg  kacpnnpqe  cllepdlld  imenskydne  rlwawegwrs  evgkqlrply  eeyvalknem  arannyedyg
201  dywrgdyeee  wadgyysyrn  qliedvehtf  tqikplyeh  hayvraklmd  aypsrpsptg  clpahllgdm  wgrfwtllyp  lmvprfrqkpn  idvtdamvng
301  swdarrifee  aetffvsvgl  pnmtegfwn  smltepgdnr  kvvchptawd  lgkrdrfrik  ctkvtmddf  tahhemghiq  ydmayaeqpf  llrnganegf
401  heavgeimsl  saatpnhlkn  igllppdfse  dsetdinfll  kqaltivgtl  pftymlekw  wmwfkgeipk  eqwmqkwem  krdivgvvpe  lphdetycdp
501  aalfhvandy  sfirytrti  yqfqqealc  qiakhegply  kdidsnssea  gqklhlemsl  grskpwtfal  ervvgaktmd  vrpllyfep  lftwkeqnr
601  nsfvgwntdw  spyadqskiv  rislksalge  kayewndnem  yffqssiaya  mrelyfskvkn  qtipfvgkdv  rvsdlkpris  fnfivtspen  msdiipradv
701  eeairksrvr  indafrlddn  sleflgiqpt  leppyqppvt  iwlvfvgvm  gvuvvgifll  ifsgirnrk  nnqarseenp  ysvdlskge  nnpfgnvdv
801  vqtsFhrmvs  kgeelftgvv  pliveldgdv  nghkfsvsge  gegdatygl  tlkftictgk  lvpvpwtlvt  thlygvqcfs  rypdhmkqhd  ffskamepegy
901  vqertiffkd  dgnyktraev  kfgedtlvnr  ielkgidfke  dgnlghkle  ynynshnvyi  madkqkngik  vnfkirhnie  dgsvgladhy  qnntpidgdp
1001  vilpndhlys  tqalskdpn  ekrdhmvll  fvtaagitlg  mdelyk

```