

Specifications:

Gene:	<i>h</i> SEMA6D
Accession:	NP_065909
Insert size:	3049bp
Concentration:	10µg at 0.2µg/µL

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

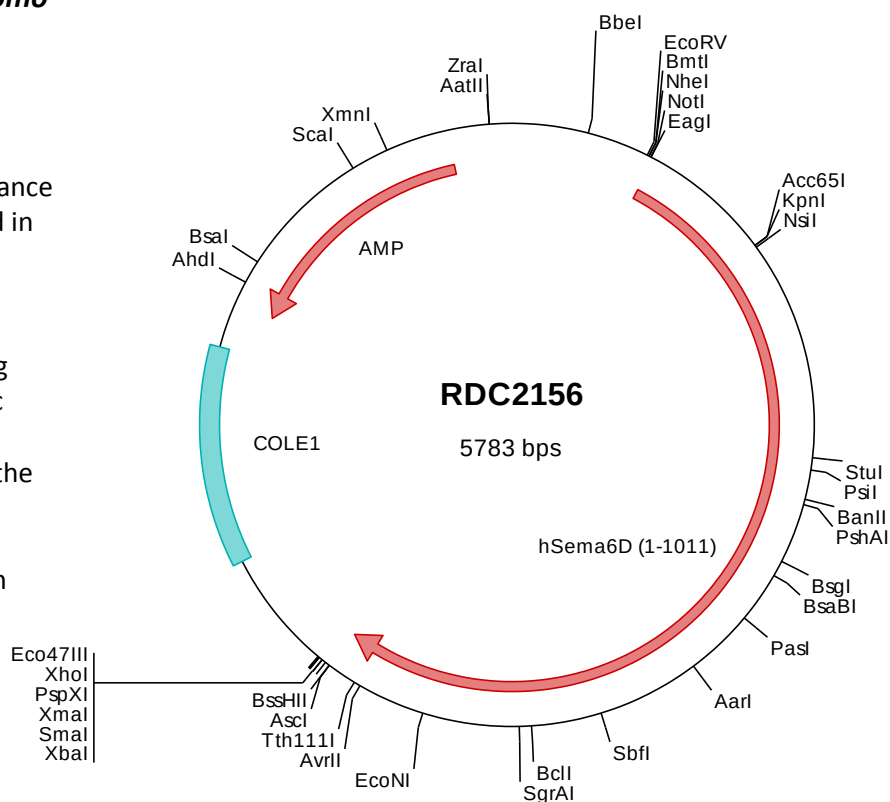
Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

*h*Semaphorin 6D cDNA Plasmid

SEMA6D semaphorin 6D [*Homo sapiens* (human)]

Summary:

Sema6D is a member of the Semaphorin family of axon guidance molecules. Sema6D is expressed in the cardiac tube and within the brain and spinal cord during development. It shows broad expression postnatally, including neurons, lymphocytes, dendritic cells and osteoclasts. Sema6D is essential for morphogenesis of the cardiac ventricle in the chick, signaling both forward through Plexin A1 and in reverse through Sema6D.



> RDC2156 Plasmid DNA Sequence

```

1   tcgcgcgcttt  cggatgatgac  ggtgaaaacc  tctgacacat  gcagctcccc  gagacgggtca  cagcttgtct  gtaagcggat  gccggggagca  gacaagcccc
101  tcaggggcgcg  tcagcgggtg  ttggcgggtg  tcggggctgg  ctttaactatg  cggcatcaga  gcagattgta  ctgagagtgc  accatatgcg  gtgtgaaata
201  ccgcacacgat  gcgtaaggag  aaaataccgc  atcaggcgcc  attcgccatt  caggctcgcg  aactgttggg  aagggcgatc  ggtgcgggcc  tcttcgctat
301  tacgcccagct  ggcgaaaagg  ggaatgtctg  caaggcgatt  aagttgggta  acgccagggt  tttcccagtc  acgacgttgt  aaaacgacgg  ccagtgaaat
401  ggagacgtgt  taacaagctt  ggatccgata  tcgctagcgc  ggccggccacc  atgagggtct  tctctgtttg  tgccctacata  ctgctgtga  tgggttccca
501  gttgaggggca  gtcagctttc  ctgaagatga  tgaacccctt  aatactgtcg  actatcacta  ttcaaggcaa  tatccggttt  ttagaggacg  cccttcaggc
601  aatgaatgcg  agcacaggct  ggactttcag  ctgatgttga  aaattcgaga  cacactttat  attgtgggca  gggatcaagt  ttatcacgta  aacttaaatg
701  aaatgcccaa  aacagaagta  ataccaca  agaaaactgac  atggcgatca  agacaacagg  atcgagaaaa  ctgtgctatg  aaaggcgaag  ataaagatga
801  atgcacaaac  tttatcaaa  tatttgttcc  aagaaacgat  gagatggttt  ttgtttgtgg  taccaatgca  ttcaatccca  tgtgtagata  ctacagggtg
901  agtaccttag  aatatgatgg  ggaagaatt  agtggcctgg  caagatgccc  atttgatgcc  agacaaacca  atgttgccct  ctttctgat  ggggaagctg
1001  attctgcac  agtggctgac  ttcttggcca  gcgatgcgct  tatttatcga  atttcttctt  ctttcgcaca  ccttcgcaca  ataaaaatg  attccaaatg
1101  gataaaagag  ccacactttc  ttcattgcat  agaatttgga  aactatgtct  atttcttctt  tcgagaaatc  gctgtgaaac  ataataat  aggcaaggct
1201  gtgtattccc  ctgtggcccc  taatgttaa  aacgacatgg  gtggttccca  cggggtctct  gagaaactac  ggacttcatt  cttaaaggct  cggctgaact
1301  gttctgtccc  tggagatctg  tttttctact  ttgatgtctt  gcagctctat  tttgatctgg  tacaatacaa  tggcatcccc  actgttctac  tgggttttac
1401  caccgacgtc  aatagcatcc  ctggttctgc  tgtctgtgca  tttagctagg  atgacattga  aaaagtatto  aaaggacggt  ttaaggaaac  gaaaactcca
1501  gattctgttt  ggacagcagt  tccogaagac  aaagtgcaca  agccaaggcc  ttggtctgtt  gcaaaacacg  gccttgcoga  aggtataaaa  acotccatcg
1601  atttccggta  tgaacctctg  taattcatca  aatctcatcc  ctctgcgttc  tctgcgtctc  caccatttgc  cgatgagccc  tggttcaaac  agactcgggt
1701  caggtaacaga  ctgacggcca  tctcagtgg  coattcagcc  ggacccatcc  agaactacac  agtctatttt  gttggtctgt  aagctggcat  ggtacttaaa
1801  gttctggcaa  agacagctcc  ttctcttgg  aacgacagcg  tattactgga  agagattgaa  gccctacaac  atgcaaagtg  cagtgtcgag  aatgaggaag
1901  acaaaaagag  catctcat  aagatggata  cagtttgata  cgttttatat  agcatgggtg  ctagtgcgat  tatccgcac  tatccgcac  cccctgacg
2001  ttatggatca  tctaaaaagt  ctgtattgac  atctcgtgac  cgttatgtg  gctggttaag  ccagggatcc  tgtggttaga  tgacccagg  gatgctctg
2101  ttaacogaag  agttcttgg  ttccataaac  caccatgctg  aaggatgta  acaagacaca  gaattcggca  acacagctca  tcttggggg  gatctgggtg
2201  tacgatggga  agtccagct  ggagatgcca  accagatgac  ccagatgga  gtccatcata  cctgtgtctt  tgctgctttt  gtttggggg  cattcatggc
2301  aggtgtggca  gtatactgct  atcagacat  gtttgttcgg  aaaaacagca  agatccataa  agatgcagag  tccgcccagt  tccgcacaga  ctccagtgg
2401  agttttgcca  aactgaatgg  actctttgac  agccctgtca  aggaatacca  acagaatatt  gattctccta  aactgtatag  taactgcata  accagtgga
2501  aagagctacc  acccaatgga  gatactaaat  coactggtat  ggaccatcga  gggaacacct  cagagttggc  tgctctctct  actcctgagt  ctacacccgt
2601  gctccacag  aagccctgac  aggccatgaa  gagccaacta  gaaaaggccc  atggccaatg  agcttcaagg  aaagaaaccc  ctaagttttt  tccgttatg
2701  ccgccaactc  attcccaatt  aagtcattgg  catatcccca  gtgcacttgt  tcttccaaat  tcttccaaat  agagagatca  ccggcgctct  gtgtattcca
2801  ctccaaaagc  tgaagaagag  ctccaaaaca  ttgatcacc  tctcacaaga  tcatccagta  catccagatg  gcacaccaga  acttaatgct  ggaatccagt
2901  caatgatctc  ctgaagatcc  tgaatgaccc  aaatagtaac  cccaagacca  tcatgggaga  catccagatg  gcacaccaga  acttaatgct  ggaatccagt
3001  ggatcgatgt  ctgagctccc  accaaagtc  cctaagctgg  aggcactgct  actctccctt  ccttccaaat  agagagatca  ccggcgctct  gtgtattcca
3101  atgtccccc  cactcctgga  gtcccaatga  cttctctgga  aagacaaaga  ggttatcaca  aaattctctc  ccaggggcac  tctatatctg  ctatgcttaa
3201  aaacttaaac  tcaccaaatg  tctgttttgt  atccagacag  cctagatgga  acgctggagg  atatatgccc  acccctactg  gggcgaaagt  ggaactatct
3301  cagggaacac  cagtgtgtgt  ctactgcag  ccttccctct  ccttccctct  tcttccaaat  ccatctgtca  gacctgaa  caaatacaca  tactaaaggc
3401  cgtccttaaa  acctgacgtg  ccaccaaaag  cctcctttgt  tctcctttgt  tctcctttgt  cctcctttgt  ggtcactgaa  gtttccctgt  tgaaattggt
3501  actctagagt  cgacaccgg  ggaattcctc  gagcgctcgt  ctctagcttg  cctcctttgt  cctcctttgt  ggtcactgaa  gtttccctgt  tgaaattggt
3601  aattccacac  aacatacag  ccggaagcat  aaagtgtaaa  gcttgggttg  cctaagtgt  cctaagtgt  gagctaaact  acattaattg  cgttgcgtc
3701  ttccagctcg  gaaacctgtc  gtgccagctg  ccttccctgt  ccttccctgt  ccttccctgt  ccttccctgt  ccttccctgt  ccttccctgt  ccttccctgt
3801  ctgactcgtc  gcgctcgtc  gttcggctgc  ggcgagcgtg  atcagctcac  ccaagcgtgc  ccaagcgtgc  ccaagcgtgc  ccaagcgtgc  ccaagcgtgc
3901  gaacatgtga  gcaaaaggcc  agcaaaaggc  caggaacgtg  aaaaaggccc  cgaagcgtgc  cgaagcgtgc  cgaagcgtgc  cgaagcgtgc  cgaagcgtgc
4001  aatcgacgct  caagtacag  gtggcgaaac  ccgacaggac  cccctcgggg  aagcgtggcg  aagcgtggcg  aagcgtggcg  aagcgtggcg  aagcgtggcg
4101  tgcgccttac  cggatacctg  tccgcttttc  tccctcgggg  aagcgtggcg  aagcgtggcg  aagcgtggcg  aagcgtggcg  aagcgtggcg  aagcgtggcg
4201  ctccaaagct  ggtgtgtgt  acgaaacccc  cgttccagcc  cgttccagcc  cgttccagcc  cgttccagcc  cgttccagcc  cgttccagcc  cgttccagcc
4301  tcgccaactg  cagcagccac  tggtaacagg  attagcagag  cgaggtatgt  cgaggtatgt  cgaggtatgt  cgaggtatgt  cgaggtatgt  cgaggtatgt
4401  gaagacagct  atttggatc  tgcgctctgc  tgaagccagt  tacctctcga  aaaaagattg  aaaaagattg  aaaaagattg  aaaaagattg  aaaaagattg
4501  tggttttttt  gtttgcagg  agcagatgga  agcagatgga  agcagatgga  agcagatgga  agcagatgga  agcagatgga  agcagatgga  agcagatgga
4601  aactcacgtt  aagggtttt  ggtcatgaga  ttatcaaaaa  ggtatcttcc  atctcagcga  atctcagcga  atctcagcga  atctcagcga  atctcagcga
4701  atagtagaac  ttgtctgac  agttaccaat  gcttaatac  cgttagctgc  ccaatgaccc  ccaatgaccc  ccaatgaccc  ccaatgaccc  ccaatgaccc
4801  cgtgttagata  actacgatac  cagcagctgc  cagcagctgc  cagcagctgc  cagcagctgc  cagcagctgc  cagcagctgc  cagcagctgc  cagcagctgc
4901  aaccagccag  ccggaaggcc  cagcagcaga  cagcagcaga  cagcagcaga  cagcagcaga  cagcagcaga  cagcagcaga  cagcagcaga  cagcagcaga
5001  gccaggttaa  tagtttgcg  aacgttgggt  ccatgtgctc  ccatgtgctc  ccatgtgctc  ccatgtgctc  ccatgtgctc  ccatgtgctc  ccatgtgctc
5101  atcaaggcga  gttacatgat  gtcgcaaaaa  gtcgcaaaaa  gtcgcaaaaa  gtcgcaaaaa  gtcgcaaaaa  gtcgcaaaaa  gtcgcaaaaa  gtcgcaaaaa
5201  ctcatggtta  tggcagcact  gcataattct  ctactgtcga  ctactgtcga  ctactgtcga  ctactgtcga  ctactgtcga  ctactgtcga  ctactgtcga
5301  agtgtatgca  gcaagcaggt  tgcctttgac  cggcgctaat  cggcgctaat  cggcgctaat  cggcgctaat  cggcgctaat  cggcgctaat  cggcgctaat
5401  ttcggggcga  aaactctcaa  ggaatcttacc  gctgttgaga  gctgttgaga  gctgttgaga  gctgttgaga  gctgttgaga  gctgttgaga  gctgttgaga
5501  agcgtttctg  ggtgagcaaa  aacagggaag  caaaatgccc  caaaatgccc  caaaatgccc  caaaatgccc  caaaatgccc  caaaatgccc  caaaatgccc
5601  attattgaag  catttatcag  ggttatgttc  tcatgagcgg  tcatgagcgg  tcatgagcgg  tcatgagcgg  tcatgagcgg  tcatgagcgg  tcatgagcgg
5701  aaaagtgcga  cctgacgtct  aagaaacat  tattatcatg  acataaactt  ataaaaatag  acataaactt  acataaactt  acataaactt  acataaactt  acataaactt

```

> RDC2156 Translated Insert Sequence

```

1   mrvfllcayl  lllmvslqla  vsfpeddepl  ntvdvhysrq  ypvfrgrpsg  nesqhrldfq  lmlkirdtly  iagrdqvytv  nlnempktev  ipnkkltwrs
101  rqqdrencam  kgkhkdechn  fikvfprnd  emvfvcgtna  fnpmcryryl  stleydgee  sglarcpfda  rqtntvalfad  gklysatvad  flasdaviyr
201  smgdgsalrt  ikydskiwe  phflhaieyg  nyvfyffrei  avehnnlqka  vvsrvarick  ndmgssqrvl  ekhwtstflka  rlnscvpqds  ffyfdvlqsi
301  tdiiginqip  tvvgvfttql  nsipgsavca  fsmddiekvf  kgrfkeqkt  dswwtavped  kvpkprpgcc  akhglaeayk  tsidfpdetl  sfikshplmd
401  savppiade  wftktrvryr  ltaiavdh  ssa  gpyqnytvif  vgseagmvlk  ndsvlleiee  aynhakcsae  needkkvisl  qldkdhhaly
501  vafssciiri  plsrceerys  ckksciasrd  pycgwlsqgs  cgrvtpgmll  lteddfafhn  hsaegyeyqdt  efgntahlgd  chgvrvewqs  gesnqmvmhm
601  vlitcvfaaf  vltcvfaaf  vltcvfaaf  knrkihkda  saqscdtssg  sfaklnglfd  spvkeyqqni  dspklysnll  tsrkelpnng  dtksmvmdhr
701  gqppelaalp  tpestpvllh  ktlqamkshs  ekahghgasr  ketpqffps  ppphspshg  hipsaivlpn  athdyntsf  nsnahkaekk  lqnidhpltk
801  ssskrdrhrs  vdsrntlnd  lkhlnpnsn  pkaimgdigm  ahqnlmldpm  gsmsevpkv  pnreaslysp  pstlprnspt  krvdvpttpg  vpmtslerqr
901  gyhknssgrh  sisampknl  spngvllsrq  psmnrggyp  tptgakvdyi  ggtptvshlg  pslsrqssyt  sngtlprtgl  krtpslkpvd  ppkpsfvpgt
1001  psvrplnkty  y

```