

Specifications:

Gene:	mMstn
Accession:	NP_034964.1
Insert size:	1144bp
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.

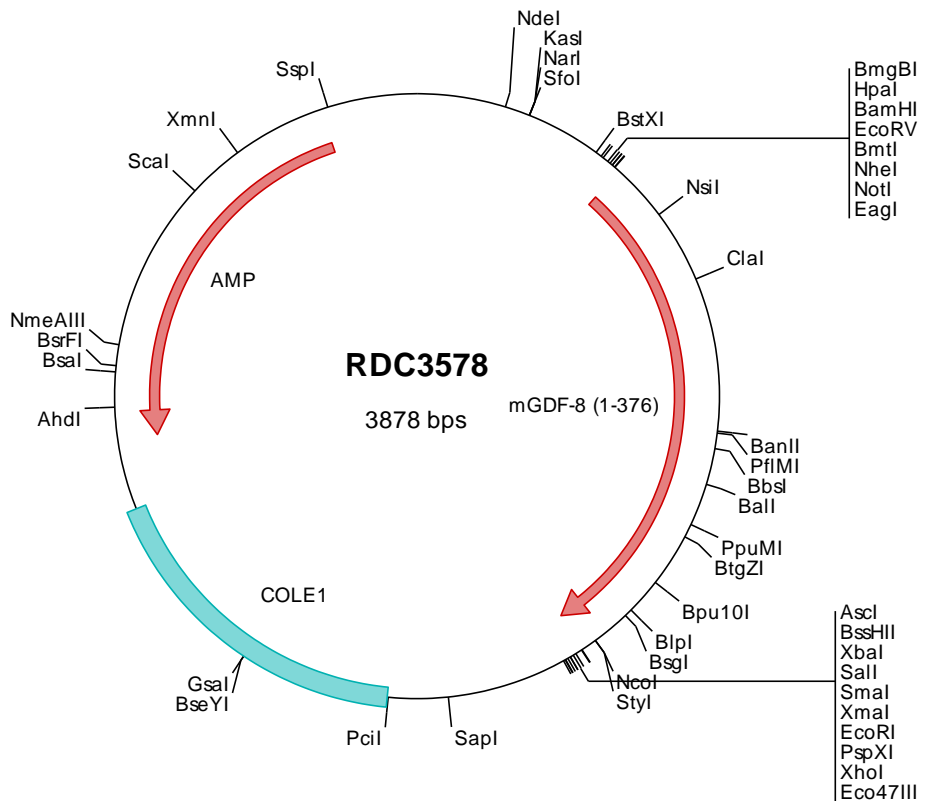
mGDF-8/Myostatin cDNA Plasmid

Mstn myostatin [*Mus musculus* (house mouse)]

Also known as: Cmpt; Gdf8

Summary:

GDF8 is a secreted ligand of the transforming growth factor-beta (TGF-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. GDF8 is proteolytically processed to generate each subunit of the disulfide-linked homodimer. It negatively regulates skeletal muscle cell proliferation and differentiation. Mutations in GDF8 are associated with increased skeletal muscle mass in humans and other mammals.



> RDC3578 Plasmid DNA Sequence

```

1   tcgctgctgtt  cggatgatgac  ggtgaaaacc  totgacacat  gcagctcccc  gagacgggtca  cagcttgtct  gtaagcggat  gccgggagca  gacaagcccg
101  tcagggcgcg  tcagcgggtg  ttggcgggtg  tcggggctgg  cttaaactatg  cggcatcaga  gcagattgta  ctgagagtgc  accatatgcg  gtgtgaaata
201  ccgcacacgat  gcgtaaggag  aaaataccgc  atcaggcgcc  attcgcatt  caggctcgcg  aactgttggg  aagggcgatc  ggtgcgggcc  tcttcctat
301  tacgccagct  ggcgaaaagg  ggatgtgctg  caagycgatt  aagttgggta  acgccagggt  tttcccagtc  acgacgttgt  aaaacgacgg  ccagtgatt
401  ggagacgtgt  taacaagctt  ggatccgata  tcgctagcgc  ggccgccaacc  atgatgcaaa  aactgcaaaat  gtatgtttat  atttacotgt  tcatgtgtat
501  tgctgctggc  ccagtggatc  taaatgaggg  cagtggagaga  gaagaaaatg  tggaaaaaga  ggggctgtgt  aatgcattgt  cgtggagaca  aaacacgagg
601  tactccagaa  tagaagccat  aaaaattcaa  atoctcagta  agctgcgct  ggaacacgct  cctaacatca  gcaaagatgc  tataagacaa  ctctgtccaa
701  gagcgcctcc  actccgggaa  ctgatcgatc  agtacgacgt  ccagagggat  gacagcagtg  atggctcttt  ggaagatgac  gattatcacg  ctaccacgga
801  aacaatcatt  accatgccta  cagagtctga  ctttctaagt  caagcggatg  gcaagcccaa  atgttctctt  tttaaattta  gctctaaaat  acagtacaac
901  aaagttagta  aagccaact  gtggatata  ctcagaccgg  tcaagactcc  tacaacagtg  tttgtgcaaa  tcttgagact  catcaaacc  atgaaagacg
1001  gtacaagta  tactggaatc  cgaatcctga  aacttgacat  gagcccaggc  actggatatt  ggcagagtat  tgatgtgaag  acagtgttgc  aaaattggct
1101  caaacagctt  gaatccaact  taggcattga  aatcaaacgt  ttggatgaga  atggccatga  tcttgctgta  accttccag  gaccaggaga  agatgggctg
1201  aatcccttt  tagaagtcaa  ggtgacagac  acaccaaga  ggtcccggag  agactttggg  cttgactgcg  atgagcactc  ccggaatcc  cgggtgtgce
1301  gaccccccct  cagcgtctgt  ttggaagcct  ttggatggga  ctggattatc  gcacccaaaa  gatataagcc  caattactgc  tcagggaagt  gtgaattttg
1401  gtttttacia  aatatatccg  atactcatct  tgtgacacaa  gcaaacccca  gaggctcagc  aggcccttgc  tgcactccga  caaaaatgtc  tccattaat
1501  atgctatatt  ttaatggcaa  agaacaata  atatatggga  aaattccagc  catggtagta  gaccgctgtg  ggtgtcata  aaggcgccg  agtatactct
1601  agagtgcaca  cccggggaat  tcctcgagcg  ctgctctcta  gcttggcgta  atcatggta  tagctgttcc  ctgtgtgaaa  ttgttatccg  ctcaaatcc
1701  cacacaacat  acgagccgga  agcataaagt  gtaaacgcctg  ggggtgcctaa  tgagttagct  aactcacatt  aattgcgttg  cgctcactgc  ccgctttcca
1801  tgcgggaaac  ctgtcgtgct  agctgcatta  atgaatcggc  caacgcgcgg  ggagagcggg  tttgcgtatt  gggcgctctt  cgcttctctc  gctcactgac
1901  tcgctgctgt  cggctcgttc  gctgcggcga  accgttaaaa  ggccgcgttg  ctggcgtttt  tccataggct  ccgccccct  gacgagatcc  acaaaaatg
2001  tgtgagcaaa  aggcagcaaa  aagcccgac  accgttaaaa  ggccgcgttg  ctggcgtttt  tccataggct  ccgccccct  gacgagatcc  acaaaaatg
2101  accgtcaagt  cagaggtggc  gaaaccggac  aggactataa  agataccagg  cgtttcccc  tggaaagctcc  ctctgtctcc  gacctgccc  gacctgccc
2201  cttaccggat  acctgcccgc  ttttctccct  tegggaagcg  ttgcgctttc  tcaatgtctc  cctctgtagg  atctcagttc  ggtgtaggtc  gttcgtctca
2301  agctgggctg  tgtgcaacga  ccccccgctc  agcccagacc  ctgctcctta  tccggtaact  atcgtcttga  gtccaaccgg  gtaagacacg  acttatcgcc
2401  actggcaaca  gccactggta  acaggttag  cagagcaggg  tatgtaggcg  gtgtcacaga  gttcttgaag  ttgtggccta  actacggcta  cactagaagg
2501  acagtatttg  tctatctcgc  tctgctgaag  ccagttacct  tcggaaaaag  agttgttagc  tcttgatccg  gcaaacaaac  caccgctggt  agcgggtggt
2601  tttttgtttg  caagcagcag  attacgcgca  gaaaaaaagg  atctcaagaa  gatcctttga  tctttctac  ggggtctgac  gctcagtgga  acgaaaaact
2701  acgttaaggg  attttggtca  tgagattatc  aaaaaggatc  ttcacctaga  tctttttaa  ttaaaaatga  agttttaa  caatctaaag  tatatatgag
2801  taaacttggt  ctgacagtta  ccaatgctta  atcagttag  cacctatctc  agcgtatctg  ctatttctgt  catccatagt  tgctgactc  cccgtcgtgt
2901  agataactac  gatacgggag  ggcttaccat  ctggccccag  tgctgcaatg  ataccgcgag  accccagctc  accggtcca  gattatcag  caataaacca
3001  gccagccgga  agggccgagc  gcagaagtgg  tctcgcaact  ttatccgct  ccatccaagc  tattaattgt  tgccgggaag  cttagaag  tagttcgcca
3101  gttaatagtt  tgcgcaacgt  tgttgccatt  gctacaggca  tcgtggtgct  acgctcgtcg  tttggtatgg  ctccattcag  ctccggttcc  caacgatcaa
3201  ggcgagttac  atgatcccc  atgttgtgca  aaaaagcgtt  tagctccttc  ggtcctccga  tcggtgtcag  aagtaagtgt  gccgcagtg  tctcactcat
3301  ggttatggca  gcaactgcata  attctcttac  tgtcatgcca  tccgtaagat  gcttttctgt  gactggtgag  tactcaacca  agtcattctg  agaatagttg
3401  atgcccggac  cgagttgctc  ttgcccggcg  tcaatacggg  ataataccgc  gccacatagc  agaactttaa  aagtgtctat  cattgaaaa  cgtttctcgg
3501  ggcgaaaact  ctcaaggatc  ttaccgctgt  tgagatccag  ttogatgtaa  cccactcgtg  caccacaactg  atcttcagca  tcttttactt  tcaccagcgt
3601  tctgggtgta  gcaaaaacag  gaaggcaaaa  tgccgcaaaa  aagggaataa  gggcgacacg  gaaatgttga  atactcatic  tcttcttttt  tcaatattat
3701  tgaagcattt  atcaggggta  ttgtctcatg  agcggataca  tatttgaatg  tatttagaaa  aataaaciaa  taggggttcc  gcgcacattt  ccccgaaaag
3801  tgccacctga  cgtctaagaa  accattatta  tcatgacatt  aacctataaa  aataggcgta  tcacgaggcc  ctttctgtc

```

> RDC3578 Translated Insert Sequence

```

1   mmqklqmyvy  iylfmliag  pvdlnegser  eenvekeglc  nacawrqnt  ysrieaikiq  ilsklrleta  pniskdairq  llprapltre  lidqydvqrd
101  dssdgsledd  dyhattetii  tmptesdfm  qadgkpkccf  fkfsskiqyn  kvvkaqlwiy  lrpvktpttv  fvqilrlikp  mkgdtrytgi  rslkldmspg
201  tgiwqsidvk  tvlqnwlkqp  esnlgieika  ldenghdlav  tfpgpgedgl  npflevkvt  tpkrrrddfg  ldcdehstes  rccrypltdv  feafgdwiii
301  apkrykanyc  sgecefvflq  kypthlvhq  anprgsagpc  ctptkmspin  mlyfngkeqi  iygkipamvv  drocgs

```