

Specifications:

Gene:	mGdf10
Accession:	AAB46753.1
Insert size:	1445bp
Concentration:	10µg at 0.2µg/µL

mGDF-10 cDNA Plasmid

Gdf10 growth differentiation factor 10 [*Mus musculus* (house mouse)]

Also known as: Bmp3b

Summary:

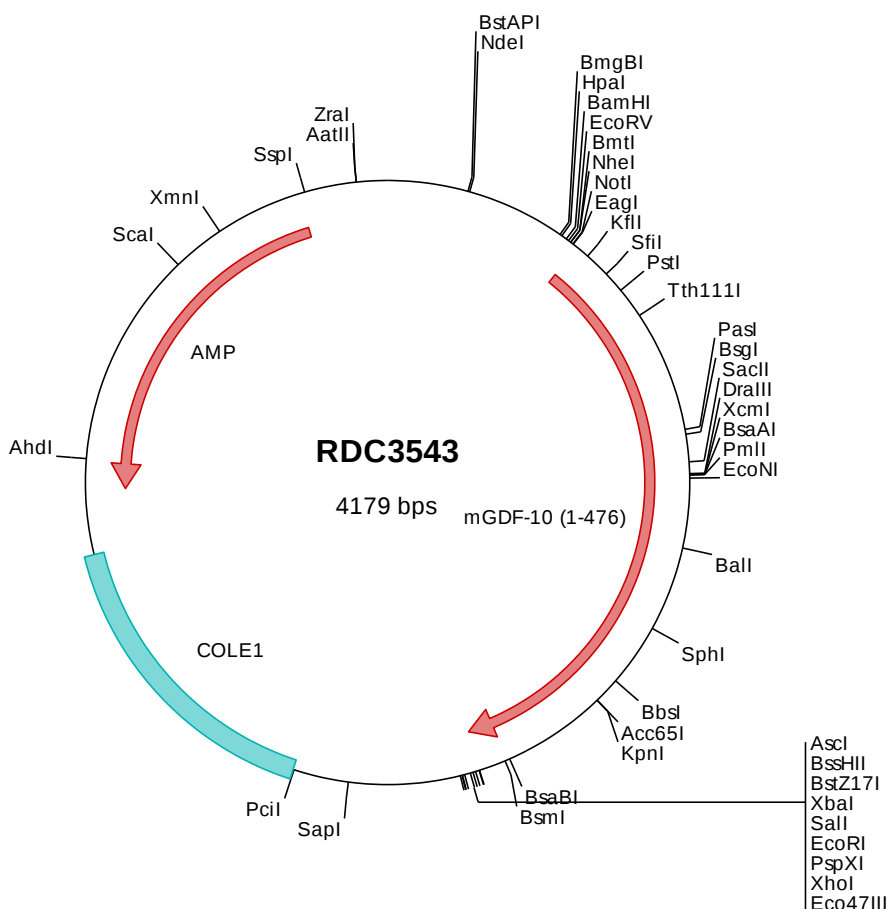
GDF10 is a secreted ligand of the transforming growth factor-beta (TGF-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. GDF10 is proteolytically processed to generate each subunit of the disulfide-linked homodimer. It has been shown to promote neural repair after stroke and may act as a tumor suppressor.

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.



> RDC3543 Plasmid DNA Sequence

```

1  tcgcgcgctt cggatgatgac ggtgaaaacc tctgacacat gcagctcccc gagacgggtc cagcttgtct gtaagcggat gccgggagca gacaagcccg
101 tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg ctttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
201 ccgcacacgat gcgtaaggag aaaataccgc atcaggcgcc attcgcatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
301 tacgccagct ggcgaaaggg ggatgtgtcg caaggcgatt aagtgtggta acgccagggt tttcccgatc acgacgttgt aaaacgacgg ccagtgaaat
401 ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgcacac atggctccag gtccctgtcg gatcagcttg ggggtccagc ttgtgcccac
501 ggtgcccgtg ctccctgtgc tgcggggcgc aggtctgcgg caccaggggcc cctcatgtgc ctccattgcc tggcgagctg ccggtctgca gggggacagg
601 gactcccagc agtccaccgg ggacgcagca gccgtctgtg gccaggcgcc ccaggacatg gtccgtatcc acatgtctcag gctctatgag aagtacaacc
701 gaagaggtgc tccaccggga ggaggcaaca ccgtccgaag cttccgtgcc cggctggaaa tgatcgacca aaagcctgtg tattcttcca acttgacttc
801 catgcaagac tcagaaaatga tcttcacagc cgccttccac tttactcag aacctccacg gtggccccgg gctggtgagg tattctgcaa gccccgagct
901 aagaacgcat cctgcgcct cctgacccca gggctgctcg cagcgttgca cctaattctc cgcagctctt ccagaaacac cgcactcag gggctgtccc
1001 cggggggcat ggccctgacg cctccaccac gtggcctgtg gcaggccaag gacatctcct caatcatcaa ggctgcccga agggatggag agctgcttct
1101 ctctgtctcag ctggatactg gggagaagga ccccgagtg ccacggccca gtccccacat gccctatata cttgtotacg ccaatgacct ggccatctcc
1201 gaacccaaca gtgtagcagt gtccgtacag agatacgacc catttccagc tgggagattt gagcctggag cagcccccaa cagctcagct gatccccggc
1301 tgctcaggcg ggctcagggt tcaaaaacccc tgcgaagacaa ttctcagcgc ggtgtggatg aaagaccagc gctgcccctg catgcccaga atttccacaa
1401 gcacgagttc tgggtccagtc ctttccgggc actgaacccc cgcacggcaa gaaaagaccg caagaagaag gaccaggaca cattoacccg cgcctcctct
1501 caggtgtctg actttgacga gaagacgatg cagaaaacca ggaggcgcca gtgggatgag ccccggtctc gctccaggag gtacctgaag gtgatttttg
1601 cagacatcag gtggaatgaa tggatcatct ctcccacatc ctttcagcgc tactactgtg ctggggcctg cgagtctccc atgcccaga ttgtccgccc
1701 atccaacctc gccaccatcc agagcatcgt cagagctgtg ggcattgtcc ctggcatccc agagccatgc tgtgttccag acaagatgaa ctcccttgga
1801 gtccctttcc tggatgaaaa tcggaatgcg gttctgaagg tgtaccocaa tatgtccgta gagacgtgtg cctgtcggta aatggcgccg cagtatactc
1901 tagagtgcac acccggggaa ttctcagac gctcgtctct agcttggcgt aatcatgggt atagctgttt cctgtgtgaa attgttatcc gctcacaaat
2001 ccacacacaa tacgagccgg aagcataaag tgtaaagcct ggggtgccta atgagtgagc taactcacat taattgcgtt gcgctcactg cccgctttcc
2101 agtcgggaaa cctgtcgtgc cagctgcatt aatgaatcgg ccaacgcgcg gggagaggcg gtttgcgtat tgggcgctct tgccttctcc cgcctactga
2201 ctgcgtcgcg tcgctcgctc ggctgcggcg gctcactcaa agcggtaat agcggttatcc acggttatcc gggataacgc gggaaaagac agctaacaga
2301 atgtgagcaa aaggccagca aaaggccagg aaccgtataa aggcgcgctt gctggcgctt ttccataggc tccgcccccc tgacgagcat cacaaaaatc
2401 gacgtctcag tcagaggttg cgaacccgca caggactata aagataccag cgttttcccc ctggaagctc cctcgtgcgc tctcctgttc cgacctgcc
2501 gcttacccga tacctgtccc cctttctccc ttcgggaagc gctgcgcttt ctcaatgctc acgctgtagg tatctcagtt cgggtgtagg cgttcgctcc
2601 aagctgggct gtgtgcacga acccccctt cagcccagacc gctgcgcctt atccggtaac tatcgtcttg agtccaaacc ggtaagacac gacttatcgc
2701 cactggcagc agcactgtgt aacaggatta gcagagcgag gtatgtaggc ggtgtctacag agttcttgaa gtggtggcct aactacggct acactagaag
2801 gacagtattt ggtatctggt cctctgtgaa gccagttacc ttcggaaaaa gagtgtgtag ctcttgatcc ggcaaacaaa ccaccgtgg tagcgttggt
2901 tttttgtttt gcaagcagca gattacgcgc agaaaaaag gatctcaaga agatcctttg atcttttcta cggggtctga cgctcagtg aacgaaaaat
3001 cactttaagg gatttttggt atgagattat caaaaaggat cttcacctag atctttttaa aagtttttaa tcaatctaaa gtatatatga
3101 gtaaaacttg tctgacagtt accaatgctt aatcagtgag gcacctatct cagcgatctg tctatttctg tcatccatag ttgctgact ccccgctgtg
3201 tagataacta cgatacggga gggcttacc tctggcccca gtgctgcaat gatacccgca gacccacgct caccggctcc agatttatca gcaataaacc
3301 agccagccgg aaggcccgag cgcagaagtg gtccctgcaac tttatccgcc tccatccagt ctattaattg ttgcccggaa gctagagtaa gtagttcgcc
3401 agttaatagt ttgcgcaacg ttgttgccat tgctacagcg atcgtgtgtg cagcgtcgtc gtttggtatg gcttcattca gctccggttc ccaacgatca
3501 aggcgagtta catgatcccc catgttgtgc aaaaaagcgg tttagctcct cggtcctccg atcgttgtca gaagtaagtt ggccgcagtg ttatcactca
3601 tgggttatggc agcactgcat aattctctta ctgtcatgcc atccgtaaga tgcttttctg tgactggtga gtactcaacc aagtcattct gagaatagtg
3701 tatgcggcga ccgagttgct cttgccggcg gtcaatacgg gataatacgg cggcacatag cagaacttta aaagtgtcga tcattggaaa acgttctctg
3801 gggcgaaaac tctcaaggat cttaccgctg ttgagatcca gttcgatgta acccactcgt gcacccaact gatcttcagc atcttttact ttaccagcg
3901 tttctgggtg agcaaaaaca ggaaggcaaa atgccgcaaa aaagggaata agggcgacac ggaaatgttg aatactcata ctcttctttt tcaatatta
4001 ttgaagcatt tatcagggtt attgtctcat gagcgggata atatttgaat gtatttagaa aaataaacia atagggttc cgcgcacatt tccccgaaa
4101 gtgccacctg acgtctaaga aaccattatt atcatgacat taacctataa aaataggcgt atcacgagcg cctttctgtc

```

> RDC3543 Translated Insert Sequence

```

1  mapgparisl gsllpmvpl llllrgagcg hrgpswsslp saaaglgdr dsqsgpgdaa aalgppaqdm vaihmlrlye kynrrgappg ggntvrsfra
101 rlemidgkpv yffnltsmqd semiltaafh fysepprwrp agevfckpra knascrltpt glparhlhlf rlsqntatq gllrgamalt ppprglwqak
201 dissiikaar rdgelllsaq ldtgekdpvg prpssshmpyi lvyandlais epnsavavslq rydpfpagdf epgaapnssa dprvraraqv skplqdnelp
301 glderpapal haqnfhkhef wsspfralkp rtarkdrkkk dqdtftaass qvldfdektm qkarrrrgwdc prvcrrylk vdfadigwne wiispskfsda
401 yycagacefp mpkivrpsnh atigsivrav givpgipepc cvpdkmnslg vlfdlenrna vlkvypnmsv etcacr

```