

**Specifications:**

Gene:	rAgrn
Accession:	P25304
Insert size:	5893bp
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.

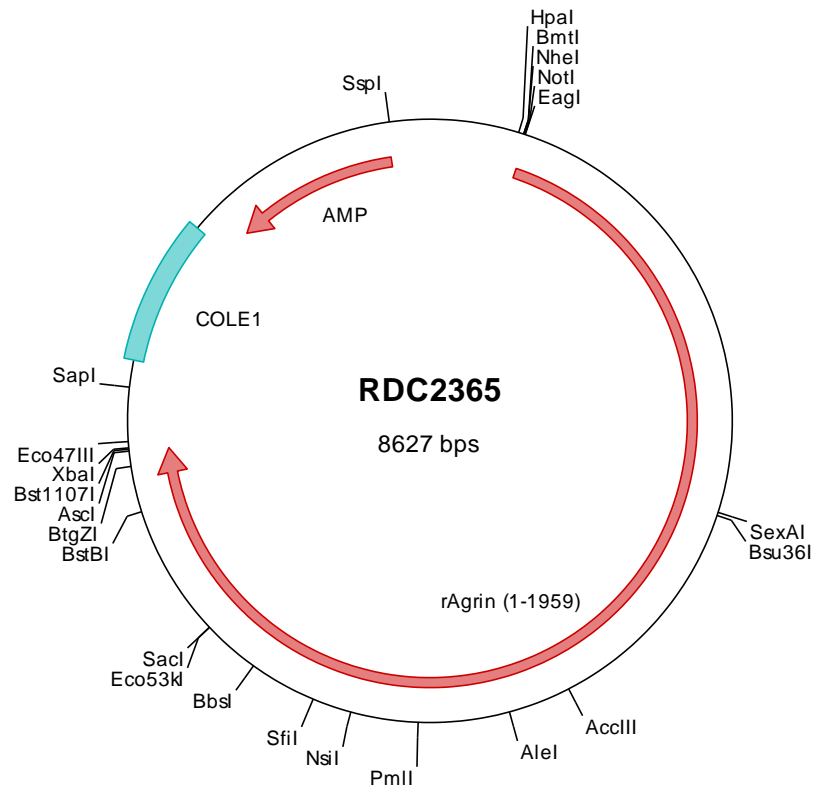
**rAgrin cDNA Plasmid**

**Agrn agrin [ *Rattus norvegicus* (Norway rat) ]**

**Also known as:** AGR

**Summary:**

Agrin is a heparan sulfate proteoglycan component of the extracellular matrix. It is critical in the development of the neuromuscular junction (NMJ). It contains several laminin G, Kazal type serine protease inhibitor, and epidermal growth factor domains. Additional post-translational modifications occur to add glycosaminoglycans and disulfide bonds.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

> RDC2365 Plasmid DNA Sequence

```

1   tcgctgctgtt  cggatgatgac  ggtgaaacc  totgacacat  gcagctccc  gagacggta  cagcttgtct  gtaagcggat  gccgggagca  gacaagccc
101  tcagggcgccg  tcagcgggtg  ttggcgggtg  tcggggctgg  cttactatg  cggcatcaga  gcagattgta  ctgagagtg  accatagcg  gtgtgaaat
201  ccgcacagat  gcgtaaggag  aaaataccgc  atcaggcgcc  attgccatt  caggctcgc  aactgttggg  aagggcgatc  ggtgcccgc  tcttcgctt
301  tacgcccagct  ggcgaaaagg  ggatgtgctg  caaggcgatt  aagttgggta  acgcccagg  tttcccagtc  acgacgttgt  aaaacgacg  ccagtgaat
401  ggagacgtgt  taacaagctt  ggatccgata  tcgctagcgc  ggccgcaacc  atgcctcctc  tgccactgga  acacagaccc  aggcaggagc  ctggtgcctc
501  catgctggtt  cgatacttca  tgatccoctg  caacatctgc  ttgatcctgt  tggccacttc  cacattgggc  tttgocggtc  tcttttctc  cagcaactac
601  aaacctggaa  tccacttcac  accagcgcct  cctacgcctc  ctgatgtatg  caggggaaat  ttagtggctt  ttgtgtgct  ttgtgtaact  agtgttgag
701  atccaggcgg  tgcttctgt  gctgtgaaga  cctgtctacg  cctgtctacg  ggtgtcctct  tgtgtgcaac  agatgcctcc  acctatagca  acgagtgtga
801  gctgcagcgc  ggcgagtgca  accagcaacg  gcgcatccgc  ctgctctgcc  aagggccatg  tgggtcccgg  gaccocctgt  ccaacgtgac  ctgcagttt
901  ggtagtacct  gtgtaccctc  ggtgacgga  cagactgcct  catgtctgtg  tctcaacaa  tgcttccggg  cccctgatgg  cacagtgtgt  ggcagtgac
1001  gtgttgacta  ccctagttaa  tgccagctgc  ttagtcatgc  ctgtgccaag  caggagcaca  tcttcaagaa  gttaaatggt  cctgtgtatc  cctgcccagg
1101  cagcatgtca  gacctgaacc  acatctgccc  tigtgaacca  cgtacacggc  acccagaat  gcttctgccc  cctgagaact  gccctgccc  gcaacgcct
1201  atctgtggag  atgatggggg  caccatgaa  aaogactgtg  toatgagccc  taatggtgca  accctgccc  tgcttctcca  gaaagtacgc  tctgttcaat
1301  gccaaactgc  agaccagctc  gccagatct  gccagtttaa  cctgtcccgc  cgtgtcccgc  ctgtcccgc  ccaactgttc  ccaactgttc  cctgcccagg
1401  tgggtctctac  agcctgtgt  gtgccaaga  tgggcaaca  tacaacaatg  actgttggcg  caacacggct  gagtgtgac  aacagcggc  catctctcc
1501  aagcaaccag  gccctgtgta  ccagaccgc  tccccatgcc  atggagtgca  atgtgcatct  ggggcagtat  gcacagtga  gaaocgggaa  gccagtgcc
1601  agtgccagg  gctgtgctc  ggcactacg  atcctgtgtg  cggcagtgac  ggtgtcctct  acggcaagt  gtgagagct  gacatagca  gacagtgcc
1701  tggcgggaa  atccaagtgg  cccgcagagg  accctgtgac  ccatgtggcg  agtgccgttt  tggatccctg  tgccaggtgg  aacctggaag  actgtgtgc
1801  cctctgagt  gctgtggagt  agcccagcc  gtagcgggt  ctgatggaca  caatacagct  agtgaaagt  agtgcaagt  acacgcctgt  ccagcctgt
1901  tcagcctata  ctgtgctca  gctggaca  gcagacact  tggagaaaa  gtttgaact  ttggggctgt  ttgctcagct  ggaacagtgt  ggaacagtgt
2001  ttgtgagca  cctccactg  gccctgtgt  tggcagtgat  ggtgtcaact  accctagtc  ctgtgagta  cgcgaagct  cctgtcagca  ctaggtaca
2101  attgaggagg  cccatggagg  gccatgtgag  ccgctgtgag  gtgctcact  gggctctgt  tetggggagg  acgacagtg  tgaacaggag  tgaacaggag
2201  agctgagct  tatctgggac  gaggactcag  aagatggccc  atgtgtctg  gactttagct  gccagagtg  gccagagtg  ccttagaagc  ccttagaagc
2301  agtcaacct  ggcaccagtg  gtgatctgaa  gaagcccagg  tggcaataac  agcaagaact  gtaactgtct  gctcagggag  cctgcccagg  cctgcccagg
2401  gctccactgc  taactgtggc  ctccaacaa  tgtgcccaaa  cccoctatgg  gctgtccag  ctgtccagc  gacaattca  ctgtgccc  ggtgtgggg
2501  gtcccagca  ctgcaactg  aacccccat  gctctacag  tggcactgt  agcccagca  caggggcag  ctctgccc  ccaggtgtag  gggcctcag
2601  gctgtgacg  tgtgaaact  gctctggaa  ctccctggc  atctgcacc  atggacatg  tgggtgca  aggtgtgca  ccctgagct  ggcaccctg
2701  agggatgact  gtgacagat  gactggatg  tgttccctg  ggcctgtgt  ggtgtgtcc  aagtggtgac  aagtggtgac  aagtggtgac  aagtggtgac
2801  taggtgtgta  agcagatccc  atgacacct  tgacttgtt  ggagatacac  ggtgtctgt  gctcttagct  tgacttagct  tgacttagct  tgacttagct
2901  ctgcccacc  ctcaactgtc  cagagctcaa  ctctaccagg  gctgcccag  ctgcccagct  cagagctgt  gacttagct  gacttagct  gacttagct
3001  cgcacagct  tggactctc  cactcagat  ctgttctct  gccagagag  tcttactct  gcttactct  gggcttccc  caacatctc  caacatctc
3101  atctctgag  caagacgct  ccaattccc  acaacagct  tctctgtct  cccggcagta  ctaccatga  ttggcccacc  ccaattccc  taaccctca
3201  caccacagct  agcatccca  gaagcacgc  gtggcctgt  ctgactctg  cccctacag  agcagcctc  gacttagct  gacttagct  gacttagct
3301  agtgaatcc  gacgcccac  tgggagtgc  tgggagtgc  gacgagaa  tgagtgaga  tgggaggcc  agtggggcg  agtggggcg  agtggggcg
3401  gcatttgtgt  gacccatgg  ccaccatcg  agagggctc  ctgtacaac  tcaccttgg  gctgtgctc  agatggcaag  acaccctcc  tggactcca
3501  aggtccaac  tgtctctca  ccaagcatt  ccagggcgtg  ctagagctg  aggggctga  ggggacagaa  ctgtctaca  cacctgagt  gctgacccc
3601  aagtcagagt  gctctggga  caacccaag  agcattgaa  agcattgaa  ggaacttca  ttttaaggt  cggactgtc  ggaacttca  ggaacttca
3701  tacgggaact  ggggctggc  aagttgttc  gcgccattg  ggcacttca  tttgacctc  ccacagctt  ccacagctt  ccacagctt  ccacagctt
3801  ccgacagat  caggtatct  ggcactggg  cctggcagtg  aggagctc  tgaagaaac  tgtgcatct  ttgagactt  ttgagactt  ttgagactt
3901  accggagctg  caacagaac  taacagtgt  atggccacg  ctgcccagc  ccagagcac  cactgtgag  cactgtgag  cactgtgag  cactgtgag
4001  gtcacaccag  ccggcctgt  ggcagaact  cagcaccac  aaccactgc  oggcccaca  ccactgcc  caactgcc  caactgcc  caactgcc
4101  tcaacagccc  tcaaaagct  gtgatccca  acctgtctc  catggagta  cctgtccag  cctgtccag  cctgtccag  cctgtccag  cctgtccag
4201  ggcagggctg  gctctgtct  tgaaaaag  caaccccct  ccaatgccc  ccaatgccc  ccaatgccc  ccaatgccc  ccaatgccc  ccaatgccc
4301  cactgocct  agcactgaa  ttccgggct  tggagacag  gggactgct  ctctacaat  gcaatgca  gcaatgca  gcaatgca  gcaatgca
4401  tcatgggct  gtgcaact  ggtttgac  aggtcagg  ccagcagtg  taacagctt  agtgccagt  agtgccagt  agtgccagt  agtgccagt
4501  taagcgaact  gctgcaagg  gctgcaagg  gctgcaagg  gctgcaagg  gctgcaagg  gctgcaagg  gctgcaagg  gctgcaagg  gctgcaagg
4601  tctatgtgg  tggatccca  gaagaaca  ttgccatgt  gctgtatgc  acctctgtg  gcgttggct  gcgttggct  gcgttggct  gcgttggct
4701  caatcagca  ctggagact  gcgactggc  gagggtctg  gcttcaagct  ctgtgtggg  agaatgtgg  agaatgtgg  agaatgtgg  agaatgtgg
4801  ggtggggccc  tatggcagg  actggaggt  ggcacttct  gctgtcag  ctccctggc  cctctggcc  cctctggcc  cctctggcc  cctctggcc
4901  agccgaccc  ctgcaatgg  gcagcccct  gtogtgtct  tccagcgt  ggggccaag  gcgagtccc  gcgagtccc  gcgagtccc  gcgagtccc
5001  agtctggag  actgtggt  ccggccct  cctgctgac  cttaatgct  tctcactac  ggaactgaa  ggaactgaa  ggaactgaa  ggaactgaa
5101  gaaagactg  cgtctgag  ggttctct  gctgtggcg  gctgtggcg  gctgtggcg  gctgtggcg  gctgtggcg  gctgtggcg  gctgtggcg
5201  tggcctgca  taacggcac  ctgagttct  gctatgact  tggcaaggg  gctgcagtc  tcaggagca  tcaggagca  tcaggagca  tcaggagca
5301  ggtatctct  gaaagcaat  gctcgaagg  tgcccctca  gtgggtgac  gtcccctgt  gctaggggaa  gctaggggaa  gctaggggaa  gctaggggaa
5401  atgtcaacc  taaagagcc  tctctatt  gggggagct  ctgagctag  caagctggc  aggggggct  aggggggct  aggggggct  aggggggct
5501  agctggtct  tcaagagg  catcaact  tgactcagg  goatgtgt  cgggcagtg  atgtctacc  atgtctacc  atgtctacc  atgtctacc
5601  gggcaaccc  tgccttaag  ggggctct  tgtcccagg  gaagccact  atgaaatgc  gtgtctctg  gtgtctctg  gtgtctctg  gtgtctctg
5701  ctagttaga  agtcagtg  aactgagaa  acactggct  ttgatggcg  gactgagaa  gaactacat  gaactacat  gaactacat  gaactacat
5801  agatcccag  cctgaaact  ctggatccc  gggcccttt  cagtgagaa  gcaactgca  gcaactgca  gcaactgca  gcaactgca  gcaactgca
5901  gggctgtgt  ctgtggatt  gcaaggct  agaactgca  gattacaag  cctgtgccc  cctgtgccc  cctgtgccc  cctgtgccc  cctgtgccc
6001  cagccagtt  ctgtgctc  gctcaacca  accgctggt  gtoaacaca  accgctggt  gtoaacaca  accgctggt  gtoaacaca  accgctggt
6101  atgaaagccc  tgtgactg  tcttcccct  tgggtgccc  gcaactgag  acagctggc  acagctggc  acagctggc  acagctggc  acagctggc
6201  gctctaccc  aagcctat  gcacaggtt  tgtgggtct  ctgcccagg  atgctgctc  atgctgctc  atgctgctc  atgctgctc  atgctgctc
6301  ccagagctaa  gacctgcc  caactctaa  aggcggcga  ctactactc  gtatgcaac  gtatgcaac  gtatgcaac  gtatgcaac  gtatgcaac
6401  tcatggctat  agctgttcc  tgtgtgaa  tgttaccgc  tcaaatcc  acacaacat  acacaacat  acacaacat  acacaacat  acacaacat
6501  gagtgagta  actcacata  atgctgttc  gctcactgc  cctctccag  ctctggcag  ctctggcag  ctctggcag  ctctggcag  ctctggcag
6601  gagagggct  ttcgctatt  ggcgctctc  cgcctctct  ctactgctc  cgtctgctc  cgtctgctc  cgtctgctc  cgtctgctc  cgtctgctc
6701  gcgtaatac  gtttatccc  agaactagg  gataacgca  gaaagaaat  gtagaagaa  gtagaagaa  gtagaagaa  gtagaagaa  gtagaagaa
6801  tggcgtttt  ccaatggct  gcgcccct  acgagcatc  caaaaatc  caaaaatc  caaaaatc  caaaaatc  caaaaatc  caaaaatc
6901  gtttcccct  ggaagctcc  tctgctctc  tctgctctc  tctgctctc  tctgctctc  tctgctctc  tctgctctc  tctgctctc  tctgctctc
7001  caatgctac  gctgtagg  tctcaagct  taagacaga  ctactgcca  ctactgcca  ctactgcca  ctactgcca  ctactgcca  ctactgcca
7101  ccgtaacta  tctctttag  tccaaccgg  taagacaga  ctactgcca  ctactgcca  ctactgcca  ctactgcca  ctactgcca  ctactgcca
7201  tgcacagag  tctcttag  tgggcccct  ctactgctc  ctactgctc  ctactgctc  ctactgctc  ctactgctc  ctactgctc  ctactgctc
7301  gttgttagct  ctgtgccc  caaacaacc  accgctgta  gcggtggt  ttttggct  ttttggct  ttttggct  ttttggct  ttttggct
7401  atctttgat  ctttctac  ggttctgac  ctcaaggt  aatctaaag  aatctaaag  aatctaaag  aatctaaag  aatctaaag  aatctaaag
7501  ccttttaaa  taaaaatg  gttttaaag  gctgactcc  cctgctgta  cctgctgta  cctgctgta  cctgctgta  cctgctgta  cctgctgta
7601  gcgatctgt  tattctgt  atccatagt  gctgactcc  cctgctgta  cctgctgta  cctgctgta  cctgctgta  cctgctgta  cctgctgta
7701  taccgagag  cccagctca  ccggctccag  atttatcag  aataaacag  aataaacag  aataaacag  aataaacag  aataaacag  aataaacag

```

```

7801 catccagtct ataatgtt gccgggaagc tagagtaagt agttcgccag ttaatagttt gcgcaacggt gttgccattg ctacagcatt cgtggtgtca
7901 cgctcgtcgt ttggtatggc ttcattcagc tccggttccc aacgatcaag gcgagttaca tgatccccc tgggtgtgcaa aaaagcgggt agctccttcg
8001 gtcctccgat cgttgtcaga agtaagttgg ccgcagtggt atcactcatg gttatggcag cactgcataa ttctcttact gtcacgccaat ccgtaagatg
8101 cttttctgtg actggtgagt actcaaccaa gtcattctga gaatagtgtg tgcggcgacc gagttgctct tgcccggcgt caatacggga taataccgcg
8201 ccacatagca gaactttaaa agtgctcattc attggaaaac gttcttcggg gcgaaaactc tcaaggatct taccgctggt gagatccagt tcgatgtaac
8301 ccaactcgtc acccaactga tcttcagcat cttttacttt caccagcgtt tctggtgtgag caaaaacagg aaggcaaaa gcccgaataa agggaataag
8401 ggcgacacgg aaatgttgaa tactcactact cttccttttt caatattatt gaagcattta tcagggttat tgtctcatga gccgatacat atttgaatgt
8501 atttagaaaa ataacaat aggggttccg cgcacatttc cccgaaaagt gccacctgac gtctaagaaa ccattattat catgacatta acctataaaa
8601 ataggcgtat cacgagggcc tttcgtc

```

**> RDC2365 Translated Insert Sequence**

```

1  mpplplehrp rpepgasm lv ryfmipcn ic lillatstlg favllflsny kpgihftpap pppdvcr gm lcgfgavcep svedpgrasc vckknacpat
101 vapvcgsdas tysnecelqr aqcnqrrir llrqqpcgsr dpcanvtcsf gstcvpsadg qtascclpctt cfgapdgtvc gsdgvdy psc cqlshhaca
201 qehifkknfng pcdpcqgms dlhnicrvnp rtrhpemllr pencpaqhtp icgddgvt ye ndcvmsr iga trgl llqkvr sgqcqtrdq petc qfnsvc
301 lsrrgrphcs cdrvtcdg sy rpvcagdqght ynn dcrwqqa ecrqraipp khqgpcdqtp spchgvqcaf gavctvkngk aeceqcqvcs giydpvcgsd
401 gvtysvcel esmactlgre iqvarrgpcd pcgqcrf gsl cevetgrcvc psecvesaqp vcgsgdghtya secelvhvac thqislyvas aghcqtcegek
501 vctfgavcsa ggcvcprceh pppgpvcgsd gvtylsacel reaacqqvq ieeahagpce paecsgsgsg sgeddeceqe lcrqrggiwd edsedgpcvc
601 dfscqsvprs pvcgsdgvty gtecdlkkar cesqqelyva agqacrgptl apllpvafph caqtpygccq dnftaaqvgv lagcpstchc nphgsysgtc
701 dpatgqcscr pgvgglrcdr cepgfwfng ivtdghsgct pcsdprgav rddceqmtgl cscrpgvagp kcgqcpdgqv lghlgceadp mtpvtcveih
801 cefgascvek agfaqcicpt ltcpeanstk vcgsdgvtyg necqlkaiac rqrldistqs lgpcqesvtp gasptsasmt tprhilsctl pfphnslpls
901 pgstthdwpt plpisphttv siprstawpv ltvpptaas dvtslatsif sesgsangsg deelsgdeea sggsgglep pvgsivvthg ppierascyn
1001 splgccsdgk tpsldsegsn cpatkafgvv lelegvegge lfytpemadp kselfgetar siestlddlf rnsdvk kdfw svrlrelpgg klvraivdvh
1101 fdpttafqas dvqgallrqi qvsrwpalav rrlplqehvrf ldfdwfptff tgaatgttaa matarattvs rlpasvtpvr vypshtsrpv grttappttr
1201 rppttatnmd rptpghgqp skscdsqpc l hggtcqdqds gkgftcscta grggsvcekv qppsmpafkg hsflafptlr ayhtlrlale fraletegll
1301 lyngnargkd flalalldgr vqfrfdtgs g pavltslvpv epgrwhrlel srhwrqg tls vdgetpvvge spsgtdglnl dtnlyvggip eeqvamvldr
1401 tsvgvglkgc irmldinnq l elsdwqraa vqssvgveg c dhpclpnpch ggalcqaalea gmflcqp pg rfgptcadek spcqpnpchg aapcrvllsg
1501 gakcecp lgr sgtfcqt vle tagsrpf lad fngfsylelk glhtferdlg ekmalemvfl argpsgllly ngqkt dkgd fvsialhnrh lefcydlgk
1601 aavirskepi algtwvr vfl erngrk galq vdgprvlge spksrkv pht mlnlkeplyi ggapdfskla rgaavssgfs gviqlvslrg hqlltqehvl
1701 ravdvspfad hpctqalgnp clnggscvpr eatyeclcp g fsglhcek g lveksvgdle tlafdg rtyi eynaviese ltneipapet ldsralfsek
1801 alqsnhfels lrteatqglv lwigkaera dymalaivdg hlqlsydlgs qpvlrstvk vntnrwlrir ahrehregsl qvgneapvtg ssp l gatqld
1901 tdgalwlggl qklpv gqalp kaygtgfvgc lrdv vvhrg l hllledavtk pelr pcppt

```