*r*Semaphorin 3A VersaClone cDNA

Catalog Number: RDC3002

Specifications:

Gene:	*r*Sema3a
Accession:	NP_059006.1
Insert size:	2332bp
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

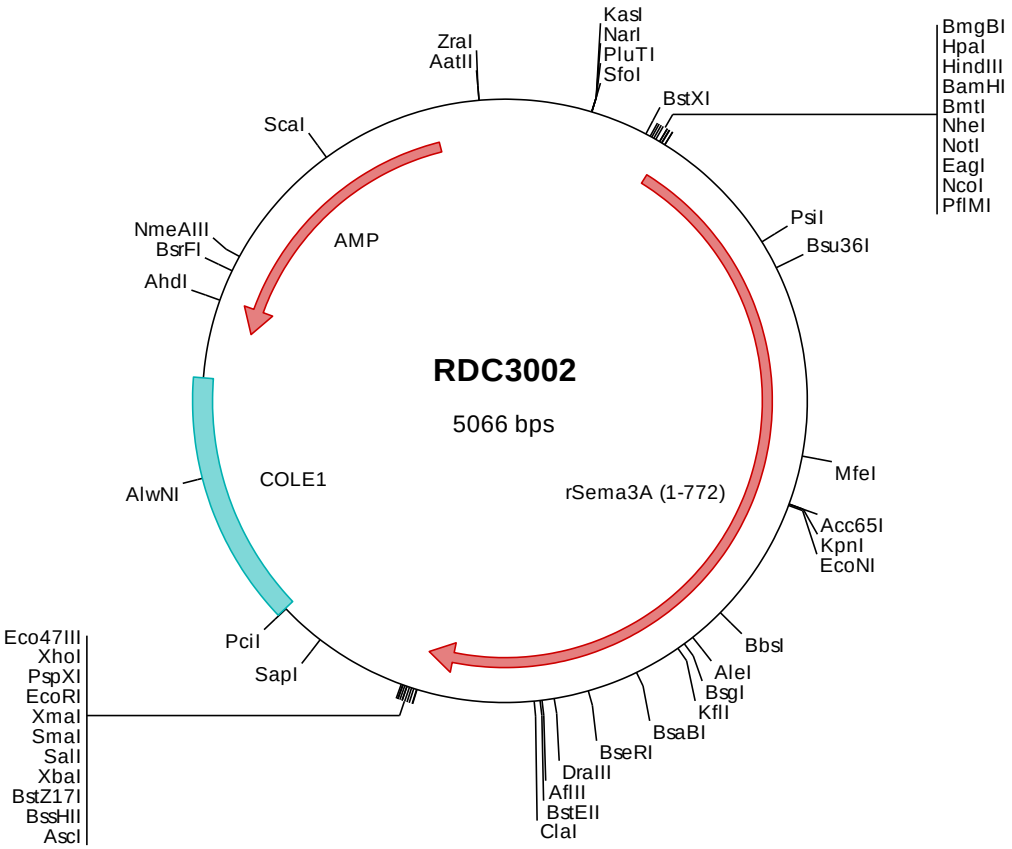
Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

*r*Semaphorin 3A cDNA Plasmid

Sema3a semaphorin 3A [*Rattus norvegicus* (Norway rat)]

Summary:

SEMA3A is one of six Class 3 secreted semaphorins which are potent chemorepellents that function in axon and/or vascular guidance during development. SEMA3A signaling is transduced by plexin A1-4, indirectly via neuropilin-1. SEMA3A activity is mediated by small GTPases that influence actin rearrangement and integrin activity. It is important in developmental organization of central and peripheral nerves, including those in heart, lung, kidneys, bones, teeth, and visual and olfactory systems.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

R&D SYSTEMS
a bio-techne brand

> RDC3002 Plasmid DNA Sequence

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 101  tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg cttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
 201  ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
 301  tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
 401  ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgccacc atgggctggt tcactgggat tgcctgtctt ttctggggta tattacttac
 501  agcaagagca aactatgcaa acggaaagaa caatgtgcca agactgaaat tatcgtacaa agaaatgttg gaatccaaca atgtgatcac tttcaatggc
 601  ttggccaaca gctccagtta tcacactttt cttctggatg aggaacggag tagactgtat gttggagcaa aggatcatat attttcattc aacttggtga
 701  atattaaaga ttttcaaaag attgtgtggc cagtatctta taccaggaga gatgaatgca agtgggctgg aaaagatatc ctgaaagaat gtgcaaattt
 801  catcaaggtc ctcaaggctt ataatcagac tcacttgtac gcctgtggaa cgggggcttt ccatccaatt tgcacctata ttgaagttgg acatcatcct
 901  gaggacaaca tttttaaact gcaggactca catttgaaa acggtcgtgg gaagagtcct tatgacccca aacttctgac tgcctctctt ctaatagatg
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1101  ctcccggtgg ctcaatgatc ctagattcat cagtgcccat ctcatcccag agagtgataa ccctgaagat gacaaagtat atttttttctt ccgagaaaat
1201  gcaatagatg gagaacattc tggaaaagcc actcatgcta gaataggtca gatatgcaag aatgactttg gaggacacag aagtcttgtg aataaatgga
1301  caactttcct gaaagcacgc ctgatttgct ctgtgccagg tcccaatggc attgacacac attttgatga attacaggat gtattcttaa tgaactctaa
1401  agatcctaaa aatccaattg tctatggagt gttcacaaca tcaagcaaca tctttaaggg ctctgctgtg tgtatgtaca gtatgagtga tgtaagaagg
1501  gtgttccttg gtccatatgc tcacagagat ggtcccaact atcagtgggt accttaccaa ggaagagtcc cttatccacg accaggaact tgtcccagta
1601  aaacatttgg tggatttgac tccacaaagg accttcctga tgatgtcata acctttgcaa gaagccatcc agccatgtac aacccagtgt ttcctattaa
1701  taatcgccca ataatgatca aaacagatgt aaattatcag ttcacacaaa ttgttgtaga ccgggtggat gcagaagatg gccagtatga tgttatgttc
1801  atcggaacag atgttggaac tgtccttaaa gtggtttcag tccccaagga gacttggcat gacctagaag aagttcttct ggaagaaatg acagtcttcc
1901  gggaaccaac aactatttca gcaatggagc tttctactaa acagcaacaa ctgtacattg gctcaactgc tggagtagca cagcttcctc tacaccgttg
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2101  aggcgcacaa gacgacagga tataaggaat ggagacccac tgactcactg ctccgacttg cagcatcatg ataatcatca tgggcacagt cttgaagaga
2201  gaatcatcta tggagtagaa aatagtagca cattcttgga atgcagtccg aagtcacaga gagccttggt atattggcaa tttcagaggc gaaatgaaga
2301  tcgaaaggag gagatcagag tgggtgatca tatcatcagg acagaacagg ggctcctgct tcgtagtctg cagaagaagg attcaggcaa ttacctgtgt
2401  cacgccgtgg agcacggttt catgcaaact cttcttaagg tgaccctgga agtcatcgat acagaacatt tggaggaact tcttcataaa gatgacgatg
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2601  cacaatggat gagttctgtg aacaagtatg gaaaagggac cgaaaacaac gccgacaaag gccggggcac tctcaaggga gcagcaacaa gtggaagcac
2701  atgcaggaga gcaagaaagg tagaaacagg aggacccacg agtttgagag ggcacccagg agtgtctaaa ggcgcgccag tatactctag agtcgacacc
2801  cggggaattc ctcgagcgct cgtctctagc ttggcgtaat catggtcata gctgtttcct gtgtgaaatt gttatccgct cacaattcca cacaacatac
2901  gagccggaag cataaagtgt aaagcctggg gtgcctaatg agtgagctaa ctcacattaa ttgcgttgcg ctcactgccc gctttccagt cgggaaacct
3001  gtcgtgccag ctgcattaat gaatcggcca acgcgcgggg agaggcggtt tgcgtattgg gcgctcttcc gcttcctcgc tcactgactc gctgcgctcg
3101  gtcgttcggc tgcggcgagc ggtatcagct cactcaaagg cggtaatacg gttatccaca gaatcagggg ataacgcagg aaagaacatg tgagcaaaag
3201  gccagcaaaa ggccaggaac cgtaaaaagg ccgcgttgct ggcgtttttc cataggctcc gccccctga cgagcatcac aaaaatcgac gctcaagtca
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3601  cactggtaac aggattagca gagcgaggta tgtaggcggt gctacagagt tcttgaagtg gtggcctaac tacggctaca ctagaaggac agtatttggt
3701  atctgcgctc tgctgaagcc agttaccttc ggaaaaagag ttggtagctc ttgatccggc aaacaaacca ccgctggtag cggtggtttt tttgtttgca
3801  agcagcagat tacgcgcaga aaaaaaggat ctcaagaaga tcctttgatc ttttctacgg ggtctgacgc tcagtggaac gaaaactcac gttaagggat
3901  tttggtcatg agattatcaa aaaggatctt cacctagatc cttttaaatt aaaaatgaag ttttaaatca atctaaagta tatatgagta aacttggtct
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4701  caaggatctt accgctgttg agatccagtt cgatgtaacc cactcgtgca cccaactgat cttcagcatc ttttactttc accagcgttt ctgggtgagc
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4901  cagggttatt gtctcatgag cggatacata tttgaatgta tttagaaaaa taaacaaata ggggttccgc gcacatttcc ccgaaaagtg ccacctgacg
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> RDC3002 Translated Insert Sequence

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 101  deckwagkdi lkecanfikv lkaynqthly acgtgafhpi ctyievghhp ednifklqds hfengrgksp ydpkklltasl lidgelysgt aadfmgrdfa
 201  ifrtlghhhp irteqhdsrw lndprfisah lipesdnped dkvyfffren aidgehsgka thariggick ndfgghrslv nkwttflkar licsvpgpng
 301  idthfdelqd vflmnskdpk npivygvftt ssnifkgsav cmysmsdvrr vflgpyahrd gpnyqwvpyq grvpyprpgt cpsktfggfd stkdlpddvi
 401  tfarshpamy npvfpinnrp imiktdvnyq ftqivvdrvd aedgqydvmf igtdvgtvlk vvsvpketwh dleevlleem tvfrepttis amelstkqqq
 501  lyigstagva qlplhrcdiy gkacaeccla rdpycawdgs scsryfptak rrtrrqdirn gdplthcsdl qhhdnhhghs leeriiygve nsstflecsp
 601  ksqralvywq fqrrnedrke eirvgdhiir teqglllrsl qkkdsgnylc havehgfmqt llkvtlevid tehleellhk dddgdgsktk emsssmtpsq
 701  kvwyrdfmql inhpnlntmd efceqvwkrd rkqrrqrpgh sqgssnkwkh mqeskkgrnr rtheferapr sv
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