

pSAT4A-cEYFP-N1

1	TCGCGCGTTT	CGGTGATGAC	GGTAAAACC	TCTGACACAT	GCAGCTCCCG
	AGCGCGCAA	GCCACTACTG	CCACTTTTGG	AGACTGTGTA	CGTCGAGGGC
51	GAGACGGTCA	CAGCTTGTCT	GTAAGCGGAT	GCCGGGAGCA	GACAAGCCCC
	CTCTGCCAGT	GTCGAACAGA	CATTTCGCTA	CGGCCCTCGT	CTGTTCGGGC
101	TCAGGGCGCG	TCAGCGGGTG	TTGGCGGGTG	TCGGGGCTGG	CTTAACTATG
	AGTCCCAGCG	AGTCGCCAC	AACCGCCCAC	AGCCCCGACC	GAATTGATAC
151	CGGCATCAGA	GCAGATTGTA	CTGAGAGTGC	ACCATATGCG	GTGTGAAATA
	GCCGTAGTCT	CGTCTAACAT	GACTCTCACG	TGGTATACGC	CACACTTTAT
201	CCGCACAGAT	GCGTAAGGAG	AAAATACCGC	ATCAGGCGCC	ATTCCGCCATT
	GGCGTGTCTA	CGCATTCCTC	TTTTATGGCG	TAGTCCGCGG	TAAGCGGTAA
251	CAGGCTGCGC	AACTGTTGGG	AAGGGCGATC	GGTGCGGGCC	TCTTCGCTAT
	GTCCGACGCG	TTGACAACCC	TTCCCCTAG	CCACGCCCGG	AGAAGCGATA
301	TACGCCAGCT	GCGAAAAGGG	GGATGTGCTG	CAAGGCGATT	AAGTTGGGTA
	ATGCGGTCGA	CCGCTTTCCC	CCTACACGAC	GTTCCGCTAA	TTCAACCCAT
351	ACGCCAGGGT	TTTCCCAGTC	ACGACGTTGT	AAAACGACGG	CCAGTGCCAT
	TGCGGTCCCA	AAAGGGTCAG	TGCTGCAACA	TTTTGCTGCC	GGTCACGGTA
				I-Sce	
			CaMV 35S promoter		
401	TACCCTGTTA	TCCCTAACCG	GTCAACATGT	GGAGCACGAC	ACACTTGTCT
	ATGGGACAAT	AGGGATTGGC	CAGTTGTACA	CCTCGTGCTG	TGTGAACAGA
	I-SceI				
			CaMV 35S promoter		
451	ACTCCAAAAA	TATCAAAGAT	ACAGTCTCAG	AAGACCAAAG	GGCAATTGAG
	TGAGGTTTTT	ATAGTTTCTA	TGTCAGAGTC	TTCTGGTTTC	CCGTTAACTC
			CaMV 35S promoter		
501	ACTTTTCAAC	AAAGGGTAAT	ATCCGGAAAC	CTCCTCGGAT	TCCATTGCCC
	TGAAAAGTTG	TTTCCCATTA	TAGGCCTTTG	GAGGAGCCTA	AGGTAACGGG
			CaMV 35S promoter		
551	AGCTATCTGT	CACTTTATTG	TGAAGATAGT	GGAAAAGGAA	GGTGGCTCCT
	TCGATAGACA	GTGAAATAAC	ACTTCTATCA	CCTTTTCCTT	CCACCGAGGA

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CaMV 35S promoter

601 ACAAATGCCA TCATTGCGAT AAAGGAAAGG CCATCGTTGA AGATGCCTCT
TGTTTACGGT AGTAACGCTA TTCCCTTTCC GGTAGCAACT TCTACGGAGA

CaMV 35S promoter

651 GCCGACAGTG GTCCCAAAGA TGGACCCCA CCCACGAGGA GCATCGTGGA
CGGCTGTCAC CAGGGTTTCT ACCTGGGGGT GGGTGCTCCT CGTAGCACCT

CaMV 35S promoter

701 AAAAGAAGAC GTTCCAACCA CGTCTTCAA GCAAGTGGAT TGATGTGATA
TTTTCTTCTG CAAGGTTGGT GCAGAAGTTT CGTTCACCTA ACTACACTAT

CaMV 35S promoter

751 ACATGGTGGG GCACGACACA CTTGTCTACT CCAAAAATAT CAAAGATACA
TGTACCACCT CGTGCTGTGT GAACAGATGA GGTTTTTTATA GTTTCTATGT

Accl
~~~~~

CaMV 35S promoter

801 GTCTCAGAAG ACCAAAGGGC AATTGAGACT TTTCAACAAA GGGTAATATC  
CAGAGTCTTC TGGTTTCCCG TTAACCTCTGA AAAGTTGTTT CCCATTATAG

BspEI  
~~~~~

CaMV 35S promoter

851 CGGAAACCTC CTCGGATTCC ATTGCCCAGC TATCTGTCAC TTTATTGTGA
GCCTTTGGAG GAGCCTAAGG TAACGGGTCG ATAGACAGTG AAATAACACT

BspEI
~~~~~

CaMV 35S promoter

901 AGATAGTGGA AAAGGAAGGT GGCTCCTACA AATGCCATCA TTGCGATAAA  
TCTATCACCT TTCCCTTCCA CCGAGGATGT TTACGGTAGT AACGCTATTT

CaMV 35S promoter

951 GGAAAGGCCA TCGTTGAAGA TGCCTCTGCC GACAGTGGTC CCAAAGATGG  
CCTTTCCGGT AGCAACTTCT ACGGAGACGG CTGTCACCAG GGTTTCTACC

CaMV 35S promoter

1001 ACCCCACCC ACGAGGAGCA TCGTGGAAAA AGAAGACGTT CCAACCACGT  
TGGGGTGGG TGCTCCTCGT AGCACCTTTT TCTTCTGCAA GGTTGGTGCA

CaMV 35S promoter

1051 CTTCAAAGCA AGTGGATTGA TGTGATATCT CCACTGACGT AAGGGATGAC  
GAAGTTTCGT TCACCTAACT AACTATAGA GGTGACTGCA TTCCCTACTG

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1101 GCACAATCCC ACTATCCTTC GCAAGACCCT TCCTCTATAT AAGGAAGTTC  
CGTGTTAGGG TGATAGGAAG CGTTCGGGA AGGAGATATA TTCCTTCAAG

translational enhancer 5'-UTR from tobacco

1151 ATTTTCATTTG GAGAGGACGT CGAGAGTTCT CAACACAACA TATACAAAAC  
TAAAGTAAAC CTCTCCTGCA GCTCTCAAGA GTTGTGTTGT ATATGTTTTG

translational enhancer 5'-UTR from tobacco

1201 AAACGAATCT CAAGCAATCA AGCATTCTAC TTCTATTGCA GCAATTTAAA  
TTTGCTTAGA GTTCGTTAGT TCGTAAGATG AAGATAACGT CGTTAAATTT

translational enhancer 5'-UTR from tobacco

1251 TCATTTCTTT TAAAGCAAAA GCAATTTTCT GAAAATTTTC ACCATTTACG  
AGTAAAGAAA ATTTCGTTTT CGTTAAAAGA CTTTTAAAAG TGGTAAATGC

MCS

translational enhancer 5'-UTR from tobacco HindIII EcoRI Accl SacI

XhoI BglII SacI PstI Sall KpnI

1301 AACGATAGAG ATCTCGAGCT CAAGCTTCGA ATTCTGCAGT CGACGGTACC  
TTGCTATCTC TAGAGCTCGA GTTCGAAGCT TAAGACGTCA GCTGCCATGG

BamHI cEYFP

MCS XmaI SacII SmaI

1351 GCGGGCCCGG GATCCTGGGC AGCGTGCAGC TCGCCGACCA CTACCAGCAG  
CGCCCGGGCC CTAGGACCCG TCGCACGTGC AGCGGCTGGT GATGGTCGTC

cEYFP

1401 AACACCCCCA TCGGCGACGG CCCCCTGCTG CTGCCCGACA ACCACTACCT  
TTGTGGGGGT AGCCGCTGCC GGGGCACGAC GACGGGCTGT TGGTGATGGA

cEYFP

1451 GAGCTACCAG TCCGCCCTGA GCAAAGACCC CAACGAGAAG CGCGATCACA  
CTCGATGGTC AGGCGGGACT CGTTTCTGGG GTTGCTCTTC GCGTAGTGT

cEYFP

1501 TGGTCCTGCT GGAGTTCGTG ACCGCCGCCG GGATCACTCT CGGCATGGAC  
ACCAGGACGA CCTCAAGCAC TGGCGGCGGC CCTAGTGAGA GCCGTACCTG

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|      |                     |            |             |                     |            |
|------|---------------------|------------|-------------|---------------------|------------|
|      | cEYFP               |            |             | CaMV 35S terminator |            |
|      |                     |            | XbaI        |                     |            |
| 1551 | GAGCTGTACA          | AGTGAAGATC | CACCTAGTCT  | AGAGTCCGCA          | AAAATCACCA |
|      | CTCGACATGT          | TCACTTCTAG | GTGGATCAGA  | TCTCAGGCGT          | TTTTAGTGGT |
|      | CaMV 35S terminator |            |             |                     |            |
| 1601 | GTCTCTCTCT          | ACAAATCTAT | CTCTCTCTAT  | TTTTCTCCAG          | AATAATGTGT |
|      | CAGAGAGAGA          | TGTTTAGATA | GAGAGAGATA  | AAAAGAGGTC          | TTATTACACA |
|      | CaMV 35S terminator |            |             |                     |            |
| 1651 | GAGTAGTTCC          | CAGATAAGGG | AATTAGGGTT  | CTTATAGGGT          | TTCGCTCATG |
|      | CTCATCAAGG          | GTCTATTCCC | TTAATCCCAA  | GAATATCCCA          | AAGCGAGTAC |
|      | CaMV 35S terminator |            |             |                     |            |
| 1701 | TGTTGAGCAT          | ATAAGAAACC | CTTAGTATGT  | ATTTGTATTT          | GTAAAATACT |
|      | ACAACCTCGTA         | TATTCCTTGG | GAATCATAACA | TAAACATAAA          | CATTTTATGA |
|      | CaMV 35S terminator |            |             |                     |            |
| 1751 | TCTATCAATA          | AAATTTCTAA | TTCCTAAAAC  | CAAAATCCAG          | TGACGCGGCC |
|      | AGATAGTTAT          | TTTAAAGATT | AAGGATTTTG  | GTTTTAGGTC          | ACTGCGCCGG |
|      |                     |            |             | NotI                |            |
| 1801 | GCATTACCCT          | GTTATCCCTA | GTAATCATGG  | TCATAGCTGT          | TTCCTGTGTG |
|      | CGTAATGGGA          | CAATAGGGAT | CATTAGTACC  | AGTATCGACA          | AAGGACACAC |
|      |                     | I-SceI     |             |                     |            |
| 1851 | AAATTGTTAT          | CCGCTCACAA | TTCACACAAA  | CATACGAGCC          | GGAAGCATAA |
|      | TTTAAACAATA         | GGCGAGTGTT | AAGGTGTGTT  | GTATGCTCGG          | CCTTCGTATT |
| 1901 | AGTGTAAGC           | CTGGGGTGCC | TAATGAGTGA  | GCTAACTCAC          | ATTAATTGCG |
|      | TCACATTTTCG         | GACCCACGG  | ATTACTCACT  | CGATTGAGTG          | TAATTAACGC |
| 1951 | TTGCGCTCAC          | TGCCCCGTTT | CCAGTCGGGA  | AACCTGTCGT          | GCCAGCTGCA |
|      | AACGCGAGTG          | ACGGGCGAAA | GGTCAGCCCT  | TTGGACAGCA          | CGGTCGACGT |
| 2001 | TTAATGAATC          | GGCCAACGCG | CGGGGAGAGG  | CGGTTTGCGT          | ATTGGGCGCT |
|      | AATTACTTAG          | CCGGTTGCGC | GCCCTCTCC   | GCCAAACGCA          | TAACCCGCGA |
| 2051 | CTTCCGCTTC          | CTCGCTCACT | GACTCGCTGC  | GCTCGGTCGT          | TCGGCTGCGG |
|      | GAAGGCGAAG          | GAGCGAGTGA | CTGAGCGACG  | CGAGCCAGCA          | AGCCGACGCC |
| 2101 | CGAGCGGTAT          | CAGCTCACTC | AAAGGCGGTA  | ATACGGTTAT          | CCACAGAATC |
|      | GCTCGCCATA          | GTCGAGTGAG | TTTCCGCCAT  | TATGCCAATA          | GGTGTCTTAG |

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|      |             |             |            |             |            |
|------|-------------|-------------|------------|-------------|------------|
| 2151 | AGGGGATAAC  | GCAGGAAAGA  | ACATGTGAGC | AAAAGGCCAG  | CAAAAGGCCA |
|      | TCCCCTATTG  | CGTCCTTTCT  | TGTACACTCG | TTTTCCGGTC  | GTTTTCCGGT |
| 2201 | GGAACCGTAA  | AAAGGCCGCG  | TTGCTGGCGT | TTTTCCATAG  | GCTCCGCCCC |
|      | CCTTGGCATT  | TTTCCGGCGC  | AACGACCGCA | AAAAGGTATC  | CGAGGCGGGG |
| 2251 | CCTGACGAGC  | ATCACAAAAA  | TCGACGCTCA | AGTCAGAGGT  | GGCGAAACCC |
|      | GGACTGCTCG  | TAGTGTTTTT  | AGCTGCGAGT | TCAGTCTCCA  | CCGCTTTGGG |
| 2301 | GACAGGACTA  | TAAAGATACC  | AGGCGTTTCC | CCCTGGAAGC  | TCCCTCGTGC |
|      | CTGTCCCTGAT | ATTTCTATGG  | TCCGCAAAGG | GGGACCTTCG  | AGGGAGCACG |
| 2351 | GCTCTCCTGT  | TCCGACCCCTG | CCGCTTACCG | GATACCTGTC  | CGCCTTTCTC |
|      | CGAGAGGACA  | AGGCTGGGAC  | GGCGAATGGC | CTATGGACAG  | GCGGAAAGAG |
| 2401 | CCTTCGGGAA  | GCGTGGCGCT  | TTCTCAATGC | TCACGCTGTA  | GGTATCTCAG |
|      | GGAAGCCCTT  | CGCACC CGCA | AAGAGTTACG | AGTGCGACAT  | CCATAGAGTC |
| 2451 | TTCGGTGTAG  | GTCGTTTCGCT | CCAAGCTGGG | CTGTGTGCAC  | GAACCCCCCG |
|      | AAGCCACATC  | CAGCAAGCGA  | GGTTCGACCC | GACACACGTG  | CTTGGGGGGC |
| 2501 | TTCAGCCCGA  | CCGCTGCGCC  | TTATCCGGTA | ACTATCGTCT  | TGAGTCCAAC |
|      | AAGTCGGGCT  | GGCGACGCGG  | AATAGGCCAT | TGATAGCAGA  | ACTCAGGTTG |
| 2551 | CCGTAAGAC   | ACGACTTATC  | GCCACTGGCA | GCAGCCACTG  | GTAACAGGAT |
|      | GGCCATTCTG  | TGCTGAATAG  | CGGTGACCGT | CGTCGGTGAC  | CATTGTCCTA |
| 2601 | TAGCAGAGCG  | AGGTATGTAG  | GCGGTGCTAC | AGAGTTCTTG  | AAGTGGTGGC |
|      | ATCGTCTCGC  | TCCATACATC  | CGCCACGATG | TCTCAAGAAC  | TTCACCACCG |
| 2651 | CTAACTACGG  | CTACACTAGA  | AGGACAGTAT | TTGGTATCTG  | CGCTCTGCTG |
|      | GATTGATGCC  | GATGTGATCT  | TCCTGTCATA | AACCATAGAC  | GCGAGACGAC |
| 2701 | AAGCCAGTTA  | CCTTCGGAAA  | AAGAGTTGGT | AGCTCTTGAT  | CCGGCAAACA |
|      | TTCGGTCAAT  | GGAAGCCTTT  | TTCTCAACCA | TCGAGAACTA  | GGCCGTTTGT |
| 2751 | AACCACCGCT  | GGTAGCGGTG  | GTTTTTTTGT | TTGCAAGCAG  | CAGATTACGC |
|      | TTGGTGGCGA  | CCATCGCCAC  | CAAAAAAACA | AACGTTTCGTC | GTCTAATGCC |
| 2801 | GCAGAAAAAA  | AGGATCTCAA  | GAAGATCCTT | TGATCTTTTC  | TACGGGGTCT |
|      | CGTCTTTTTT  | TCCTAGAGTT  | CTTCTAGGAA | ACTAGAAAAG  | ATGCCCCAGA |
| 2851 | GACGCTCAGT  | GGAACGAAAA  | CTCACGTTAA | GGGATTTTGG  | TCATGAGATT |
|      | CTGCGAGTCA  | CCTTGCTTTT  | GAGTGCAATT | CCCTAAAACC  | AGTACTCTAA |
| 2901 | ATCAAAAAGG  | ATCTTCACCT  | AGATCCTTTT | AAATTAAAAA  | TGAAGTTTTA |
|      | TAGTTTTTCC  | TAGAAGTGGA  | TCTAGGAAAA | TTTAATTTTT  | ACTTCAAAAT |

## pSAT4A-cEYFP-N1

2951 AATCAATCTA AAGTATATAT GAGTAAACTT GGTCTGACAG TTACCAATGC  
TTAGTTAGAT TTCATATATA CTCATTTGAA CCAGACTGTC AATGGTTACG

AMP

3001 TTAATCAGTG AGGCACCTAT CTCAGCGATC TGTCTATTTT GTTCATCCAT  
AATTAGTCAC TCCGTGGATA GAGTCGCTAG ACAGATAAAG CAAGTAGGTA

AMP

3051 AGTTGCCTGA CTCCCCGTCG TGTAGATAAC TACGATACGG GAGGGCTTAC  
TCAACGGACT GAGGGGCAGC ACATCTATTG ATGCTATGCC CTCCCGAATG

AMP

3101 CATCTGGCCC CAGTGCTGCA ATGATACCGC GAGACCCACG CTCACCGGCT  
GTAGACGGG GTCACGACGT TACTATGGCG CTCTGGGTGC GAGTGGCCGA

AMP

3151 CCAGATTTAT CAGCAATAAA CCAGCCAGCC GGAAGGGCCG AGCGCAGAAG  
GGTCTAAATA GTCGTTATTT GGTCCGTCGG CCTTCCCGGC TCGCGTCTTC

AMP

3201 TGGTCCTGCA ACTTTATCCG CCTCCATCCA GTCTATTAAT TGTTGCCGGG  
ACCAGGACGT TGAAATAGGC GGAGGTAGGT CAGATAATTA ACAACGGCCC

AMP

3251 AAGCTAGAGT AAGTAGTTCG CCAGTTAATA GTTTGCGCAA CGTTGTTGCC  
TTCGATCTCA TTCATCAAGC GGTCAATTAT CAAACGCGTT GCAACAACGG

AMP

3301 ATTGCTACAG GCATCGTGGT GTCACGCTCG TCGTTTGGTA TGGCTTCATT  
TAACGATGTC CGTAGCACCA CAGTGCAGC AGCAAACCAT ACCGAAGTAA

AMP

3351 CAGCTCCGGT TCCCAACGAT CAAGGCGAGT TACATGATCC CCCATGTTGT  
GTCGAGGCCA AGGGTTGCTA GTTCCGCTCA ATGTACTAGG GGGTACAACA

AMP

3401 GCAAAAAAGC GGTTAGCTCC TTCGGTCCTC CGATCGTTGT CAGAAGTAAG  
CGTTTTTTTCG CCAATCGAGG AAGCCAGGAG GCTAGCAACA GTCTTCATTC

AMP

3451 TTGGCCGCAG TGTTATCACT CATGGTTATG GCAGCACTGC ATAATTCTCT  
AACCGGCGTC ACAATAGTGA GTACCAATAC CGTCGTGACG TATTAAGAGA

AMP

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3501 TACTGTCATG CCATCCGTAA GATGCTTTTC TGTGACTGGT GAGTACTCAA  
 ATGACAGTAC GGTAGGCATT CTACGAAAAG ACACTGACCA CTCATGAGTT

AMP

3551 CCAAGTCATT CTGAGAATAG TGTATGCGGC GACCGAGTTG CTCTTGCCCC  
 GGTTTCAGTAA GACTCTTATC ACATACGCCG CTGGCTCAAC GAGAACGGGC

AMP

3601 GCGTCAATAC GGGATAATAC CGCGCCACAT AGCAGAACTT TAAAAGTGCT  
 CGCAGTTATG CCCTATTATG GCGCGGTGTA TCGTCTTGAA ATTTTCACGA

AMP

3651 CATCATTGGA AAACGTTCTT CGGGGCGAAA ACTCTCAAGG ATCTTACCGC  
 GTAGTAACCT TTTGCAAGAA GCCCCGCTTT TGAGAGTTCC TAGAATGGCG

AMP

3701 TGTTGAGATC CAGTTCGATG TAACCCACTC GTGCACCCAA CTGATCTTCA  
 ACAACTCTAG GTCAAGCTAC ATTGGGTGAG CACGTGGGTT GACTAGAAGT

AMP

3751 GCATCTTTTA CTTTCACCAG CGTTTCTGGG TGAGCAAAAA CAGGAAGGCA  
 CGTAGAAAAT GAAAGTGGTC GCAAAGACCC ACTCGTTTTT GTCCTTCCGT

AMP

3801 AAATGCCGCA AAAAAGGGAA TAAGGGCGAC ACGGAAATGT TGAATACTCA  
 TTTACGGCGT TTTTTCCCTT ATTCCCGCTG TGCCTTTACA ACTTATGAGT

AMP

3851 TACTCTTCCT TTTTCAATAT TATTGAAGCA TTTATCAGGG TTATTGTCTC  
 ATGAGAAGGA AAAAGTTATA ATAACCTTCGT AAATAGTCCC AATAACAGAG

AMP

3901 ATGAGCGGAT ACATATTTGA ATGTATTTAG AAAAATAAAC AAATAGGGGT  
 TACTCGCCTA TGTATAAACT TACATAAATC TTTTTATTTG TTTATCCCCA

3951 TCCGCGCACA TTTCCCCGAA AAGTGCCACC TGACGTCTAA GAAACCATTA  
 AGGCGCGTGT AAAGGGGCTT TTCACGGTGG ACTGCAGATT CTTTGGTAAT

4001 TTATCATGAC ATTAACCTAT AAAAATAGGC GTATCACGAG GCCCTTTCGT  
 AATAGTACTG TAATTGGATA TTTTATCCG CATAGTGCTC CGGGAAAGCA

4051 C  
 G