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1	TCGCGCGTTT	CGGTGATGAC	GGTGAAAACC	TCTGACACAT	GCAGCTCCCC	AGCGCGCAA	GCCACTACTG	CCACTTTTGG	AGACTGTGTA	CGTCGAGGGC
51	GAGACGGTCA	CAGCTTGTCT	GTAAGCGGAT	GCCGGGAGCA	GACAAGCCCC	CTCTGCCAGT	GTCGAACAGA	CATTTCGCTA	CGGCCCTCGT	CTGTTTCGGC
101	TCAGGGCGCG	TCAGCGGGTG	TTGGCGGGTG	TCGGGGCTGG	CTTAACTATG	AGTCCCAGCG	AGTCGCCAC	AACCGCCCAC	AGCCCCGACC	GAATTGATAC
										ALPHA
151	CGGCATCAGA	GCAGATTGTA	CTGAGAGTGC	ACCATATGCG	GTGTGAAATA	GCCGTAGTCT	CGTCTAACAT	GACTCTCACG	TGGTATACGC	CACACTTTAT
										ALPHA
201	CCGCACAGAT	GCGTAAGGAG	AAAATACCGC	ATCAGGCGCC	ATTTCGCCAT	GGCGTGTCTA	CGCATTCCCT	TTTTATGGCG	TAGTCCGCGG	TAAGCGGTAA
										ALPHA
251	CAGGCTGCGC	AACTGTTGGG	AAGGGCGATC	GGTGCGGGCC	TCTTCGCTAT	GTCCGACGCG	TTGACAACCC	TTCCCGCTAG	CCACGCCCGG	AGAAGCGATA
										ALPHA
301	TACGCCAGCT	GGCGAAAGGG	GGATGTGCTG	CAAGGCGATT	AAGTTGGGTA	ATGCGGTCTA	CCGCTTTCCC	CCTACACGAC	GTTCCGCTAA	TTCAACCCAT
										ALPHA
351	ACGCCAGGGT	TTTCCCAGTC	ACGACGTTGT	AAAACGACGG	CCAGTGCCAC	TGCGGTCCCA	AAAGGGTCAG	TGCTGCAACA	TTTTGCTGCC	GGTCACGGTG
										PI-PspI
										ALPHA
401	CCATAATACC	CATAATAGCT	GTTTGCCAAC	CGGTCAACAT	GTGGAGCACG	GGTATTATGG	GTATTATCGA	CAAACGGTTG	GCCAGTTGTA	CACCTCGTGC
										PI-PspI
										CaMV 35S promoter
										CaMV dual 35S promoter + TEV enhancer
451	ACACACTTGT	CTACTCCAAA	AATATCAAAG	ATACAGTCTC	AGAAGACCAA	TGTGTGAACA	GATGAGGTTT	TTATAGTTTC	TATGTCAGAG	TCTTCTGGTT
										Accl
										CaMV 35S promoter
										CaMV dual 35S promoter + TEV enhancer
501	AGGGCAATTG	AGACTTTTCA	ACAAAGGGTA	ATATCCGGAA	ACCTCCTCGG	TCCCGTTAAC	TCTGAAAAGT	TGTTTCCCAT	TATAGGCCTT	TGGAGGAGCC
										BspEI
										CaMV 35S promoter
										CaMV dual 35S promoter + TEV enhancer
551	ATTCCATTGC	CCAGCTATCT	GTCACTTTAT	TGTGAAGATA	GTGGAAAAGG	TAAGGTAACG	GGTCGATAGA	CAGTGAAATA	ACACTTCTAT	CACCTTTTCC
										CaMV 35S promoter
										CaMV dual 35S promoter + TEV enhancer
601	AAGGTGGCTC	CTACAAATGC	CATCATTGCG	ATAAAGGAAA	GGCCATCGTT	TTCCACCGAG	GATGTTTACG	GTAGTAACGC	TATTTCCTTT	CCGGTAGCAA
										CaMV 35S promoter
										CaMV dual 35S promoter + TEV enhancer
651	GAAGATGCCT	CTGCCGACAG	TGGTCCCAA	GATGGACCCC	CACCCACGAG	CTTCTACGGA	GACGGCTGTC	ACCAGGTTT	CTACCTGGGG	GTGGGTGCTC

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	CaMV 35S promoter				
	CaMV dual 35S promoter + TEV enhancer				
701	GAGCATCGTG	GAAAAAGAAG	ACGTTCCAAC	CACGTCTTCA	AAGCAAGTGG
	CTCGTAGCAC	CTTTTTCTTC	TGCAAGGTTG	GTGCAGAAGT	TTCGTTCCACC
	CaMV 35S promoter		CaMV 35S promoter		
	CaMV dual 35S promoter + TEV enhancer				
751	ATTGATGTGA	TAACATGGTG	GAGCACGACA	CACTTGTCTA	CTCCAAAAAT
	TAACCTACACT	ATTGTACCAC	CTCGTGCTGT	GTGAACAGAT	GAGGTTTTTTA
	CaMV 35S promoter		CaMV 35S promoter		
	CaMV dual 35S promoter + TEV enhancer				
801	ATCAAAGATA	CAGTCTCAGA	AGACCAAAGG	GCAATTGAGA	CTTTTCAACA
	TAGTTTCTAT	GTCAGAGTCT	TCTGGTTTCC	CGTTAACTCT	GAAAAGTTGT
	CaMV 35S promoter		CaMV 35S promoter		
	CaMV dual 35S promoter + TEV enhancer				
851	AAGGGTAATA	TCCGGAAACC	TCCTCGGATT	CCATTGCCCA	GCTATCTGTC
	TTCCATTAT	AGGCCTTTGG	AGGAGCCTAA	GGTAACGGGT	CGATAGACAG
	CaMV 35S promoter		CaMV 35S promoter		
	CaMV dual 35S promoter + TEV enhancer				
901	ACTTTATTGT	GAAGATAGTG	GAAAAGGAAG	GTGGCTCCTA	CAAATGCCAT
	TGAAATAACA	CTTCTATCAC	CTTTTCCTTC	CACCGAGGAT	GTTTACGGTA
	CaMV 35S promoter		CaMV 35S promoter		
	CaMV dual 35S promoter + TEV enhancer				
951	CATTGCGATA	AAGGAAAGGC	CATCGTTGAA	GATGCCTCTG	CCGACAGTGG
	GTAACGCTAT	TTCCTTTCCG	GTAGCAACTT	CTACGGAGAC	GGCTGTCACC
	CaMV 35S promoter		CaMV 35S promoter		
	CaMV dual 35S promoter + TEV enhancer				
1001	TCCCAAAGAT	GGACCCCCAC	CCACGAGGAG	CATCGTGGAA	AAAGAAGACG
	AGGGTTTCTA	CCTGGGGGTG	GGTGCTCCTC	GTAGCACCTT	TTTCTTCTGC
	CaMV 35S promoter		CaMV 35S promoter		
	CaMV dual 35S promoter + TEV enhancer				
1051	TTCCAACCAC	GTCTTCAAAG	CAAGTGGATT	GATGTGATAT	CTCCACTGAC
	AAGGTTGGTG	CAGAAGTTTC	GTTACACCTAA	CTACACTATA	GAGGTGACTG
	CaMV 35S promoter		CaMV 35S promoter		
	CaMV dual 35S promoter + TEV enhancer				
1101	GTAAGGGATG	ACGCACAATC	CCACTATCCT	TCGCAAGACC	CTTCCTCTAT
	CATTCCCTAC	TGCGTGTTAG	GGTGATAGGA	AGCGTTCTGG	GAAGGAGATA
	CaMV 35S promoter		CaMV 35S promoter		
	CaMV dual 35S promoter + TEV enhancer				
1151	ATAAGGAAGT	TCATTTTCAAT	TGGAGAGGAC	GTCGAGAGTT	CTCAACACAA
	TATTCCTTCA	AGTAAAGTAA	ACCTCTCCTG	CAGCTCTCAA	GAGTTGTGTT
	CaMV 35S promoter		CaMV 35S promoter		
	CaMV dual 35S promoter + TEV enhancer				
1201	CATATACAAA	ACAAACGAAT	CTCAAGCAAT	CAAGCATTCT	ACTTCTATTG
	GTATATGTTT	TGTTTGCTTA	GAGTTCGTTA	GTTCGTAAGA	TGAAGATAAC
	CaMV 35S promoter		CaMV 35S promoter		
	CaMV dual 35S promoter + TEV enhancer				
1251	CAGCAATTTA	AATCATTTCT	TTTAAAGCAA	AAGCAATTTT	CTGAAAATTT
	GTCGTTAAAT	TTAGTAAAGA	AAATTTTCGTT	TTCGTTAAAA	GACTTTTAAA



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	RFP CDS				
	RFP-N1 ORF				
		NcoI ~~~~~			
1801	TGCAGAAGAA	GACCATGGGC	TGGGAGGCCT	CCACCGAGCG	GATGTACCCC
	ACGTCTTCTT	CTGGTACCCG	ACCTCCGGA	GGTGGCTCGC	CTACATGGGG
	RFP CDS				
	RFP-N1 ORF				
1851	GAGGACGGCG	CCCTGAAGGG	CGAGATCAAG	ATGAGGCTGA	AGCTGAAGGA
	CTCCTGCCGC	GGGACTTCCC	GCTCTAGTTC	TACTCCGACT	TCGACTTCCT
	RFP CDS				
	RFP-N1 ORF				
1901	CGGCGGCCAC	TACGACGCCG	AGGTCAAGAC	CACCTACATG	GCCAAGAAGC
	GCCGCCGGTG	ATGCTGCGGC	TCCAGTTCTG	GTGGATGTAC	CGGTTCTTCG
	RFP CDS				
	RFP-N1 ORF				
1951	CCGTGCAGCT	CCCCGGCGCC	TACAAGACCG	ACATCAAGCT	GGACATCACC
	GGCACGTCGA	CGGGCCGCGG	ATGTTCTGGC	TGTAGTTCGA	CCTGTAGTGG
	RFP CDS				
	RFP-N1 ORF				
2001	TCCCACAACG	AGGACTACAC	CATCGTGGAA	CAGTACGAGC	GCGCCGAGGG
	AGGGTGTTCG	TCCTGATGTG	GTAGCACCTT	GTCATGCTCG	CGCGGCTCCC
	RFP CDS			35S terminator	
	RFP-N1 ORF			35S terminator	
			XbaI ~~~~~		
2051	CCGCCACTCC	ACCGGCGCCT	AATCTAGAGT	CCGAAAAAT	CACCAGTCTC
	GGCGGTGAGG	TGGCCGCGGA	TTAGATCTCA	GGCGTTTTTA	GTGGTCAGAG
	35S terminator				
2101	TCTCTACAAA	TCTATCTCTC	TCTATTTTTT	TCCAGAATAA	TGTGTGAGTA
	AGAGATGTTT	AGATAGAGAG	AGATAAAAAG	AGGTCTTATT	ACACACTCAT
	35S terminator				
2151	GTTCCCAGAT	AAGGGAATTA	GGGTTCTTAT	AGGGTTTCGC	TCATGTGTTG
	CAAGGTCTA	TTCCCTTAAT	CCCAAGAATA	TCCCAAAGCG	AGTACACAAC
	35S terminator				
2201	AGCATATAAG	AAACCCTTAG	TATGTATTTG	TATTTGTAAA	ATACTTCTAT
	TCGTATATTC	TTTGGGAATC	ATACATAAAC	ATAAACATTT	TATGAAGATA
	35S terminator				
				NotI ~~~~~	
2251	CAATAAAATT	TCTAATTCCT	AAAACCAAAA	TCCAGTGACG	CGGCCGCACC
	GTTATTTTAA	AGATTAAGGA	TTTTGGTTTT	AGGTCACTGC	GCCGGCGTGG
					PI-PspI ~~~~~
2301	CATAATACCC	ATAATAGCTG	TTTGCCAGTA	ATCATGGTCA	TAGCTGTTTT
	GTATTATGGG	TATTATCGAC	AAACGGTCAT	TAGTACCAGT	ATCGACAAA
					PI-PspI ~~~~~
2351	CTGTGTGAAA	TTGTTATCCG	CTCACAATTC	CACACAACAT	ACGAGCCGGA
	GACACACTTT	AACAATAGGC	GAGTGTTAAG	GTGTGTTGTA	TGCTCGGCCT
2401	AGCATAAAGT	GTAAGCCTG	GGGTGCCTAA	TGAGTGAGCT	AACTCACATT
	TCGTATTTCA	CATTTCCGGAC	CCCACGGATT	ACTCACTCGA	TTGAGTGATA
2451	AATTGCGTTG	CGCTCACTGC	CCGCTTTCCA	GTCGGGAAAC	CTGTCGTGCC
	TTAACGCAAC	GCGAGTGACG	GCGAAAGGT	CAGCCCTTTG	GACAGCACGG

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2501	AGCTGCATTA	ATGAATCGGG	CAACGCGCGG	GGAGAGGCGG	TTTGCGTATT
	TCGACGTAAT	TACTTAGCCG	GTTGCGCGCC	CCTCTCCGCC	AAACGCATAA
2551	GGGCGCTCTT	CCGCTTCCTC	GCTCACTGAC	TCGCTGCGCT	CGGTCGTTCG
	CCC GCGAGAA	GGCGAAGGAG	CGAGTGA CTG	AGCGACGCGA	GCCAGCAAGC
2601	GCTGCGGCGA	GCGGTATCAG	CTCACTCAA A	GGCGGTAATA	CGGTTATCCA
	CGACGCCGCT	CGCCATAGTC	GAGTGAGTTT	CCGCCATTAT	GCCAATAGGT
2651	CAGAATCAGG	GGATAACGCA	GGAAAGAACA	TGTGAGCAA A	AGGCCAGCAA
	GTCTTAGTCC	CCTATTGCGT	CCTTTCTTGT	ACACTCGTTT	TCCGGTCGTT
2701	AAGGCCAGGA	ACCGTAAAAA	GGCCGCGTTG	CTGGCGTTTT	TCCATAGGCT
	TTCCGGTCC T	TGGCATTTTT	CCGGCGCAAC	GACCGCAAAA	AGGTATCCGA
2751	CCGCCCCCCT	GACGAGCATC	ACAAAAATCG	ACGCTCAAGT	CAGAGGTGGC
	GGCGGGGGGA	CTGCTCGTAG	TGTTTTTAGC	TGCGAGTTCA	GTCTCCACCG
2801	GAAACCCGAC	AGGACTATAA	AGATACCAGG	CGTTTCCCCC	TGGAAGCTCC
	CTTTGGGCTG	TCCTGATATT	TCTATGGTCC	GCAAAGGGGG	ACCTTCGAGG
2851	CTCGTGCGCT	CTCCTGTTCC	GACCCTGCCG	CTTACCGGAT	ACCTGTCCGC
	GAGCACGCGA	GAGGACAAGG	CTGGGACGGC	GAATGGCCTA	TGGACAGGGC
2901	CTTTCTCCCT	TCGGGAAGCG	TGGCGCTTTC	TCAATGCTCA	CGCTGTAGGT
	GAAAGAGGGA	AGCCCTTCGC	ACCGCGAAAG	AGTTACGAGT	GCGACATCCA
2951	ATCTCAGTTC	GGTGTAGGTC	GTTTCGCTCCA	AGCTGGGCTG	TGTGCACGAA
	TAGAGTCAAG	CCACATCCAG	CAAGCGAGGT	TCGACCCGAC	ACACGTGCTT
3001	CCCCCGTTC	AGCCCGACCG	CTGCGCCTTA	TCCGGTAACT	ATCGTCTTGA
	GGGGGGCAAG	TCGGGCTGGC	GACGCGGAAT	AGGCCATTGA	TAGCAGA ACT
3051	GTCCAACCCG	GTAAGACACG	ACTTATCGCC	ACTGGCAGCA	GCCACTGGTA
	CAGGTTGGGC	CATTCTGTGC	TGAATAGCGG	TGACCGTCGT	CGGTGACCAT
3101	ACAGGATTAG	CAGAGCGAGG	TATGTAGGCG	GTGCTACAGA	GTTCTTGAAG
	TGTCCTAATC	GTCTCGCTCC	ATACATCCGC	CACGATGTCT	CAAGAACTTC
3151	TGGTGGCCTA	ACTACGGCTA	CACTAGAAGG	ACAGTATTTG	GTATCTGCGC
	ACCACCGGAT	TGATGCCGAT	GTGATCTTCC	TGTCATAAAC	CATAGACGGC
3201	TCTGCTGAAG	CCAGTTACCT	TCGGAAAAAG	AGTTGGTAGC	TCTTGATCCG
	AGACGACTTC	GGTCAATGGA	AGCCTTTTTTC	TCAACCATCG	AGAACTAGGC
3251	GCAAACAAAC	CACCGCTGGT	AGCGGTGGTT	TTTTTGTTTTG	CAAGCAGCAG
	CGTTTGTTTTG	GTGGCGACCA	TCGCCACCAA	AAAAACAAAC	GTTTCGTCTC
3301	ATTACGCGCA	GAAAAAAAGG	ATCTCAAGAA	GATCCTTTGA	TCTTTTCTAC
	TAATGCGCGT	CTTTTTTTTCC	TAGAGTTCTT	CTAGGAAACT	AGAAAAGATG
3351	GGGTCTGAC	GCTCAGTGGA	ACGAAA ACTC	ACGTTAAGGG	ATTTTGGTCA
	CCCAGACTG	CGAGTCACCT	TGCTTTT GAG	TGCAATTCCC	TAAAACCA GT
3401	TGAGATTATC	AAAAAGGATC	TTCACCTAGA	TCCTTTTAAA	TAAAAAATGA
	ACTCTAATAG	TTTTTCC TAG	AAGTGGATCT	AGGAAAATTT	AATTTTTACT
3451	AGTTTTAAAT	CAATCTAAAG	TATATATGAG	TAAACTTGGT	CTGACAGTTA
	TCAAAATTTA	GTTAGATTTT	ATATATACTC	ATTTGAACCA	GACTGTCAAT
3501	CCAATGCTTA	ATCAGTGAGG	CACCTATCTC	AGCGATCTGT	CTATTTCTGT
	<u>GGTTACGAAT</u>	<u>TAGTCACTCC</u>	<u>GTGGATAGAG</u>	<u>TCGCTAGACA</u>	<u>GATAAAGCAA</u>
	AMP (R)				
3551	CATCCATAGT	TGCCTGACTC	CCCGTCGTGT	AGATAACTAC	GATACGGGGAG
	<u>GTAGGTATCA</u>	<u>ACGGACTGAG</u>	<u>GGGCAGCACA</u>	<u>TCTATTGATG</u>	<u>CTATGCCCTC</u>
	AMP (R)				

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3601 GGCTTACCAT CTGGCCCCAG TGCTGCAATG ATACCGCGAG ACCCAGCTC  
 CCGAATGGTA GACCGGGGTC ACGACGTTAC TATGGCGCTC TGGGTGCGAG

AMP (R)

3651 ACCGGCTCCA GATTTATCAG CAATAAACCA GCCAGCCGGA AGGGCCGAGC  
 TGGCCGAGGT CTAAATAGTC GTTATTTGGT CGGTCGCGCT TCCCAGCTCG

AMP (R)

3701 GCAGAAGTGG TCCTGCAACT TTATCCGCCT CCATCCAGTC TATTAATTGT  
 CGTCTTCACC AGGACGTTGA AATAGGCGGA GGTAGGTCAG ATAATTAACA

AMP (R)

3751 TGCCGGGAAG CTAGAGTAAG TAGTTCGCCA GTTAATAGTT TGCGCAACGT  
 ACGGCCCTTC GATCTCATT C ATCAAGCGGT CAATTATCAA ACGCGTTGCA

AMP (R)

3801 TGTTGCCATT GCTACAGGCA TCGTGGTGTC ACGCTCGTCG TTTGGTATGG  
 ACAACGGTAA CGATGTCCGT AGCACCACAG TGCAGCAGC AAACCATAAC

AMP (R)

3851 CTTTCATTAG CTCCGGTTCC CAACGATCAA GCGAGTTAC ATGATCCCCC  
 GAAGTAAGTC GAGGCCAAGG GTTGCTAGTT CCGCTCAATG TACTAGGGGG

AMP (R)

3901 ATGTTGTGCA AAAAAGCGGT TAGCTCCTTC GGTCCCTCCGA TCGTTGTCAG  
 TACAACACGT TTTTTCGCCA ATCGAGGAAG CCAGGAGGCT AGCAACAGTC

AMP (R)

3951 AAGTAAGTTG GCCGCAGTGT TATCACTCAT GGTATATGGCA GCACTGCATA  
 TTCATTCAAC CGGCGTCACA ATAGTGAGTA CCAATACCGT CGTGACGTAT

AMP (R)

4001 ATTCTCTTAC TGTCATGCCA TCCGTAAGAT GCTTTTCTGT GACTGGTGAG  
 TAAGAGAATG ACAGTACGGT AGGCATTCTA CGAAAAGACA CTGACCACTC

AMP (R)

4051 TACTCAACCA AGTCATTCTG AGAATAGTGT ATGCGGCGAC CGAGTTGCTC  
 ATGAGTTGGT TCAGTAAGAC TCTTATCACA TACGCCGCTG GCTCAACGAG

AMP (R)

4101 TTGCCCGGCG TCAATACGGG ATAATACCGC GCCACATAGC AGAACTTTAA  
 AACGGGCCCG AGTTATGCC TATTATGGCG CGGTGTATCG TCTTGAAATT

AMP (R)

4151 AAGTGCTCAT CATTGGAAAA CGTTCCTTCGG GCGGAAAACT CTCAAGGATC  
 TTCACGAGTA GTAACCTTTT GCAAGAAGCC CCGCTTTTGA GAGTTCCTAG

AMP (R)

4201 TTACCGCTGT TGAGATCCAG TTCGATGTAA CCCACTCGTG CACCCAAC TG  
 AATGGCGACA ACTCTAGGTC AAGCTACATT GGGTGAGCAC GTGGGTTGAC

AMP (R)

4251 ATCTTCAGCA TCTTTTACTT TCACCAGCGT TTCTGGGTGA GCAAAAACAG  
 TAGAAGTCGT AGAAAATGAA AGTGGTCGCA AAGACCCACT CGTTTTTGTG

AMP (R)

4301 GAAGGCAAAA TGCCGCAAAA AAGGGAATAA GGGCGACACG GAAATGTTGA  
 CTTCCGTTTT ACGGCGTTTT TTCCCTTATT CCCGCTGTGC CTTTACAAC

AMP (R)

4351 ATACTCATACT TCTTCCTTTT TCAATATTAT TGAAGCATTT ATCAGGGTTA  
 TATGAGTATG AGAAGGAAAA AGTTATAATA ACTTCGTAAA TAGTCCCAAT

AMP (R)

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4401 TTGTCTCATG AGCGGATACA TATTTGAATG TATTTAGAAA AATAAACAAA  
AACAGAGTAC TCGCCTATGT ATAAACTTAC ATAAATCTTT TTATTTGTTT

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4451 TAGGGGTTCC GCGCACATTT CCCCAAAAG TGCCACCTGA CGTCTAAGAA  
ATCCCAAGG CGCGTGTAAG GGGGCTTTTC ACGGTGGACT GCAGATTCTT

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4501 ACCATTATTA TCATGACATT AACCTATAAA AATAGGCGTA TCACGAGGCC  
TGGTAATAAT AGTACTGTAA TTGGATATTT TTATCCGCAT AGTGCTCCGG

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4551 CTTTCGTC  
GAAAGCAG

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