ATCAAGATGCTATAATGAGTTTAAACCCGCTGATCA	BGH-rev AGCCTCGACTGTGCCTTCTAC 1 36 48	bGH poly(A) sig GTTGCCAGCCATCTGTTGTTT I 60 72	
CCCTGGAAGGTGCCACTCCCACTGTCCTTTCCTAA 1	144 15 A) signal GCAGGCATGCTGGGGATGCGG	GCATTGTCTGAGTAGGTGTCA 1	180 192 GGCGGAAAGAACCAGCTGGGGCTCG
204 216 228 ATACCGTCGACCTCTAGCTAGAGCTTGGCGTAATCA	1	1	lac promoter ACAATTCCACACACATACGAGCCG I
lac promoter GAAGCATAAAGTGTAAAGCCTAGGGTGCCTAATGAG 1	444 45	56 468	1 480 492 L4440
CCAGCTGCATTAATGAATCGGCCAACGCGCGGGGAATCGCTGCGGGGGAATCGGCTGCGGGGGGAATCAGCTCACTCA	1 1 540 552	564 57	
AAAAGGCCAGGAACCGTAAAAAGGCCGCGTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG		ori CCCCCC <mark>TG</mark> AC <mark>G</mark> AGCA <mark>T</mark> CACAA I I 56 768	AAATCGACGCTCAAGTCAGAGGTG 780 792
GCGAAACCCGACAGGACTATAAAGATACCAGGCGT 804 816 828 GCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCA 912 924 93	1 840 852 ori	864 87	6 888 900
AACCCCCGTTCAGCCCGACCGCTGCGCCTTATCCC 1	1044 10 ori	1 056 1068	1080 1092
	1140 1152 ori TGGTAGCTCTTGATCCGGCAA 1 236 1248	AACAAACCACCGCTGGTAGCC	
AGATTACGCGCAGAAAAAAAGGATCTCAAGAAGATCTCAAGAAGATCTCAAGAAGATCTCAAGAAGATCTCACCTAGATCAGATCCTAGATCAGATCCTAGATCAGATCTAGATCAGATCTAGATCAGATCTAGATCAGATCTAGATCAGATCAGATCTAGATCAGATCTAGATCAGATCAGATCTAGATCAGATCAGATCAGATCTAGATCA	1344 13	1 356 1368	1380 1392 AMARCTCACGTTAAGGGATTTTGGT 1380 1392 AMPR
TACCAATGCTTAATCAGTGAGGCACCTATCTCAGCG 1 1512 1524 15	AmpR GATCTGTCTATTTCGTTCATC 536 AmpR AmpR	1464 14 CCATAGTTGCCTGACTCCCCC 1 1560 1572	76 1488 1500 TCGTGTAGATAACTACGATACGGG 1584 1596
AGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACTACTACTACTACTACTACTACTACTACTACTACTAC	1644 16 AmpR	1 656 1668	TCGCCAGTTAATAGTTTGCGCAAC
GTTGTTGCCATTGCTACAGGCATCGTGGTGTCACGGTGTCACGGTGTCACGGTGTCACGGTGTCACGGTGTCACGGTGTCACGGTTAGCTCCTTCGGTGTGTCACGGTGTGTGCACAAAAAAGCGGTTAGCTCCTTCGGTGTGTGT	1 336 1848 AmpR	1860 1872	GATCAAGGCGAGTTACATGATCCC 1 1884 1896 CACTCATGGTTATGGCAGCACTGCA
TAATTCTCTTACTGTCATGCCATCCGTAAGATGCT 2004 2016 2028	AmpR	TCAACCAA <mark>GT</mark> CA <mark>TTCTG</mark> AGAA 2064 20	1980 1992 TAGTGTATGCGGCGACCGAGTTGC 1 76 2088 2100
TCTTACCGCTGTTGAGATCCAGTTCGATGTAACCC	1 136 2148 AmpR ACTCGTGCACCCAACTGATC	TTCAGCATCTTTTACTTTCAC	2184 2196 CAGCGTTTCTGGGTGAGCAAAAC
2208 2220 2232 AmpR AGGAAGGCAAAATGCCGCAAAAAAGGGAATAAGGG 1	C <mark>G</mark> ACAC <mark>GG</mark> AAA <mark>TGTTG</mark> AA <mark>T</mark> AC I I 2340 2352 oter	CTCATACTCTTCCTTTTTCAA 2364 23	
TATTGTCTCATGAGCGGATACATATTTGAATGTAT 2412 2424 24 GATCGGGAGATCGATCTCCCGATCCCCTAGGGTCG 1 1 1 1 2508 2520 2532	pRS-mark	2460 2472 Ker	2484 2496
GGAGGTCGCTGAGTAGTGCGCGAGCAAAATTTAAG 2604 2616 2628 CTGCTTCGCGATGTACGGGCCAGATATACGCGTTGA 2712 2724 27	2640 2652	2664 26 CMV enhancer	1
TGGAGTTCCGCGTTACATAACTTACGGTAAATGGCC	CMV enhancer CCGCCTGGCTGACCGCCCAAC 2844 28 CMV enhancer	C <mark>G</mark> ACCCCC <mark>G</mark> CCCA <mark>TTG</mark> AC <mark>GT</mark> (I 856 2868	2784 2796 CAATAATGACGTATGTTCCCATAGT 2880 2892 CGTGTATCATATGCCAAGTACGCCC
2904 2916 2928 CCTATTGACGTCAATGACGGTAAATGGCCCGCCTGG 3012 3024 30	2940 2952 CMV enhancer GCATTATGCCCAGTACATGAC 1 036 3048	2964 29 CCTTATGGGACTTTCCTACTT 3060 3072	76 2988 3000
TCGCTATTACCATGGTGATGCGGTTTTGGCAGTACATGGTGATGCGGTTTTGGCAGTACATGGTGATGCGGTTTTGGCAGTACATGGCAGTACATGGGAGTTTGGCAGTACATGGGAGTTTGGCACCAAAATCAACGGGACTTGGGCACCAAAATCAACGGGACTTGGGCACCAAAATCAACGGGACTTGGGCACCAAAATCAACGGGACTTGGGCACCAAAATCAACGGGACTTGGGCACCAAAATCAACGGGACTTGGGCACCAAAATCAACGGGACTTGGGCACCAAAATCAACGGGACTTGGGCACCAAAATCAACGGGACTTGGGCACCAAAATCAACGGGACTTGGGCACCAAAATCAACGGGACTTGGGCACCAAAATCAACGGGACTTGGGCACCAAAATCAACGGGACTTGGGCACCAAAATCAACGGGACTTGGGACTTGGGCACCAAAATCAACGGGACTTGGGCACCAAAATCAACGGGACTTGGGCACCAAAATCAACGGGACTTGGGCACCAAAATCAACGGGACTTGGGCACCAAAATCAACGGGACTTGGGCACCAAAAATCAACGGGACTTGGGCACCAAAAATCAACGGGACTTGGGCACCAAAAATCAACGGGACTTGGCACCAAAAATCAACGGGACTTGGGCACCAAAAATCAACGGGACTTGGGCACCAAAAATCAACGGGACTTGGGCACCAAAAATCAACGGGACTTGGGCACCAAAAATCAACGGGACTTGGGCACCAAAAATCAACGGGACTTGGGCACCAAAAATCAACGGGACTTGGGCACCAAAAATCAACGGGACTTGGAACAAAATCAACGGGACTTGAACGGGACTTGAACGGGACTTGAACGGGACTTGAACGGGACTTGAACGGGACTTGAACGGGACTTGAACGGGACTTGAACGGGACTTGAACGGGACTTGAACGGAACAAAATCAACGGGACTTGAACGGGACTTGAACGGGACTTGAACGGGACTTGAACGGAACAAAATCAACGGGAACTGAACAAAAATCAACGGGAACTGAACAAAAATCAACGGGAACTGAACAAAAATCAACGGGAACTGAACAAAAATCAACGGGAACTGAACAAAAATCAACGGGAACTGAACAAAAATCAACGGGAACTGAACAAAAATCAACGGAACAAAAAATCAACAACAAAAAATCAACAAAAAAAA	ATCAATGGGCGTGGATAGCGG 3144 31 CMV promoter	3168	CMV-F GGCGGTAGGCGTGACGTCAA 1 3180 3192
TGGGAGTTTGTTTTGGCACCAAAATCAACGGGACT 3204 3216 3228 CMV promoter GTCTATATAAGCAGAGCTGGTTTAGTGAACCGTCAG	3240 3252	3264 32 T7 promoter T7	76 3288 3300 SV40 NLS
	TGCGGCAA <mark>TGG</mark> ACAAGAAGT	3360 3372 Cas9(D10A)	3384 3396
TCATTACGGACGAGTACAAGGTGCCGAGCAAAAAA 3504 3516 3528 CGACTCCGGGGAGACGGCCGAAGCCACGCGGCTCAA 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TTCAAAGTTCTGGGCAATACC 3540 3552 Cas9(D10A)	3564 35	76 3588 3600
AGTAATGAGATGGCTAAGGTGGATGACTCTTTCTT 3708 3720 3732 GCAATATCGTGGACGAGGTGGCGTACCATGAAAAG	Cas9(D10A) CCATAGGCTGGAGGAGTCCT 3744 3744 37	TTTTGGTGGAGGAGGATAAAA I I 756 3768	AGCACGAGCGCCACCCAATCTTTG I 3780 3792
3804 3816 3828 GATCTATCTCGCGCTGGCGCATATGATCAAATTTCG 3912 3924 39	3840 3852 Cas9(D10A) GGGGACACTTCCTCATCGAGG 1 936 3948 Cas9(D10A)	3864 38 GGGGACCTGAACCCAGACAAC 1 3960 3972	
CAACTGGTTCAGACTTACAATCAGCTTTTCGAAGAGAGAG	GAACCC <mark>G</mark> A <mark>TCAACGCA</mark> TCC <mark>GC</mark> 4044 40 Cas9(D10A)	056 4068	4080 4092 CACTCGGGCTGACCCCCAACTTTAA
ATCTAACTTCGACCTGGCCGAAGATGCCAAGCTTCAACTTCAACTTCGACCTGGCCGAAGATGCCAAGCTTCAACTCAACAACAACCTGTCAGAAAGAA	236 4248 Cas9(D10A)	4260 4272	4284 4296
4308 4320 4332 GTATGATCAAGCGCTATGATGAGCACCACCAAGAC 4404 4416 4428	Cas9(D10A) TTGACTTTGCTGAAGGCCCT 1 4440 4452 Cas9(D10A)	4464 44	76 4488 4500
TCAGTCTAAAAATGGCTACGCCGGATACATTGACGGATACATTGACGGATACATTGACGGATACATTGACGGATACATTGACGGATACATTGACGGATACATTGACGGATACATTGACGAGAGATCTGACGAGAGATCTGACGAGAGATCTGACAGAGAGATCTGACGAGAGATCTGACGAGAGATCTGACGAGAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACGAGAAGATCTGACGAGAAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACGAGAGAAGATCTGACAGAGAAGATCTGACAGAGAAGAAGATCTGACAGAGAAGAAGATCTGACAGAGAAGAAGATCTGACAGAGAAGAAGATCTGACAGAGAAGAAGATCTGACAGAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAG	GTTGCGCAAACAGCGCACTT	4560 4572	4584 4596
ACGCTATCCTCAGGCGGCAAGAGGATTTCTACCCC 4704 4716 4728 CCCCCTCGCCCGGGGAAATTCCAGATTCGCGTGGA 4812 4824 4824 4824	4740 4752 Cas9(D10A)	4764 47	
	Cas9(D10A) TGATAAAAATCTGCCTAACGA 4944 49 Cas9(D10A)	AAAA <mark>GGTG</mark> CTTCC <mark>T</mark> AAACACT I I 956 4968	CTCTGCTGTACGAGTACTTCACAG 4980 4992
5004 5016 5028 CAAGACGAACCGGAAAGTTACCGTGAAACAGCTCAA	5040 5052 Cas9(D10A)	5064 50	
5208 5220 5232	GAAAA <mark>T</mark> CA <mark>TT</mark> AAAGACAA <mark>GG</mark> 5244 52 Cas9(D10A)	AC <mark>TT</mark> CC <mark>TGG</mark> ACAA <mark>TG</mark> AGGAGA I I 256 5268	ACGAGGACATTCTTGAGGACATTG 5280 5292
		TTACGCTCATCTCTTCGACGA	CAAA <mark>GT</mark> CA <mark>TG</mark> AAACA <mark>G</mark> C <mark>T</mark> CAA <mark>G</mark> AG I I 76 5388 5400
GGATTTGCCAACCGGAACTTCATGCAGTTGATCCA	Cas9(D10A) AACTGATCAATGGGATCCGAC 1 436 5448 Cas9(D10A)	5364 53 GACAAGCAGAGTGGAAAGACA 5460 5472	76 5388 5400 ATCCTGGATTTTCTTAAGTCCGAT 5484 5496
GGATTTGCCAACCGGAACTTCATGCAGTTGATCCATTCATGCAGTTGATCCATTCATGCAGTTGATCCATTCATGCAGTTGATCCATTCATGCAGGTAGCCCAGTTGATCCATGCAGGTAGCCCAGATCATCTTGCAGGTAGCCCAGATCGCTAATCTTGCAGGTAGCCCCAGATCGCTAATCTTGCAGGTAGCCCCAGATCGCCCAGATCGCTAATCTTGCAGGTAGCCCAGATCGCCCAGATCGCCCAGATCGCCCAGATCGCCCAGATCGCCCAGATCGCCCAGATCGCCAGATCGCCCCAGATCGCCCAGATCGCCCCAGATCGCCCAGATCGCCCAGATCGCCCAGATCGCCCCAGATCGCCCAGATCGCCCCAGATCGCCCAGATCGCCCCAGATCGCCCAGATCAG	Cas9(D10A) AACTGATCAATGGGATCCGAC 1 436 5448 Cas9(D10A) TGATGACTCTCTCACCTTTAA 5544 55 Cas9(D10A)	5364 53 GACAAGCAGAGTGGAAAGACACACACACACACACACACAC	ATCCTGGATTTTCTTAAGTCCGAT 5484 5496 CAAGTTTCTGGCCAGGGGGACAGTC 5580 5592 ATGAACTCGTCAAAGTAATGGGAAG
5508 5520 5532 TTCACGAGCACATCGCTAATCTTGCAGGTAGCCCAG 5604 5616 5628 GCATAAGCCCGAGAATATCGTTATCGAGATGGCCC	Cas9(D10A) AACTGATCAATGGGATCCGAC 136 5448 Cas9(D10A) TGATGACTCTCTCACCTTTAA 5544 55 Cas9(D10A) GCTATCAAAAAGGGAATACTC 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5364 53 GACAAGCAGAGTGGAAAGACAGACAGAGAGACAGAGAGAG	TGAACTCGTCAAAGTAATGGGAAG TGAAAGGATGAAGAGGATTGAAGAG TGAAAGGATGAAGAGGATTGAAGAGAG TGAAAGGATGAAGAGGATTGAAGAGAG TGAAAGGATGAAGAGGATTGAAGAGAG TGAAAGGATGAAGAGGATTGAAGAGAG TGAAAGGATGAAGAGGATTGAAGAGAG TGAAAGGATGAAGAGGATTGAAGAGAGAG
TTCACGAGCACATCGCTAATCTTGCAGGTAGCCCAGGTAGCCCAGGTAGCCCAGGTAGCCCAGGTAGCCCAGGTAGCCCAGGTAGCCCAGGTAGCCCAGGTAGCCCAGGTAGCCCAGGTAGCCCAGGTAGCCCAGGTAGCCCAGGTAGCCCAGGTAGCCCAGGTAGCCCAGGTAGCCCAGGTAGAGAGGTCCCAAATCCTTAAGGAGGTAGGAACTGGGACATCAATCGTTAAGGAAGG	Cas9(D10A) AACTGATCAATGGGATCCGAC 1436 5448 Cas9(D10A) TGATGACTCTCTCACCTTTAA 5544 55 Cas9(D10A) GCTATCAAAAAAGGGAATACTC 5640 5652 Cas9(D10A) GAGAGAACCAAACTACCCAGAC 736 5748 Cas9(D10A) ACACCCAGTTGAAAAACACCCA 5844 58 Cas9(D10A) CGGCTCTCCGACTACGACGTC 5940 5952 Cas9(D10A) GGAAGAGTGATAACGTCCCCT	GACAAGCAGAGTGGAAAGACAGACAGAGAGAGAGAGAGAG	ATGAAAAATTATTGGCGGCAGCTG ATGAAAAAATTATTGGCGGCAGCAGTC 5988 5400 ATGAAAAAAATTATTGGCGGCAGCAGTC 5588 5400 5484 5496 5484 5496 5484 5496 5484 5496 5484 5496 5484 5496 5484 5496 5580 5592 5580 5592 5688 5700 6688 5700 6688 6700
TTCACGAGCACATCGCTAATCTTGCAGGTAGCCCAC 5604 5604 5616 5628 GCATAAGCCCGAGAATATCGTTATCGAGATGGCCCC 5712 5712 5724 57 GGTATAAAAGAACTGGGGTCCCAAATCCTTAAGGA 5808 5820 5832 GGGACATGTACGTGGATCAGGAACTGGACATCAATC 1 5904 5916 5928 TAATAAAGTGTTGACAAGATCCGATAAAAAATAGAG 6012 6012 6024 60 CTGAACGCCAAACTGATCACACAACGGAAGTTCGA 6108 6120 6132	Cas9(D10A) AACTGATCAATGGGATCCGAC 1336 5448 Cas9(D10A) TGATGACTCTCTCACCTTTA 5544 55 Cas9(D10A) GCTATCAAAAAAGGGAATACTC 5640 5652 Cas9(D10A) GAGAGAACCAAACTACCCAGA 736 5748 Cas9(D10A) ACACCCAGTTGAAAAACACCCA 5844 58 Cas9(D10A) CGGCTCTCCGACTACGACGTC 5940 5952 Cas9(D10A) GGAAGAGAGTGATAACGTCCCCT 1036 6048 Cas9(D10A) TAATCTGACTAAGGCTGAACG 6144 61 Cas9(D10A)	GACAAGCAGAGTGGAAAGACAGAGAGAGAGAGAGAGAGAG	ATCCTGGATTTTCTTAAGTCCGAT 5484 5496 AAGTTTCTGGCCAGGGGGACAGTC 5580 5592 ATGAACTCGTCAAAGTAATGGGAAG 76 5688 5700 ACCTGTACTACCTGCAGAACGGCA 5880 5892 ATGAAAAAATTATTGGCGGCAGCTG 6084 6096 AATGAAAAAATTATTGGCGGCAGCTG 6084 6096
TTCACGAGCACATCGCTAATCTTGCAGGTAGCCCAG 5604 5616 5628 GCATAAGCCCGAGAATATCGTTATCGAGATGGCCCAG 5712 5724 57 GGTATAAAAGAACTGGGGTCCCAAATCCTTAAGGAA 5808 5820 5832 GGGACATGTACGTGGATCAGGAACTGGACATCAATC 5904 5916 5928 TAATAAAGTGTTGACAAGATCCGATAAAAATAGAGG 6012 6024 60 CTGAACGCCAAACTGATCACACACACGGAAGTTCGAGGAACTGTTGAGAACTGATCACACACA	Cas9(D10A) AACTGATCAATGGGATCCGAC 136 5448 Cas9(D10A) TGATGACTCTCTCACCTTTA 5544 55 Cas9(D10A) GCTATCAAAAAAGGGAATACTC 5640 5652 Cas9(D10A) GAGAGAACCAAACTACCCAG 736 5748 Cas9(D10A) ACACCCAGTTGAAAACACCC 5844 58 Cas9(D10A) CGGCTCTCCGACTACGACGTC 5940 5952 Cas9(D10A) GGAAGAGAGTGATAACGTCCCCC 1 036 6048 Cas9(D10A) TAATCTGACTAAGGCTGAACC 6144 61 Cas9(D10A) GCCCAAATTCTCGATTCACGC 6240 6252 Cas9(D10A) ATTTCAGAAAGGACTTTCACGC 1 6240 6252 Cas9(D10A) ATTTCAGAAAGGACTTTCACGC 1 6336 6348	GACAAGCAGAGTGGAAAGACAGAGAGAGAGAGAGAGAGAG	ATCCTGGATTTTCTTAAGTCCGAT 5484 5496 AAGTTTCTGGCCAGGGGGACAGTC 5580 5592 ATGAACTCGTCAAAGTAATGGGAAG 76 5688 5700 AGGAAAGGATGAAGAGGATTGAAGAG 5784 5796 ACCTGTACTACCTGCAGAACGGCA 5880 5892 ATTTTCTCAAAGATGATTCTATTGA 76 5988 6000 ATGAAAAATTATTGGCGGCAGCTG 6084 6096 BATAAAGCCGGCTTCATCAAAAAGGC 6180 6192
TTCACGAGCACATCGCTAATCTTGCAGGTAGCCCAG 5604 5616 5628 GCATAAGCCCGAGAATATCGTTATCGAGATGGCCCAG 5712 5724 57 GGTATAAAAGAACTGGGGTCCCAAATCCTTAAGGAA 5808 5820 5832 GGGACATGTACGTGGATCAGGAACTGGACATCAATC 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Cas9(D10A) AACTGATCAATGGGATCCGAC A36 5448 Cas9(D10A) TGATGACTCTCTCACCTTTA 5544 55 Cas9(D10A) GCTATCAAAAAAGGGAATACTC 5640 5652 Cas9(D10A) GAGAGAACCAAACTACCCAG 736 5748 Cas9(D10A) ACACCCAGTTGAAAAACACCC 5844 58 Cas9(D10A) CGGCTCTCCGACTACGACGTC 5940 5952 Cas9(D10A) CGGCAAATTCTCGACTACGACGTC 6144 61 CAS9(D10A) TAATCTGACTAAGGCTGAACC 6144 61 Cas9(D10A) ATTTCAGAAAAGGACTTTCACGC 6240 6252 Cas9(D10A) ATTTCAGAAAAGGACTTTCACGC 6240 6252 Cas9(D10A) ATTTCAGAAAAGGACTTTCACGC 6240 6252 Cas9(D10A) CAAAAAATATCCCAAGCTTGA 6444 64 Cas9(D10A)	GACAAGCAGAGTGGAAAGACAGAGAGAGAGAGAGAGAGAG	ATCCTGGATTTTCTTAAGTCCGAT 5484 5484 5496 CAAGTTTCTGGCCAGGGGGACAGTC 5580 5592 CTGAACTCGTCAAAGTAATGGGAAG 76 5688 5700 CGAAAGGATGAAGAGGATTGAAGAG 5784 5796 CACCTGTACTACCTGCAGAACGGCA 5880 5892 CTTTTCTCAAAGATGATTCTATTGA 76 5988 6000 CATGAAAAATTATTGGCGGCAGCTG 6084 6084 6096 CATAAAGCCGGCTTCATCAAAAGGC 6180 6192 CAACAATTACCACCATGCGCATGAT 6384 6396 CAACAATTACCACCATGCGCATGAT 6384 6480 6492 CTTTCAAGACCGAGATTACACTGGC CTTTCAAGACCGAGATTACACTGGC CTTTCAAGACCGAGATTACACTGGC CTTTCAAGACCGAGATTACACTGGC CTTTCAAGACCGAGATTACACTGGC CTTTCAAGACCGAGATTACACTGGC
TTCACGAGCACATCGCTAATCTTGCAGGTAGCCCAATCGCTAATCTTGCAGGTAGCCCCAATCGCTAATCTTGCAGGTAGCCCCAATCGCTAATCTTGCAGGTAGCCCCAATCGCTAATCGTTATCGAGGTAGCCCCAATCGCTATCGTATCGAGATGGCCCCAATCGTTATCGAGAATCGTTAAAAAAAA	Cas9(D10A) AACTGATCAATGGGATCCGAC 1336 5448 Cas9(D10A) TGATGACTCTCTCACCTTTA 5544 55 Cas9(D10A) GCTATCAAAAAGGGAATACTC 5640 5652 Cas9(D10A) GAGAGAACCAAACTACCCAG 736 5748 Cas9(D10A) ACACCCAGTTGAAAACACCC 5844 58 Cas9(D10A) CGGCTCTCCGACTACGACGTC 5940 5952 Cas9(D10A) GGAAGAGTGATAACGTCCCC 1036 6048 Cas9(D10A) GCCAAATTCTCGATTCACGACGTC 6144 61 Cas9(D10A) GCCCAAATTCTCGATTCACGACGTC 6240 6252 Cas9(D10A) ATTTCAGAAAGGACTTTCACGACGACGACGACGACGACGACGACGACGACACTTCACGACGACGACGACGACGACGACGACGACGACACCCCCC	\$364 \$3 GACAAGCAGAGTGGAAAGACAGAGAGAGAGAGAGAGAGAG	ATCATGAAAATTATTGGCGGCAGGCAGGCAGGCAGGCAGG
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S508	Cas9(D10A) AACTGATCAATGGGATCCGAC 136 5448 Cas9(D10A) TGATGACTCTCTCACCTITAL 5544 55 Cas9(D10A) GCTATCAAAAAGGGAATACTC 5640 5652 Cas9(D10A) GAGAGGAACCAAACTACCCAG 736 5748 Cas9(D10A) ACACCCAGTTGAAAACCCCC 5844 58 Cas9(D10A) ACACCCAGTTGAAAACCCCC 5844 58 Cas9(D10A) CGGAGGAGGATACGACGTC 5940 5952 Cas9(D10A) GGGAGGAGGATACGTCCCC 1036 6048 Cas9(D10A) GGCCAAATTCTCGATCACGC 6240 6252 Cas9(D10A) ATTTCAGAAAGGCTGAACC 6240 6252 Cas9(D10A) GCCCAAATTCTCGATTCACG 6240 6252 Cas9(D10A) GCCCAAATTCTCGATTCACG 6240 6252 Cas9(D10A) GCCCAAATTCTCGATTCACG 6240 6252 Cas9(D10A) CAAAAAAATATCCCAAGCTTC 6346 6348 Cas9(D10A) CCAACCGGAGAACCAGGAGAA CAS9(D10A) CCAACCGGAAACCAGGAGAA CAS9(D10A) CCAACCGGAGAACCAGGAGAA CAS9(D10A) CCAACCGGAAACCAGGAGAA CAS9(D10A) CCAACCGGAAACCAGGAGAA CAS9(D10A) CCAACCAGGAGAACCAGGAGAA CAS9(D10A) CCAACCAGGAGAACCAGGAGAACAACAGAACAACAACAAC	SAGA SAGA SAGA SAGA SAGA SAGA SAGA SAGA	10
TICACGAGGACA T CGC TAATCT T GEAGGT AGCECA 5604	Cas9(D10A) AACTGATCAATGGGATCCGAG 136 5448 Cas9(D10A) TGATGACTCTCTCACCTTTA 5544 55 Cas9(D10A) GCTATCAAAAAGGGAATACTC 5640 5652 Cas9(D10A) GCAGGACCCAACTACCCCAG 736 5748 Cas9(D10A) ACACCCAGTTGAAAACACCCG 5844 58 Cas9(D10A) ACACCCAGTTGAAAACACCCG 5844 58 Cas9(D10A) CGGCTCTCCGACTACGACGT 5940 5952 Cas9(D10A) GGAAGAGTGATAACGTCCCC 136 6048 Cas9(D10A) GCACCAATTCTCGATTCACG 6240 6252 Cas9(D10A) ATTTCAGAAAAGGACTTTCACG 6240 6252 Cas9(D10A) ATTTCAGAAAAGACCTTCCGAGT 6344 64 Cas9(D10A) GCCAAAATATCCCAAGCTTG 6444 64 Cas9(D10A) GCCAAAATATCCCAAGCTTG 6540 6552 Cas9(D10A) GCCAACCGCTAAGTACTTCTTT 6540 6552 Cas9(D10A) CAAAAAAATCCCAAGCTTG 6540 6552 Cas9(D10A) CCAAACGGAGAAACAGGAGAAA 1336 6348 Cas9(D10A) CCAAACGGAGAAACAGGAGAAA 1336 6648 Cas9(D10A) CCAAACGGAGAAACAGGAGAAA 1336 6948 Cas9(D10A) CCAAACGGAGAAACAGGAGAAA 1336 6948 Cas9(D10A) CCAACTACCAATCTCTCTTTTG 7044 70 CCAS9(D10A) CCACGGAAACGGACGATCATCAGGAG 336 6948 Cas9(D10A) CCAACTACCAATCATCTCTTTTG 7044 70 CCAS9(D10A) CCACGGAAAACGGACGAAACAGGAGAAA 136 6948 CCAS9(D10A) CCACGGAAAACAGGAGAAACAGGAGAAACAGAAGAGAACAGAAGA	5364 53 GACAAGCAGAGTGGAAAGAC/ 5460 5472 AGGAGGACATCCAGAAAGCAC 556 5568 GCAGACCGTTAAGGTCGTGG/ 566 5568 GCAGACCGTTAAGGTCGTGG/ 5760 5772 AGCTTCAGAATGAGAAGCTC 556 5868 GGATCATATCGTGCCCCAGTC 5964 59 TCAGAAGAAGTTGTCAAGAA/ 6060 6072 GAGGTGGCCTGTCTGAGTTGC 6360 6372 AATCTGAATTTGTTTACGGAC 556 6468 TTACAGCAATATTATGAATTC 6564 65 ATCGTGTGGGACAAGGATACCTC 556 6768 ATCGTGTGGGACAAGGATACCTCC 6960 6972 AGCTTCAAAAAAAAACCCC 6960 6972 AGCTTGAAAACGCCGGAAAC 7260 7272 AGCTTGAAAACGCCCGGAAAC 7260 7272 AGCTACGTGCTGTTTGAGTGG 7260 7272 AGCTGCAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	Table Tabl
### TEANS CONTROL Section Sectio	Cas9(D10A) AACTGATCAATGGGATCCGAC 136 5448 Cas9(D10A) TGATGACTCTCTCACCTTTAA 5544 55 Cas9(D10A) GCTATCAAAAAAGGAATACTC 5640 5652 Cas9(D10A) GAGAGAACCAAACTACCCAGA 736 5748 Cas9(D10A) ACACCCAGTTGAAAACACCC 5844 58 Cas9(D10A) ACACCCAGTTGAAAACACCC 5844 58 Cas9(D10A) CGGCTCTCCGACTACGACGTC 5940 5952 Cas9(D10A) GGAGAGAGGTGATAACGTCCCC 6048 Cas9(D10A) GGAGAGATTCTCGATTCACG 6240 6252 Cas9(D10A) ATTTCAGAAAGGACTTTCACG 6240 6252 Cas9(D10A) ATTTCAGAAAGGACTTTCACG 6240 6252 Cas9(D10A) ACACCAGCTAAGTACTTCTT 6540 6552 Cas9(D10A) GCCAACATATCCCAAGCTTG 6444 64 Cas9(D10A) GCCACCGCTAAGTACTTCTTT 6540 6552 Cas9(D10A) CGAAAACAGGAGAAACAGGAGAAA 336 6648 Cas9(D10A) GCCACCGCTAAGTACTTCTTT 6540 6552 Cas9(D10A) CGAAACAGGAGAAACAGGAGAAA 336 6648 Cas9(D10A) CGAAGTACAGACCGGAGGCT 6744 67 CAS9(D10A) CGAAGTACAGACCGGAGGCT 6744 70 CAS9(D10A) CGAACGGAGAAACAGGAGAGA ACCTGATCATCTCTTAC 6840 6852 Cas9(D10A) CGAAGTACAGAGCGGAGGCT 6744 70 CAS9(D10A) CGAAGGAAAGCGGTACACCTC 7440 7452 ACCGGGATTCATCTCTCTAC 6840 6852 CAS9(D10A) CGAAGGAAAGCGGTACACCTC 7440 7452 ACCGGGAAGAGGGAATACAC 6844 76 GAAGGAAAAGCGGTACACCCTC 7440 752 ACCGGGGGGGGGCT 6744 76 GGAAGGAAAGCGGTACACCCCTC 7440 752 ACCGGGAAGATTCTCTCTAC 6840 8040 8052 GCGAAGATTTCTCTCGAGG 6840 6848 CAS9(D10A) CGAAGGAAAGGGAATACAC 6844 76 GGAAGGAAAGCGGTACACCCCTC 7440 7452 ACGGAAGATTTCTCTCACACGGGAGGCT 6744 76 GGAAGGAAAAGGGAAATACAC 6844 76 GGAAGGAAAGGGAAATACAC 6844 76 GGAAGGAAAAGGGAAATACAC 6844 76 GGAAGGAAAAGGGAAATACAC 6844 76 GGAAGGAAAAGGGAAATACAC 6844 76 GGAAGGAAAACAGGAAATACAC 6844 76 GGAAGGAAAACAGGAAATACAC 6844 76 GGAAGGAAGAATACAC 6846 86 GAAATCTGGGAAGAGAATACAC 6846 86 GAAATCTGGAAAGGAAACAG	GACAAGCAGAGTGGAAAGACAC 5460 5472 AGGAGGACATCCAGAAAGCAC 5566 5568 GCAGACCGTTAAGGTCGTGG 5664 56 AAGGGACAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA	1