Nr.	Name	Sequenz 5' -> 3'	Länge [bp]	Annealing Temp Q5 [°C]	Länge Produkt [bp]	Template
01_fw	pBAD_fw_FS_1	tgcGGTCTCaGGAGacattgattatttgcacggcgt	36			
01_rev	pBAD_rv +RBS+FS_2	tcaGGTCTCtCATGTAGTATTTCTCCTCTTTCTCTAGAgctagcccaaaaaaacggtatg	60	65	182	iGEM_Bba_I13453
02_fw	RT_fw_FS2_BpiI	atcGAAGACtaCATGctaaatatagaagatgagcatcggcta	42			
02_rev	RT_rev_RBS_FS_C_BpiI	ttGAAGACtgAATTgTTTCTCCTCTTTCTCTAGAtgaCTACTAGTGATGGTGATGGTGAT	60	64	2089	gBlock_MMLV_P80RT_GG
03_fw	FLPe_fw_FS_C_BpiI	tcaGAAGACtcAATTgaATGAGTCAATTTGATATATTATGTAAAACACC	49			
03_rev	FLPe_rev_FS_3_BpiI	acaGAAGACgtAAGCCTATTATATGCGTCTATTTATGTAGGATGAa	46	62	1307	gBlock_FLPe_GG
04_fw	RepA101ts_fw_FS_23_BsaI	tcgGGTCTCtCATGTCTGAATTAGTTGTTTTCAAAGC	37			
04_rev	RepA101ts_rev_FS_3_BsaI	tgaGGTCTCtAAGCTCAGATCCTTCCGTATTTAGC	35	62	976	pSIM5 (2. Stock)
05_fw	AmpR_Intron_Fw_ohne_FRT_FS_2_BsaI	tgaGGTCTCaCATGAGTATTCAACATTTCCGTGTCG	36			
05_rev	AmpR_Intron_rev_ohne_FRT_FS_3_BsaI	tcaGGTCTCtAAGCTCATTACCAATGCTTAATCAGTGAG	39	64	1302	gBlock_AmpR_Intron
06_fw	KanR_CripsR_fw_FS_B_BsaI	tagGGTCTCaCCGGGTCATAGCTGTTTCCTGAGGCTCAAT	40			
06_rev	KanR_CrispR_rev_Fs_E_BsaI	atcGGTCTCaGGAGAGCCTATGGAAAAACGCCAGCA	36	70	1117	012_BB1_L_34_syn_BsaI_3
07_fw	AmpR_Intron_Fw_FRT_FS_2_BsaI	acaGGTCTCaCATGGAAGTTCCTATTCcGAAGTTCC	36	64	1398	gBlock_AmpR_Intron

07_rev	AmpR_Intron_rev_FRT_FS_3_BsaI	tctGGTCTCaAAGCGAAGTTCCTATACtatttgaaGAATA	40			
08_fw	Cas9_fw_FS_2_BsaI	tagGGTCTCcCATGGACAAGAAGTACTCCATTGGGC	36			
08_rev	Cas9_rev_FS_3_BsaI	tcgGGTCTCtAAGCCTATCAGTCTCCACCGAGCTGAGAGAG	41	70	4135	MST1220_BB2_BC_p109_Cas9
09_fw	AmpR_Intron_Fw_FRT_FS_2_BsaI	acaGGTCTCaCATGGAAGTTCCTATTCcGAAGTTCC	36			
09_rev	AmpR_CDSI_rev_customFS_BsaI	acgggtctcacttactgtcatgccatccgtaaga	34	66	422	gBlock_AmpR_Intron
10_fw	AmpR_CDSII_fw_customFS_BsaI	gacggtctcataAGAGAGTTATGCAGTGCTGC	32			
10_rev	AmpR_Intron_rev_FRT_FS_3_BsaI	tctGGTCTCaAAGCGAAGTTCCTATACtatttgaaGAATA	40	64	587	gBlock_AmpR_Intron
11_fw	LacZ_CrispRtarget_fw	tcaGAAGACgctagcctgagcgcatttttacgcgcGTTTatGTCTTCtta	50			
11_rev	LacZ_CrispRtarget_rev	taaGAAGACatAAACgcgcgtaaaaatgcgctcaggctagcGTCTTCtga	50	72	50	Primer dimer 100°C langsam abkühlen
12_fw	IS_6_CrispRtarget_fw	ctaGAAGACtaTAGCcttgacttgcttcactgtagGTTTacGTCTTCata	50			
12_rev	IS_6_CrispRtarget_rev	tatGAAGACgtAAACctacagtgaagcaagtcaagGCTAtaGTCTTCtag	50	72	50	Primer dimer 100°C langsam abkühlen
13_fw	AmpR_Intron_Fw_FRT_FS_2_BsaI	acaGGTCTCaCATGGAAGTTCCTATTCcGAAGTTCC	36	68	369	BB3_04
13_rev	AmpR_frameshift_rev_customFS_BsaI	gagggtctctccAGTCATTCTGAGAATAGTGTatgcggc	39			
14_fw	AmpR_frameshift_fw_customFS_BsaI	ctcggtctcactGGTTGAGTACTCACCAGTCA	32	64	639	BB3_04
14_rev	AmpR_Intron_rev_FRT_FS_3_BsaI	tctGGTCTCaAAGCGAAGTTCCTATACtatttgaaGAATA	40			

15_fw	Fw_GFP+PBS1_FS2_BsaI	gtaGGTCTCaCATGAGCAAAGGCGAAGAAC	30		763	GFP BB1 (1. Stock, Dioli-plasmid)
15_rev	Rv_GFP+PBS1_FS3_BsaI	atgGGTCTCtAAGCCCTCTCCATCCACAACCTACCTTATTTATACAGTTCATCCATGCCA	60	62		
16_fw	CompRev_AmpR_Intron_fw_FS_3_BsaI	ctcggtctctaagcATTTCCGTGTCGCCCTTATT	34	66	1284	
16_rev	CompRev_AmpR_Intron_rev_FS_2_BsaI	gagggtctcacatgAATGCTTAATCAGTGAGgcac	35			gBlock_AmpR_Intron
17_fw	J23101-1_+RBS+FRT1_FS12_fw	taGAAGACGCGGAGttta	18	56	115	199nt Fragment ist bei PCR, dabei: muss mit Gel aufgetrennt werden
17_rev	J23101-1_+RBS+FRT1_FS12_rev	ATGAAGACTGagaGAATAGGAACTTCgGAATAGGAACTTCgtagtatttctcctctttct	60			
18_fw	FRT2_GFP_FS23_fw	ATGAAGACTTCtctagaaaGTATAGGAACTTCATGAGCAAAGGCGAAGAACTGTTTAC	58	69	763	
18_rev	FRT2_GFP_FS23_rev	ATGAAGACGCAAGCTTATTTATACAGTTCATCC	33			
19_fw	J23101-1_+RBS+RNDM1_FS12_fw	ATGAAGACGCGGAGttta	18	61	111	wieder 199nt Störprodukt bei PCR ---> GEL
19_rev	J23101-1_+RBS+RNDM1_FS12_rev	agGAAGACGCCCTAGGTCGTGAAACATTTCGTCCATGtagtatttctcctctttctctag	60			
20_fw	RNDM2_GFP_FS23_fw	ctGAAGACGCTAGGATAAGGTCGCCCTACAAAATAGATGAGCAAAGGCGAAGAACTGTTT	60	67	767	
20_rev	RNDM2_GFP_FS23_rev	ATGAAGACGCAAGCTTATTTATACAGTTCAT	31			

21_fw	Fw_GFP_kassette_FS1_BpiI	tgaGAAGACatGGAGtttacagctagctcag	31		828	GFP+PBS1 in BB2_AB
21_rev	Rv_GFP_FRT1.H_BpiI	tgaGAAGACggTAGGAACTTCgGAATAGGAACTTCTTATTTATACAGTTCATCCATGCCA	60	62		
22_fw	Fw_PBS+FRT2.H_BpiI	catGAAGACtaCCTATTCtctagaaaGtATAGGAACTTCGGTAGGTTGTGGATGGAGAG	59	65	114	GFP+PBS1 in BB2_AB
22_rev	Rv_GFP_kassette_FS4_BpiI	tcaGAAGACggAGCGaaaaaaaaacccc	28			
23_fw	Leu2_CripsR_H1_fw_smaI_FS_1_BpiI	tcaGAAGACtcGGAGCCCgggtggtatgttggaataaaaatcaac	45	66	842	gDNA Hefe
23_rev	Leu2_crispR_H1_rev_PAM_mut_FS_4_BpiI	tgaGAAGACtaAGCGccatatattggaaaaaacaataggtccttaaataatattgtc	57			
24_fw	Leu2_crispR_H2_fw_FS_1_BpiI	tacGAAGACtaGGAGcgaagaagttaagaaaatccttgcttaaaaag	47	64	609	gDNA Hefe
24_rev	Leu2_crispR_H2_rev_smaI_FS_4_BpiI	tgaGAAGACtaAGCGCCCgggtaaggatgatgcattagc	39			
25_fw	fw_Ura3_H1_CRISPR_FS1_BpiI	gatGAAGACcaGGAGCCCgggcaacggttcatcatctcatg	41	69	533	gDNA Hefe
25_rev	rv_Ura3_H1_CRISPR_FS4_BpiI	tgcGAAGACtgAGCGttcgtttcctgcaggtttttgttctg	41			
26_fw	fw_Ura3_H2_CRISPR_FS1_BpiI	catGAAGACgaGGAGCCCGGGaatctcggtcgtaatg	37	71	780	gDNA Hefe
26_rev	rv_Ura3_H2_CRISPR_FS4_BpiI	tcaGAAGACtcAGCGCCCgggaacggcaacggttgttc	38			
27_fw	BBa_J23101_RBS_B0034_FS12_fw	aggGGTCTCaggagtttacagctagctcagtcct	34	60	88	iGEM Distribution Kit BBa_J23101
27_rev	BBa_J23101_RBS_B0034_FS12_rev	aggGGTCTCacatgtagtatttctcctctttctctagtagctagcataatacctaggac	59			

28_fw	Fw_Gal.Ind.Synth.Prom._FS12_BsaI	ctaGGTCTCaGGAGCGGATTAGAAG	25	65	168	gBlock Yeast DIVERT part 2
28_rev	Rv_Gal.Ind.Synth.Prom._FS12_BsaI	caaGGTCTCgCATGTTTTTTCGATGC	26			
29_P1	Leu2_cripsr_primer1	atggtctcCCATGATCGTCCTGATGAGTCCGTGAGGACGAAACGAGTAAGCTCGTCGACG	60	6 Primer PCR	248	
29_P2	Leu2_cripsr_primer2	AAACGAGTAAGCTCGTCGACGATTGCTAACCACCTATgttttagagctagaaatagcaag	60			
30_P1	Ura3_crispr_primer1	atggtctcCCATGCAAGCTCTGATGAGTCCGTGAGGACGAAACGAGTAAGCTCGTCAGCT	60	6 Primer PCR	248	
30_P2	Ura3_crispr_primer2	AAACGAGTAAGCTCGTCAGCTTGGCAGCAACAGGACTgttttagagctagaaatagcaag	60			
31_fw	Fw_GFP+PBS1_FS2 (=15_fw)	gtaGGTCTCaCATGAGCAAAGGCGAAGAAC	30	63	761	GFP BB1 (1. Stock, Dioli-plasmid)
31_rev	Rv_GFP+Coli-tRNA-Ala-BS_FS3	tcaGGTCTCcAAGCTCCCGCATAGCTCCACCACTTATTTATACAGTTCATCCATGCCA	58			
32_fw	Fw_GFP+PBS1_FS2 (=15_fw)	gtaGGTCTCaCATGAGCAAAGGCGAAGAAC	30	63	761	GFP BB1 (1. Stock, Dioli-plasmid)
32_rev	Rv_GFP+Coli-tRNA-Arg-BS_FS3	tcaGGTCTCcAAGCATCCTCCCGGATGCACCACTTATTTATACAGTTCATCCATGCCA	58			
33_fw	Fw_GFP+PBS1_FS2 (=15_fw)	gtaGGTCTCaCATGAGCAAAGGCGAAGAAC	30	63	761	GFP BB1 (1. Stock, Dioli-plasmid)
33_rev	Rv_GFP+Coli-tRNA-Glu-BS_FS3	tcaGGTCTCcAAGCATCCCCTAGGGGACGCCACTTATTTATACAGTTCATCCATGCCA	58			
34_fw	Fw_GFP+PBS1_FS2 (=15_fw)	gtaGGTCTCaCATGAGCAAAGGCGAAGAAC	30	63	761	GFP BB1 (1. Stock, Dioli-plasmid)

34_rev	Rv_GFP+Coli-tRNA-Gly-BS_FS3	tcaGGTCTCcAAGCGTCTCGTTTCCCGCTCCACTTATTTATACAGTTCATCCATGCCA	58			
35_fw	Fw_GFP+PBS1_FS2 (=15_fw)	gtaGGTCTCaCATGAGCAAAGGCGAAGAAC	30	63	761	GFP BB1 (1. Stock, Dioli-plasmid)
35_rev	Rv_GFP+Coli-tRNA-Ile-BS_FS3	tcaGGTCTCcAAGCGTCCACTCAGGCCTACCACTTATTTATACAGTTCATCCATGCCA	58			
36_fw	Fw_GFP+PBS1_FS2 (=15_fw)	gtaGGTCTCaCATGAGCAAAGGCGAAGAAC	30	63	761	GFP BB1 (1. Stock, Dioli-plasmid)
36_rev	Rv_GFP+Coli-tRNA-Leu-BS_FS3	tcaGGTCTCcAAGCGTCCCCCCCCTCGCACCACTTATTTATACAGTTCATCCATGCCA	58			
37_1	Seq_Primer_CRISRP-Plasmid_1	CCTACGATGATGATCTCGAC	20	62		CRISPR/Cas9 Plasmid
37_2	Seq_Primer_CRISPR-Plasmid_2	TTCCTGGACAATGAGGAGAAC	21	64		CRISPR/Cas9 Plasmid
37_3	Seq_Primer_CRISPR-Plasmid_3	GATTCACGCATGAACACCAAGT	22	66		CRISPR/Cas9 Plasmid
37_4	Seq_Primer_CRISPR-Plasmid_4	AAAAGAGTGATCCTCGCCGAC	21	67		CRISPR/Cas9 Plasmid
38_fw	sgRNA_fw_FS_C_BsaI	ATAGGTCTCGAATTTTGACGGC	22	65	238	sgRNA ori gBlock
38_rev	sgRNA_rev_FS_D_BsaI	aatGGTCTCgAGCTatctcaattggtatagtgatATAAAACGAAAGG	47			
39_fw	Fw_ori_pSC101(Ts)_FS_1_BpiI	tagGAAGACcaGGAGGACAGTAAGACGGGTAAGCC	35	66	2256	pSIM5
39_rev	Rv_ori_pSC101(Ts)_FS_4_BpiI	tagGAAGACatAGCGTATAAGAGACAGCTGACGGGTTTT	39			
40_fw	Fw_ori_pSC101(Ts)_FS_D_BsaI	tagGGTCTCaAGCTGACAGTAAGACGGGTAAGCC	34	66	2256	pSIM5
40_rev	Rv_ori_pSC101(Ts)_FS_E_BsaI	tagGGTCTCtCTCCTATAAGAGACAGCTGACGGGTTTT	38			

41_fw	Fw_Primer1_cassette_FSX3_BpiI	cctGAAGACgatagcCCTCTCCATCCACAACCTAC	35	71	119	coli Helfer gBlock Fragment AB
41_rev	Rv_Primer1_cassette_FSX3_BpiI	ctaGAAGACtaAAGCGTCCCATTCGCCATGCCGAA	35			
42_fw	Fw_BBa_J23105_FS1X_BpiI	cacGAAGACgtGGAGtttacggctagctcagtcctaggta	40	66	61	kein Template
42_rev	Rv_BBa_J23105_FS1X_BpiI	tcaGAAGACtggctagcatagtacctaggactgagctagcc	41			
43_fw	fw_Ura3_H2_CRISPR_FS1_BpiI_v2	catGAAGACgaGGAGcgggaatctcggtcgtaatgatttct	41	69	778	Hefe gDNA
43_rv	rv_Ura3_H2_CRISPR_FS4_BpiI	tcaGAAGACtcAGCGCCCgggaacggcaacggttgttc	38			
44_fw	FS1_J23105_FS_FRT_fw	ATGAAGACGCGGAGttta	18	57	109	josi
44_rev	FS1_J23105_FS_FRT_rev	ttGAAGACctagaGAATAGGAACTTCgGAATAGGAACTTCGtagtatttct cctctttca	60			
45_fw	FS1_J23105_FS_RNDM_fw	ATGAAGACGCGGAGttta	18	61	105	josi
45_rev	FS1_J23105_FS_RNDM_rev	ATGAAGACTGCCTAGGTCGTGAAACATTTCGTCCATGtagtatttctcct ctttc	55			
46_fw	Fw_coli_DIVERT_fragment1_J23108 _FS_AX	tgcaGGTCTCaGATCctCGTCTC	23	71		Coli DIVERT gBlock
46_rev	Rv_coli_DIVERT_fragment1_J23108_ FS_AX	tcaGGTCTCaaggactgagctagctgtcagtctaaAGTCAAAAG	44			
47_fw	Fw_coli_DIVERT_fragment2_J23108 _FS_XD	tgaGGTCTCatcctaggtataatgctagcTCTCCTCTCC	39	71		Coli DIVERT gBlock
47_rev	Rv_coli_DIVERT_fragment2_J23108_ FS_XD	gaccGGTCTCtAGCTcgtaCGTC	23			

48_fw	AmpR_ohne_FRT_fw_ohne_FS	AGTATTCAACATTTCCGTGT	20	60	861	BB3_04
48_rev	AmpR_ohne_FRT_rev_ohne_FS	TCATTACCAATGCTTAATCAGT	22			
49_fw	Beta+Gam_FS23_BsaI_fw	CTCggtctcacATGAACGCTTATTACATTCAGGATCGTCTTG	42	70	1113	pSim5
49_rev	Beta+Gam_FS23_BsaI_rev	ctcggtctccaagcTCATGCTGCCACCTTCTGCT	34			
50_fw	Fw_Yeast_DIVERT_gBlock1_FSBG_BsaI	tcaGGTCTCtCCGGaaTTTGAAAGA	25	68	276	gBlock Hefe DIVERT p1
50_rv	Rv_Yeast_DIVERT_gBlock1_FSBG_BsaI	tgaGGTCTCtAGCGCAAGCg	20			
51_fw	Fw_Yeast_DIVERT_gBlock2_FSGC_BsaI	tcaGGTCTCtCGCTGGTGCG	20	71	268	gBlock Hefe DIVERT p2
51_rv	Rv_Yeast_DIVERT_gBlock2_FSGC_BsaI	tgaGGTCTCgAATTgcTTTGAAAGATGATACTCT	34			
52_fw	Fw_AraC+PC_FS13_BpiI	tgaGAAGACtaGGAGatagcaaagtgtgacgccgt	35	67	1144	AraC iGEM Distribution BBa_I13458
52_rv	Rv_AraC+PC_FS13_BpiI	atgGAAGACtgAAGCttatgacaacttgacggctacatcattc	43			
53_fw	KanR_fw_FS_A	tagGGTCTCaGATCGTCATAGCTGTTTCCTGAGGCTCAAT	40			Empty BB1 (irgendeines)
53_rv	6_rev	atcGGTCTCaGGAGAGCCTATGGAAAAACGCCAGCA	36	70	1117	
54_fw	37_4	AAAAGAGTGATCCTCGCCGAC	21		401	
54_rv	LacZ_protospacer_detection_rev	gcgcgtaaaaatgcgctca	19	61 (one Taq 56)		
55_fw	37_4	AAAAGAGTGATCCTCGCCGAC	21		407	

55_rv	IS6_protospacer_detection_rev	AACctacagtgaagcaagtcaag	23	61 (one Taq 54)		
56_fw	Fw_AmpR+Intron (ohne FRT)_FS23_BpiI	tgaGAAGACcacCATGAGTATTCAACATTTCCGTGTCG	37	64	1304	AmpR Intron gBlock
56_rv	Rv_AmpR+Intron (ohne FRT)_FS23_BpiI	tcaGAAGACatAAGCTCATTACCAATGCTTAATCAGTGAG	40			
57_fw	Fw_bet+gam_FSC3_BpiI	tagGAAGACcaAATTgaATGAACGCTTATTACATTCAGGATCGTCTTG	48	69	1120	BB2_21
57_rv	Rv_bet+gam_FSC3_BpiI	tcgGAAGACtgAAGCTCATGCTGCCACCTTC	31			
58_fw	pGal-syn_igem_std_fw	ttaggaattcgcggccgcttctagagCGGATTAGAAGCCGCCGAGC	46	72	190	BB1_14
58_rev	pGal-syn_igem_std_rev	taactgcagcggccgctactagtaTTTTTTCGATGCTTTTTTCCGGCGCCTCC	53			
59_fw	fw_URA3_ohne_FRT_FS2_BpiI	gacGAAGACcaCATGtcgaaagctacatataaggaacgt	39	64	919	BB3_15 (oder Ura3 gBlock)
59_rev	rev_Ura3_ohneFRT_FS3 BpiI	gtaGAAGACtaAAGCagtcattagttttgctggcc	35			
60_fw	FS1_J23105_FS_RNDM_fw	GATGAAGACGCGGAGttt	18	60	105	BB1_J23105
60_rev	FS1_J23105_FS_RNDM_rev	ATGAAGACtcGAGCCTTAGTTCAGGTACTCGCGACCtagtatttctcctcttt cactagt	60			
61_fw	FS_RNDM_GFP_FS3_fw	CCGAAGACagGCTCCGGACAGGACTATATACTAGGGATGAGCAAA GGCGAAGAA	54	59	767	BB1_GFP
61_rev	FS_RNDM_GFP_FS3_rev	ATGAAGACGCAAGCTTAT	18			
62_fw	42_fw	cacGAAGACgtGGAGtttacggctagctcagtcctaggta	40	63		BB2_15

62_rv	21_rv	tgaGAAGACggTAGGAACTTCgGAATAGGAACTTCTTATTTATACAGTTCATCCATGCCA	60			
63_fw	FS2_ATG_FRT_GFP_FS3_fw	aCGAAGACATCATGGAAGTTCCTATTCcGAAG	32	57	793	BB2_34
63_rev	FS2_ATG_FRT_GFP_FS3_rev	TAGAAGACAGAAGCTTATTTATACAGTTCATCC	33			
64_fw	Fw_Coli_Helfer_Kassette_ganz_FSA_BsaI	tgaGGTCTCtGATCGGAGatGTCTTCttgacagc	34	62	3945	BB3_1
64_rv	Rv_Coli_Helfer_Kassette_ganz_FSB_BsaI	tcgGGTCTCaCCGGtGGCTTTTGACTtgtCTTAAGAAA	38			
65_fw	Fw_Coli_DIVERT_Kassette_ganz_FSB_BsaI	gtcGGTCTCaCCGGtttacggctagctcagtcctaggtactatgctagcTCTCCTCTCCA	60	71	405	BB3_2
65_rv	Rv_Coli_DIVERT_Kassette_ganz_FSC_BsaI	gtaGGTCTCtAATTcacgcgccgcgttAAAACAAA	35			
66_fw	65_fw	gtcGGTCTCaCCGGtttacggctagctcagtcctaggtactatgctagcTCTCCTCTCCA	60	71	1743	BB3_12
66_rv	65_rv	gtaGGTCTCtAATTcacgcgccgcgttAAAACAAA	35			
67_fw	oligo über AmpR frameshift	CGCATACACTATTCTCAGAATGACTTGGTTGAGTACTCACCAGTCACAGA	50	na	na	AmpR frameshift
67_rv	oligo über AmpR frameshift	TCTGTGACTGGTGAGTACTCAACCaagTCATTCTGAGAATAGTGTatgcg	50			
68_fw	28_fw	ctaGGTCTCaGGAGCGGATTAGAAG	25	65	191	hefe divert part 2
68_rev	rev_pGAL_synv2_Kozak	tgaGGTCTCaCATGtagcccgccgccaccatggagacTTTTTTCGATGCTTTTTTCCGGC	60			

69_fw	Fw Coli Genom außerhalb v. IS6	ccgaaggtcattatggtctgaata	24	65 (Q5)	502 (leer)	E. coli gDNA
69_rv	Rv Coli Genom außerhalb v. IS6	taacctgggtcacggtgttt	20	54 (one taq)		
70_fw	Fw Coli Genom außerhalb v. LacZ-IS	tgacgcgatcggcataacca	20	70 (Q5)	522 (leer)	E. coli gDNA
70_rv	Rv Coli Genom außerhalb v. LacZ-IS	cggagaatccgacgggttgtta	22	60 (one taq)		
71_fw	Fw_pSIM5_ganzes Plasmid FS_C	cagGGTCTCtAATTCATCTCGTTGTTCCATACAACC	36	64	6199	pSIM5
71_rev	Rev_pSIM5_ganzes Plasmid FS_A	tgaGGTCTCtGATCTGTATAAGAGACAGCTGACGG	35			
72_fw	Fw_pBAD+RBS+AraC_FS_1_BsaI	tagGGTCTCaGGAGttatgacaacttgacggctacatcattc	42	62 (Q5)	1242	iGEM part BBa_K808000
72_rv	RV_pBAD+RBS+AraC_FS_2_BsaI	ctaGGTCTCtCATGTAGTATTTCTCCTCTTTatcgggtatggagaaacagtag	53	50 (one taq)		
73_fw	fw_CD_BsaI	tgaGGTCTCtAATTtagctacgatacggactagcAGCTtGAGACCtaa	48			
73_rev	rev_CD_BsaI	ttaGGTCTCaAGCTgctagtccgtatcgtagctaAATTaGAGACCtca	48			
74_fw	fw_LacZ_CRISPR_spacer_v2	tcaGAAGACgcCATActgagcgcatttttacgcgcGTTTatGTCTTCtta	50			
74_rev	rev_LacZ_CRISPR_spacer_v2	taaGAAGACatAAACgcgcgtaaaaatgcgctcagTATGgcGTCTTCtga	50			
75_fw	fw_IS6_CRISPR_spacer_v2	ctaGAAGACtaCATActtgacttgcttcactgtagGTTTacGTCTTCata	50			
75_rev	rev_IS6_CRISPR_spacer_v2	tatGAAGACgtAAACctacagtgaagcaagtcaagTATGtaGTCTTCtag	50			
76_fw	fw_BC_BsaI	tgaGGTCTCtCCGGtagctacgatacggactagcAATTtGAGACCtaa	48			
76_rv	rv_BC_BsaI	ttaGGTCTCaAATTgctagtccgtatcgtagctaCCGGaGAGACCtca	48			

77_fw	GFP_FRT_RFP_fw	atCGTCTCGCCTATTCtctagaaaGTATAGGAACTTCaaagaggagaaatactagatggc	60	61	4957	BBa_I13514 (mutiert)
77_rev	GFP_FRT_RFP_rev	atCGTCTCCTAGGAACTTCgGAATAGGAACTTCttattatttgtatagttcatccatgcc	60			
78_fw	GFP_TRF_RFP_fw	atCGTCTCGaGAATAGGAACTTCgGAATAGGAACTTCaaagaggagaaatactagatggc	60	61	4957	BBa_I13514 (mutiert)
78_rev	GFP_TRF_RFP_rev	atCGTCTCCTTCtctagaaaGTATAGGAACTTCttattatttgtatagttcatccatgcc	60			
79_fw	GFP_RNDM_RFP_fw	atCGTCTCGAGGCTCCGGACAGGACTATATACTAAGGaaagaggagaaatactagatggc	60	61	4957	BBa_I13514 (mutiert)
79_rev	GFP_RNDM_RFP_rev	atCGTCTCCGCCTTAGTTCAGGTACTCGCGACCttattatttgtatagttcatccatgcc	60			
80_fw	GFP_B1001_RFP_fw	atCGTCTCGgcttcggcggggttttttttttaaagaggagaaatactagatggc	53	61	4943	BBa_I13514 (mutiert)
80_rev	GFP_B1001_RFP_rev	atCGTCTCCaagcggggttttttttttttattatttgtatagttcatccatgcc	53			
81_fw	GFP_RFP_removerestrictionsite_fw	gctgaCacgaaaaacatattctcaataaaccctttag	37	68	4907	BBa_I13514
81_rev	GFP_RFP_removerestrictionsite_rev	tttcgtGTCAGCCAATCCCTggg	23			
82_fw	Fw_RFP_yeast-optimized_FS2_BsaI	tgaGGTCTCaCATGgcaactagcggcatggt	31	69 (Q5)	794	BBa_E2050
82_rv	Rv_RFP_yeast-optimized_FS3_BsaI	cgtGGTCTCtAAGCgagatctacactagcactatcagagttattatgcg	49	59 (one taq)		
83_fw	Fw_Coli-Helfer-AB-mit-BBa_J23105_FSA_BsaI	tgaGGTCTCaGATCtaCGTCTCttaatgttgatg	34	71 (Q5)	345	gBlock Coli Helfer AB
83_rv	Rv_Coli-Helfer-AB-mit-BBa_J23105_FSX_BsaI	atgGGTCTCtggactgagctagccgtaaaGAAGACatCTCC	41	60 (one taq)		

84_fw	Fw_Coli-Helfer-AB-mit-BBa_J23105_FSX_BsaI	catGGTCTCcgtcctaggtactatgctagcCCTCTCCAT	39	72 (Q5)	179	gBlock Coli Helfer AB
84_rv	Rv_Coli-Helfer-AB-mit-BBa_J23105_FSB_BsaI	agctGGTCTCaCCGGtAGCGc	21	65 (one taq)		
85_fw	Fw_Coli-Helfer-CD-mit-BBa_J23105_FSC_BsaI	GAGGTCTCgAATTtaGGCGCGCCtttacggctagctcagtcctaggtactatgctagcAC	60	72 (Q5)	499	gBlock Coli Helfer CD
85_rv	Rv_Coli-Helfer-CD-mit-BBa_J23105_FSD_BsaI	tcaGGTCTCtAGCTctCGTCTCcatttcac	30	65 (one taq)		
86_fw	Fw_Primertausch-1-zu-2_2-Stage-SDM-Protokoll	gtcctaggtactatgctagcACCCTCACATAATCGCACGCAGGCCGGCATGGTCCCAGCC	60			BB2_19, 2 Stage SDM Protokoll
86_rv	Rv_Primertausch-1-zu-2_2-Stage-SDM-Protokoll	GGCTGGGACCATGCCGGCCTGCGTGCGATTATGTGAGGGTgctagcatagtacctaggac	60			
87_fw	42_fw	cacGAAGACgtGGAGtttacggctagctcagtcctaggta	40	57 (Q5)	834	BB2_15
87_rv	Rv_GFP+PBS2+BBa_1001_FS3_BpiI	ctaGAAGACtgAAGCACCCTCACATAATCGCACGCATCCAACCTACCTTATTTATACAGT	60	45 (one taq)		
88_fw	fw_pSynGalv2_GFP_cycT_FSB_BsaI	tgaGGTCTCaCCGGGGAGCGGATTAGAAGCCGCC	34	70 (Q5)	1239	BB2_39
88_rv	rv_pSynGalv2_GFP_cycT_FSF_BsaI	tagGGTCTCtAAGCAGCGCCAGCTTGCAAATTAAAGC	37	60 (one taq)		
89_fw	88_fw	tgaGGTCTCaCCGGGGAGCGGATTAGAAGCCGCC	34	70 (Q5)	1216	BB2_16
89_rv	88_rv	tagGGTCTCtAAGCAGCGCCAGCTTGCAAATTAAAGC	37	60 (one taq)		
90_fw	fw_pTDH3_GFP_cycT_FSB_BsaI	tgaGGTCTCaCCGGggagAAGCTTCAGTTCGAGTTTATCATTAT	44	67 (Q5)	1752	BB2_40
90_rv	88_rv	tagGGTCTCtAAGCAGCGCCAGCTTGCAAATTAAAGC	37	56 (one taq)		

			0			
91_fw	Mutagenesis_BsmBI-FS_fw	ggCGTCTCatgaCacgaaaaacatattctcaataaacccttttagggaaata	51	68	4917	BBa_I13524
91_rev	Mutagenesis_BsmBI-FS_rev	gtCGTCTCaGtcagccaatccctgggtg	28			
92_fw	fw_CRISPR_LacZ_H1	tttcatctgtggtgcaacggttgacggctagctcagtcctaggtacagttactagtgaaa	60	63 (Q5)	812	BB2_14
92rv	rv_CRISPR_LacZ_H2	cacggaaaatgccgctcatcTTATTTATACAGTTCATCCATGCCAT	46	54 (one taq)		
93_fw	fw_CRISPR_IS6_H1	cgttgtaggcttgacttgctttgacggctagctcagtcctaggtacagttactagtgaaa	60	63 (Q5)	812	BB2_14
93_rv	rv_CRISPR_IS6_H2	ctccacgattggctcgtaccTTATTTATACAGTTCATCCATGCCAT	46	54 (one taq)		
94_fw	sdm_gfp-bsaI	cgaaagatcccaacgaaaagagagatcacatggtccttcttgagtttgta	50	72	2815	BBa_E0040 oda so
94_rev	sdm_gfp-bsaI	tacaaactcaagaaggaccatgtgatctctcttttcgttgggatctttcg	50			
95_fw	RCF1000	agtctgaattcgcggccgcttctagagggtctccaatgcgtaaaggagaagaact	55	59	789	SDM_GFP
95_rev	RCF1000	gtctgcagcggccgctactagtaggtctctaagcttattatttgtatagttcatccatgc	60			
96_fw	pGal-syn_kozak_igem_std_fw	GATGACgaattcgcggccgcttctagagCGGATTAGAAGCCGCCGAGCGGG	51	72	215	BB1_26
96_rev	pGal-syn_kozak_igem_std_rev	GTAAGCctgcagcggccgctactagtacccgccgccaccatggagacT	48			
97_fw	Fw_IS6H1_Anfang	tcggtggcgcgagatcgggg	20	72 (Q5)	2227	BB3_2,12,24,30
97_rv	Rv_IS6H2_Ende	aacgcgcggaacggctaggt	20	66 (one taq)		
			0			
98_fw	71_fw	cagGGTCTCtAATTCATCTCGTTGTTCCATACAACC	36			

98_rev	Rv_pSIM9_ganzes_Plasmid	tacGGTCTCtGATCTGTATAAGAGACAGCTGaaacgc	37	64 °C	6435	pSIM9
			0			
99_fw	Ura_3 integration check fw	ggaagacaagcaacgaaac	19	onetaq 56°C	leer 2332 bp	hefe colony pcr
99_rev	Ura_3 integration check rev	aagaaatatactggggaaccag	22			
			0			
100_fw	Leu2_integration check_fw	gtgttagaagatgacgcaaatg	22	onetaq 50°C	leer 2461	hefe colony pcr
100_rev	Leu2_integration check_rev	ggtaaggatgatgcattagc	20			
101_fw	Primer2_check	ACCCTCACATAATCGCACGCA	21	64 (MT one taq)		zum Test f. BB2_44
102_fw	Fw_GFP-tRNA-Ala-BS+14Spacer-nts_FSX	catGAAGACtaGACATACCAGATTCTGGTGGAGCTATGCGGGAGC	45	71 (Q5)	3058	BB2_25
102_rv	Rv_GFP_FSX	ctaGAAGACcaTGTCTCATTATTTATACAGTTCATCCATGCCATGCGTAATACCC	55			
103_fw	Fw_GFP-tRNA-Arg-BS+14Spacer-nts_FSX	catGAAGACtaGACATACCAGATTCTGGTGCATCCGGGAGGATGC	45	71 (Q5)	3058	BB2_26
103_rv	102_rv	ctaGAAGACcaTGTCTCATTATTTATACAGTTCATCCATGCCATGCGTAATACCC	55			
104_fw	Fw_GFP-tRNA-Glu-BS+14Spacer-nts_FSX	catGAAGACtaGACATACCAGATTCTGGCGTCCCCTAGGGGATGC	45	71 (Q5)	3058	BB2_27
104_rv	102_rv	ctaGAAGACcaTGTCTCATTATTTATACAGTTCATCCATGCCATGCGTAATACCC	55			
105_fw	Fw_GFP-tRNA-Gly-BS+14Spacer-nts_FSX	catGAAGACtaGACATACCAGATTCTGGAGCGGGAAACGAGACGC	45	71 (Q5)	3058	BB2_28

105_rv	102_rv	ctaGAAGACcaTGTCTCATTATTTATACAGTTCATCCATGCCATGCGTAATACCC	55			
106_fw	Fw_GFP-tRNA-Ile-BS+14Spacer-nts_FSX	catGAAGACtaGACATACCAGATTCTGGTAGGCCTGAGTGGACGC	45	71 (Q5)	3058	BB2_29
106_rv	102_rv	ctaGAAGACcaTGTCTCATTATTTATACAGTTCATCCATGCCATGCGTAATACCC	55			
107_fw	Fw_LacZ-H1 (500bp)	tcacacaggaaacagctatgaccatgattacg	32	72 (Q5)	502	coli gDNA
107_rv	Rv_LacZ-H1 + PAM-Mutation (500bp)_FS1_BsaI	ttgGGTCTCaCTCCcatcaccgcgaggcggttttcttgggcgcgtaaaaatgcgctcag	59			
108_fw	Fw_LacZ-H2 (500bp)_FS4_BsaI	tgaGGTCTCtCGCTgtgctgcgctggagtgacgg	34	72 (Q5)	526	coli gDNA
108_rv	Rv_LacZ-H2 (500bp)	tcgtgacggttaacgcctcgaatca	25			
109_fw	Fw_IS6-H1(500bp)	aggcaatggtcagaatgttggtatcgc	27	72 (Q5)	514	coli gDNA
109_rv	Rv_IS6-H1(500bp)_FS1_BsaI	tcaGGTCTCtCTCCattggctcgtaccttgtggctacagtgaagcaagtcaag	53			
110_fw	Fw_IS6-H2(500bp)_FS4_BsaI	tgaGGTCTCaCGCTcgtggagaaaaaaaggagttaatgtaaattatcatgccctt	55	72 (Q5)	514	coli gDNA
110_rv	Rv_IS6-H2(500bp)	cggatctcccctccgcattg	20			
111_fw	Fw_J23100+GFPuv+B1001_FS1_BsaI	taGGTCTCtGGAGttgacggctagctcagtcctaggtacagttactagtgaaagaggaga	60	71 (Q5)	837	BB2_60
111_rv	Rv_J23100+GFP+B1001_FS4_BsaI	tgaGGTCTCaAGCGaaaaaaaaaccccgccgaa	33			

112_fw	107_fw	tcacacaggaaacagctatgaccatgattacg	32	72 (Q5)	1818	GG aus PCRs 107,108,111
112_rv	108_rv	tcgtgacggttaacgcctcgaatca	25			
113_fw	109_fw	aggcaatggtcagaatgttggtatcgc	27	72 (Q5)	1818	GG aus PCRs 109,110,111
113_rv	110_rv	cggatctcccctccgcattg	20			
114_fw	Fw_sgRNA-Kassette+J23103_FSA_BsaI	tagGGTCTCaGATCAAAGCCATGACAAAAAC	31	71 (Q5)	374	gBlock sgRNA NEU
114_rv	Rv_sgRNA-Kassette+J23103_FSX_BsaI	ctaGAAGACtaAAGCGTCCCATTCGCCATGCCGAA	35			
115_fw	Fw_sgRNA-Kassette+J23103_FSA_BsaI	tgaGGTCTCaagcataatccctaggactgagctagctatcagcaaataaaacgaaaggct	60	61 (Q5)	110	gBlock sgRNA NEU
115_rv	Rv_sgRNA-Kassette+J23103_FSA_BsaI	aatGGTCTCgCCGGtagt	18			
116_fw	114_fw	tagGGTCTCaGATCAAAGCCATGACAAAAAC	31	71 (Q5)	306	gBlock sgRNA NEU
116_rv	Rv_sgRNA-Kassette+J23103-ohne-HDV_FSX_BsaI	tcaGGTCTCttgctagcGCACCGACTCGGTGCCACTT	37			
117_fw	Fw_sgRNA-Kassette-ohneRNAi-ohneHDV_FSA_BsaI	tgaGGTCTCaagcacaaataaaacgaaaggctcagtcgaaa	41	66 (Q5)	82	gBlock sgRNA NEU
117_rv	115_rv	aatGGTCTCgCCGGtagt	18			
			0			
118_fw	5_fw	tgaGGTCTCaCATGAGTATTCAACATTTCCGTGTCG	36	64 (Q5)	862	BB3_4
118_rv	5_rv	tcaGGTCTCtAAGCTCATTACCAATGCTTAATCAGTGAG	39			

			0			
119_fw	gfp_bsa_fs2	agagggtctcccatgcgtaaaggagaagaact	32	61 (Q5)	670 bp	BBa_E0040
119_rev	gfp_bsa_customfs	ctcggtctcaatctctcttttcgttgggat	30			
120_fw	gfp_bsa_customfs	ctcggtctccagatcacatggtccttcttgagttt	35	59 (Q5)	120 bp	BBa_E0040
120_rev	= 95_rev (gfp_bsa_fs3)	gtctgcagcggccgctactagtaggtctctaagcttattatttgtatagttcatccatgc				
121_fw	102_fw	catGAAGACtaGACATACCAGATTCTGGTGGAGCTATGCGGGAGC	45	71 (Q5)	3058	BB1_20
121_rv	102_rv	ctaGAAGACcaTGTCTCATTATTTATACAGTTCATCCATGCCATGCGTAATACCC	55			
122_fw	103_fw	catGAAGACtaGACATACCAGATTCTGGTGCATCCGGGAGGATGC	45	71 (Q5)	3058	BB1_21
122_rv	102_rv	ctaGAAGACcaTGTCTCATTATTTATACAGTTCATCCATGCCATGCGTAATACCC	55			
123_fw	104_fw	catGAAGACtaGACATACCAGATTCTGGCGTCCCCTAGGGGATGC	45	71 (Q5)	3058	BB1_22
123_rv	102_rv	ctaGAAGACcaTGTCTCATTATTTATACAGTTCATCCATGCCATGCGTAATACCC	55			
124_fw	105_fw	catGAAGACtaGACATACCAGATTCTGGAGCGGGAAACGAGACGC	45	71 (Q5)	3058	BB1_23
124_rv	102_rv	ctaGAAGACcaTGTCTCATTATTTATACAGTTCATCCATGCCATGCGTAATACCC	55			

125_fw	106_fw	catGAAGACtaGACATACCAGATTCTGGTAGGCCTGAGTGGACGC	45	71 (Q5)	3058	BB1_24
125_rv	102_rv	ctaGAAGACcaTGTCTCATTATTTATACAGTTCATCCATGCCATGCGTAATACCC	55			
126_fw	Fw_GFPuv_BsaI_FS2	tgaGGTCTCaCATGGCTAGCAAAGGAGAAGA	31	64 (Q5)	748	Addgene pSMART-GFPuv
126_rv	Rv_GFPuv_BsaI_FS3	tagGGTCTCgAAGCTCATTATTTGTAGAGCTCATCCATG	39			
127_fw	6_fw	tagGGTCTCaCCGGGTCATAGCTGTTTCCTGAGGCTCAAT	40	71 (Q5)	1117	empty BB1_34
127_rv	Rv_KanR_FS4_BsaI	atcGGTCTCaAGCGAGCCTATGGAAAAACGCCAGCA	36			
			0			
128_fw	Improve_Flpe_NLS_BsaI_FS2	tctggtctcacATGGCTCCCAAGAAGAAGAG	31	62 (Q5)	1118	
128_rv	Improve_Flpe_NLS_BsaI_FS4	ctcggtctcaAGcGCGAAGTAGTGATCAGGTATT	34			
129_fw	Improve_Flpe_NLS_BsaI_FS4	ctcggtctcaCgCTAGTTTCTCGGTACTATGCATA	35	61 (Q5)	233	
129_rv	Improve_Flpe_NLS_BsaI_FS3	acaggtctctAAGCCTATTATATGCGTCTATTTATGTAGGATGAa	45			
130_fw	Improve_Flpe_NLS_Prefix	GATGACgaattcgcggccgcttctagaATGGCTCCCAAGAAGAAGAG	47	63 (Q5)	1350	
130_rv	Improve_Flpe_NLS_Suffix	AGCctgcagcggccgctactagtaTTATATGCGTCTATTTATGTaggatgaaag	54			
131_fw	15_fw	gtaGGTCTCaCATGAGCAAAGGCGAAGAAC	30	67 (Q5)	775	BB2_45
131_rv	87_rv	ctaGAAGACtgAAGCACCCTCACATAATCGCACGCATCCAACCTACCTTATTTATACAGT	60			