

2 LEFT PRIMER	88	20	58.84	50.00	9.73	0.00	0.00	aggacttcaacattgcgctc
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RIGHT PRIMER	261	20	59.48	50.00	0.00	0.00	0.00	ttcgccgcgcaaatgactcaag
INTERNAL OLIGO	200	20	60.10	50.00	0.00	0.00	0.00	tggtgtgagtcaagtgtga
PRODUCT SIZE: 174, PAIR ANY_TH COMPL: 0.00, PAIR 3'_TH COMPL: 4.61								
3 LEFT PRIMER	1	20	58.30	50.00	10.83	0.00	0.00	ctttgatggcgcaggttttc
RIGHT PRIMER	173	20	58.83	55.00	0.00	0.00	0.00	gtcaccccaatttccagtcg
INTERNAL OLIGO	125	20	59.89	50.00	0.00	0.00	0.00	catcacatcgggtttgcat
PRODUCT SIZE: 173, PAIR ANY_TH COMPL: 0.00, PAIR 3'_TH COMPL: 0.00								
4 LEFT PRIMER	125	20	58.98	50.00	0.00	0.00	0.00	catcacatcgggtttgcat
RIGHT PRIMER	294	19	59.21	57.89	0.00	0.00	0.00	caatcttgccgtcacgacc
INTERNAL OLIGO	200	20	60.10	50.00	0.00	0.00	0.00	tggtgtgagtcaagtgtga
PRODUCT SIZE: 170, PAIR ANY_TH COMPL: 0.00, PAIR 3'_TH COMPL: 0.00								
5 LEFT PRIMER	74	20	58.45	55.00	0.00	0.00	0.00	cgtaggagactggtaaggact
RIGHT PRIMER	242	20	59.69	60.00	0.00	0.00	0.00	ggtaggagcgtaggtgtatc
INTERNAL OLIGO	200	20	60.10	50.00	0.00	0.00	0.00	tggtgtgagtcaagtgtga
PRODUCT SIZE: 169, PAIR ANY_TH COMPL: 0.00, PAIR 3'_TH COMPL: 0.00								
6 LEFT PRIMER	41	20	59.67	55.00	0.00	0.00	0.00	ggtgaaggacatgaggcagt
RIGHT PRIMER	215	20	58.04	50.00	0.00	0.00	0.00	cacttgactcacaccagctt
INTERNAL OLIGO	125	20	59.89	50.00	0.00	0.00	0.00	catcacatcgggtttgcat
PRODUCT SIZE: 175, PAIR ANY_TH COMPL: 6.44, PAIR 3'_TH COMPL: 4.94								
7 LEFT PRIMER	69	19	59.19	57.89	0.00	0.00	0.00	cgatgcgtggagactggta
RIGHT PRIMER	235	21	58.81	52.38	0.00	0.00	0.00	gcgtaggtgtatctgttcagc
INTERNAL OLIGO	125	20	59.89	50.00	0.00	0.00	0.00	catcacatcgggtttgcat
PRODUCT SIZE: 167, PAIR ANY_TH COMPL: 0.00, PAIR 3'_TH COMPL: 0.00								
8 LEFT PRIMER	104	20	58.64	50.00	6.13	0.00	0.00	gctcgcggtcaagacaaata
RIGHT PRIMER	263	18	59.14	55.56	0.00	0.00	0.00	cgttcgccgcgcaaatgact
INTERNAL OLIGO	200	20	60.10	50.00	0.00	0.00	0.00	tggtgtgagtcaagtgtga
PRODUCT SIZE: 160, PAIR ANY_TH COMPL: 5.44, PAIR 3'_TH COMPL: 0.50								
9 LEFT PRIMER	19	21	58.01	42.86	0.00	0.00	0.00	tccgtttgaagttccaacagt
RIGHT PRIMER	189	19	58.96	52.63	0.00	0.00	0.00	ttgcggccttcttttggtc
INTERNAL OLIGO	125	20	59.89	50.00	0.00	0.00	0.00	catcacatcgggtttgcat
PRODUCT SIZE: 171, PAIR ANY_TH COMPL: 0.00, PAIR 3'_TH COMPL: 0.00								
10 LEFT PRIMER	129	20	58.35	50.00	0.00	0.00	0.00	acatcgggtttgcatgactg
RIGHT PRIMER	292	20	61.95	55.00	0.00	0.00	0.00	atcttgccgtcacgaccgat
INTERNAL OLIGO	200	20	60.10	50.00	0.00	0.00	0.00	tggtgtgagtcaagtgtga
PRODUCT SIZE: 164, PAIR ANY_TH COMPL: 0.00, PAIR 3'_TH COMPL: 0.00								
11 LEFT PRIMER	75	22	59.10	50.00	0.00	0.00	0.00	gtggagactggtaaggacttca
RIGHT PRIMER	247	19	59.57	63.16	0.00	0.00	0.00	ctcaagggtcgaggcgtagg
INTERNAL OLIGO	200	20	60.10	50.00	0.00	0.00	0.00	tggtgtgagtcaagtgtga
PRODUCT SIZE: 173, PAIR ANY_TH COMPL: 0.00, PAIR 3'_TH COMPL: 0.00								
12 LEFT PRIMER	59	18	59.11	61.11	0.00	0.00	0.00	gtacctccaccgatgcgt
RIGHT PRIMER	244	19	60.61	57.89	0.00	0.00	0.00	aagggtcgaggcgtaggtgt
INTERNAL OLIGO	200	20	60.10	50.00	0.00	0.00	0.00	tggtgtgagtcaagtgtga

PRODUCT SIZE: 186, PAIR ANY_TH COMPL: 8.19, PAIR 3'_TH COMPL: 8.19

13 LEFT PRIMER 34 21 57.42 42.86 0.00 0.00 0.00 aacagttggtgaaggacatga
RIGHT PRIMER 214 22 59.32 45.45 0.00 0.00 0.00 acttgactcacaccagcttttg
INTERNAL OLIGO 125 20 59.89 50.00 0.00 0.00 0.00 catcacatcgggtttgcat
PRODUCT SIZE: 181, PAIR ANY_TH COMPL: 9.87, PAIR 3'_TH COMPL: 1.77

Statistics

	con sid ered	too many Ns	in tar get	in excl reg	not ok reg	bad GC%	no GC clamp	tm too low	tm too high	high any_th compl	high 3'_th compl	high hair- pin	poly X	high end stab	ok
Left	852	0	0	0	0	5	0	276	254	0	0	103	0	0	214
Right	778	0	0	0	0	10	0	135	300	0	0	79	19	0	235
Intl	2795	0	0	0	0	0	0	331	1584	0	0	22	0	0	858

Pair Stats:
considered 6612, unacceptable product size 6596, primer in pair overlaps a primer in a better pair 15289, ok 16
libprimer3 release 2.4.0

(primer3_results.cgi release 4.1.0)