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<110> NewSouth Innovations Pty Ltd
Universitetet i Oslo

<120> Detection of saxitoxin-producing dinoflagellates

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<170> PatentIn version 3.5

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Ala Ala Arg Ala	Ala Leu Gly Gly Ile Phe Gly Glu Leu Gly Val Gly					
	180		185			190
Thr Val Asp Gly	Glu Gly Thr Val Thr Leu Thr Ala Glu Gly Ser Phe					
	195		200			205
Ala Leu Gln Arg	Arg Tyr Ser Tyr Tyr Val Pro Thr Ser Tyr Ala Pro					
	210		215			220
Leu Leu Asp Arg	Tyr His Ser Ile Leu Phe Glu Asn Pro Gly Trp Gly					
	225		230			235
Phe Ala Gly Ala	Gly Arg Asp Ser Gln Glu Gln Glu Ile His Val His					
	245		250			255
Arg Thr Leu Asn	Val Val Gly Ser Gly Ala Gln His Gln Thr Leu Phe					
	260		265			270
Thr Asp Leu Val	Arg Leu Ile Asp Ser Val Phe Ala Gly Asp Phe					
	275		280			285
Ala Ser Gln Pro	Ala Phe Val Val Asp Thr Gly Cys Gly Asp Gly Arg					
	290		295			300
Leu Leu Arg Arg	Ile Tyr Glu His Val Lys Ser Asn Thr Pro Arg Gly					
	305		310			315
Lys Ala Leu Ala	Glu His Pro Leu Thr Met Val Gly Val Asp Phe Asn					
	325		330			335
Lys Asp Ser Arg	Val Ala Thr Glu Leu Asn Leu Ser Arg His Ala Val					
	340		345			350
Pro His Leu Val	Leu Phe Gly Asp Val Gly Lys Pro Ala Asp Ile Met					
	355		360			365
Glu Ile Leu Gly	Arg Lys Gly Val Asp Pro Ser Arg Ser Leu His Val					
	370		375			380
Arg Ser Phe Leu	Asp His Asp Arg Pro Tyr Val Pro Pro Ala Arg Glu					
	385		390			395
Met Asp Pro Asp	Ser Ala Ala Gly Arg Phe Ala Arg Leu Gln Leu Ser					
	405		410			415
Asp Cys Ala His	Leu Asp Gly Glu Gly Lys Arg Ile Ala Pro Ser Glu					
	420		425			430
Met Phe Ala Ser	Leu Val Glu His Phe Gln Arg Trp Gly Gly Ala Leu					
	435		440			445
Gln Gly Ser Phe	Gly Leu Cys Met Leu Glu Val Met Met Leu Asp Val					
	450		455			460
Pro Thr Thr Arg	Ala Ser Leu Asn Asp Cys Val Ser Leu His Phe Asp					
	465		470			475
Leu Val Gln Cys	Leu Ser Arg Gln Tyr Met Val Ser Pro Ala Ala Phe					
	485		490			495
Ala Leu Gly Leu	Ala Met Ala Gly Leu Leu Pro Gly Ser Tyr Glu Gly					
	500		505			510
Val Gln Thr His	Pro Ala Arg Gly Arg Tyr Cys Arg Val Met Ser Gln					
	515		520			525
His Leu Val Arg	Arg Pro Tyr Gln Ile Arg Leu Ala Glu Val Gly Asp					
	530		535			540
Leu Pro Arg Leu	Ala Arg Leu Glu Glu Leu Ala Trp Gly Arg Leu Gly					
	545		550			555
Ala Thr Pro Glu	Val Leu Arg Arg Arg Leu Glu Thr Ser Pro Thr Thr					
	565		570			575
Cys Leu Ala Val	Glu Met Asp Gln Leu Val Val Ala Val Leu Tyr Thr					
	580		585			590
Gln Arg Val Asp	Ser Ala Asp Val Val Asp Gln Gln Lys Phe Met Gln					
	595		600			605
Val Ser Asp Trp	His Ser Pro Ser Gly Arg Ile Met Gln Leu Ile Ala					
	610		615			620
Ile Cys Ser Asp	Pro Ala Ala Lys His Leu Gly Val Ala Ala Asp Leu					
	625		630			635
						640

Leu Ala Phe Ala Leu His Leu Ala Arg Leu Ser Pro Asp Val Asp Ser
 645 650 655
 Val Ile Gly Val Thr Arg Cys Gln Asn Phe Glu Thr Phe Ala Gly Ser
 660 665 670
 Met Arg Asp Tyr Val Asp Glu His Ile Ala Gly Thr Arg Val Asp Pro
 675 680 685
 Ile Ile Gly Leu His Thr Gly Asn Gly Ala Arg Val Val Arg Leu Val
 690 695 700
 His Gly Phe Arg Pro Glu Asp Val Gly Asn Arg Gly Asp Gly Val Leu
 705 710 715 720
 Ile Gln Tyr Asp Thr Ser Lys Leu Gly Ala Ala Thr Gly Glu Arg Ala
 725 730 735
 Ala Pro Gly Val Gly Pro Ala Ala Ala Pro Pro Pro Gly Pro Ala Pro
 740 745 750
 Ala Pro Cys Pro Thr Asp Tyr Glu His His Glu Ala Leu Val Leu Ala
 755 760 765
 Ala Leu Gly Ser Leu Met Leu Lys Asn Gly Gly Thr Glu Ala Ala Ala
 770 775 780
 Ala Gly Ser Ala Asp Val Arg Phe Val Asp Met Asp Leu Leu Asp Ser
 785 790 795 800
 Leu Asn Phe Thr Asp Phe Ala Gly Gln Leu Asp Ala Ala Leu Pro Val
 805 810 815
 Pro Val Ser Val Gly Leu Leu Phe Glu Ala Ser Thr Pro Arg Lys Leu
 820 825 830
 Ala Ala His Leu His Arg Glu Met Gln Arg Leu Ala Gly Gln Ala Asp
 835 840 845
 Gly Gly Pro Arg Leu Gly Pro Ala Pro Ala Ala Ala Ala Pro Pro
 850 855 860
 Pro Ala Ala Ala Arg Glu Glu Ala Ala Glu Ala Pro Leu Ala Ser Phe
 865 870 875 880
 Asp Ser Val Cys Thr Lys Leu Glu Gly Cys Ser Ala Leu Val Asp Gly
 885 890 895
 Cys Trp Cys Ile Asp Val Ala Asn Cys Ser Tyr Leu Gly Phe Gln Trp
 900 905 910
 Arg Asp Glu Ile Ala Asp Gly Val Asp Arg Asp Val Arg Thr Trp Gly
 915 920 925
 Val His Pro Pro Trp Thr Arg Leu Val Ser Ser Pro Lys Leu Tyr Asp
 930 935 940
 Asp Val Glu Ala Arg Cys Cys Glu Leu Thr Gly Ile Trp Lys Cys Val
 945 950 955 960
 Leu Tyr Pro Ser Val Thr Met Leu Asn Met Gly Val Ile Pro Ser Leu
 965 970 975
 Val Gly Glu Ser Gly Phe Leu Leu Leu Asp Ile Asn Ala His Asp Cys
 980 985 990
 Val Gln Thr Ala Ala Arg Leu Cys Lys Lys Gly Ala Thr Val Val Arg
 995 1000 1005
 Leu Arg His Asn Asp Ala Glu Gln Leu Glu His Met Leu Ser Ser
 1010 1015 1020
 Ile Pro Gln Gly Ala Asp Ile Thr Tyr Val Cys Asp Gly Val Tyr
 1025 1030 1035
 Ser Thr Asp Gly Glu Leu Ala Asp Leu Pro Ala Ile Cys Ala Cys
 1040 1045 1050
 Leu Arg Pro Arg Gly Ala Lys Ile Leu Val Asp Asp Ser His Gly
 1055 1060 1065
 Cys Gly Val Leu Gly Arg Asn Pro Asp Ser Glu Gln Pro Phe Gly
 1070 1075 1080
 Tyr Gly Gly Gly Gly Val Glu Tyr Phe Gly Leu Asp Tyr Ala
 1085 1090 1095
 Glu Asn Asn Ile Ile Tyr Ala Gly Gln Leu Ser Lys Ala Phe Asn
 1100 1105 1110
 Ser Pro Gly Gly Phe Val Gly Cys Ala Arg Glu Thr Asp Glu Lys

1115	1120	1125
Phe Gly Ile Leu Asn Leu	Ala Lys Asn Ser Asn Thr	Leu Val Phe
1130	1135	1140
Thr Gly Pro Ile Cys Thr	Gly Leu Ser Ser Ala	Met Thr Thr
1145	1150	1155
Leu Asp Leu Asn Ala Ala	Glu Gly Asp Leu Gln Arg	Lys Arg Leu
1160	1165	1170
Leu Ala Ala Thr Leu Glu	Phe Cys Glu Gly Leu Lys	Ala Leu Gly
1175	1180	1185
Cys Pro His Thr Tyr His	Gly Phe Pro Ile Val Asn	Ile Tyr Trp
1190	1195	1200
Thr Pro Val Glu Val Cys	Ala Glu Val Tyr Arg Glu	Leu Met Ser
1205	1210	1215
Ala Arg Gln Gly Ala Phe	Gln Gly Val Val Thr	Thr Pro Met
1220	1225	1230
Trp His Pro Ile Ala Pro	Lys Gly His Glu Met Leu	Arg Phe Gln
1235	1240	1245
Phe Thr Ser Leu His Asp	Glu Ala Ala Val Arg His	Ile Leu Val
1250	1255	1260
Ile Leu Glu Asp Leu Ile	Lys Arg Tyr Pro Pro Ser	Ala Val Pro
1265	1270	1275
Pro Arg Ile		
1280		

<210> 5

<211> 504

<212> DNA

<213> Alexandrium catenella

<400> 5

gtcccgacct	cctacgcccc	actgctggac	aggtaccacc	gcacccctctt	cgagaatccc	60
ggctgggggt	tcgcccggcg	cggccgggac	tcgcaggagc	aggaggtcca	cgctccaccg	120
acgctgaacg	tggtgggcag	cggggcgagc	caccagacgc	tcttcacgga	tctcgtgcg	180
ctgattgact	cggctcttcg	gggcccggac	ttcgccggcg	agccggcggt	cgctcgtgg	240
acaggggtgc	gcgacggccg	cttgctcagg	cgcacgtgaa	gagcaaacac	gagcaaacac	300
ccgcccggga	aggcgctcgg	cgagcaccgc	ctcacgatgg	tcggcgctcg	cttcaacaag	360
gactctcggg	tgccacggga	gtcaaacctg	agcaggcacg	cggtcccgcg	cctgggtgct	420
ttcggggacg	tcggcaagcc	cgccgacatc	atggagctcc	tcggggcgga	gggggtggac	480
ccgagcaggt	ccctccacgt	gcgc				504

<210> 6

<211> 504

<212> DNA

<213> Alexandrium catenella

<400> 6

gtcccgacct	cctacgcccc	actgctggac	aggtaccacc	gcacccctctt	cgagaatccc	60
ggctgggggt	tcgcccggcg	cggccgggac	tcgcaggagc	aggaggtcca	cgctccaccg	120
acgctgaacg	tggtgggcag	cggggcgagc	caccagacgc	tcttcacgga	tctcgtgcg	180
ctgattgact	cagctcttcg	gggcccggac	ttcgccggcg	agccggcggt	cgctcgtgg	240
acaggggtgc	gcgacggccg	cttgctcagg	cgcacgtgaa	gagcaaacac	gagcaaacac	300
ccgcccggga	aggcgctcgg	cgagcaccgc	ctcacgatgg	tcggcgctcg	cttcaacaag	360
gactctcggg	tgccacggga	gtcaaacctg	agcaggcacg	cggtcccgcg	cctgggtgct	420
ttcggggacg	tcagcaagcc	cgccgacatc	atggagctcc	tcggggcgga	gggggtggac	480
ccgagcaggt	ccctccacgt	gcgc				504

<210> 7

<211> 402

<212> DNA

<213> Alexandrium catenella

<400> 7

gaggagcatg	ttgacagaat	cttgaatgtc	gttggcagtg	gtgcgcaaca	ccggaccctc	60
tttaaggatc	tgatgcgaca	catcagtgcc	gtgttcaagg	gcgaggcatt	tgccctgcag	120

ccaaattttg	ttgtggacac	tggtgtgggc	gacgggagcc	tgctcataca	cgtctacgag	180
cacatcaagg	agcacacgcc	ccgggggaaa	gtgctcgacg	agttccctct	gacgatggtc	240
ggcgtggacc	tcaacgagga	gccgcgagtg	acgacggccg	tgaatctgag	caagcagggc	300
gtcccgcacg	tggtcatctc	cggcgacgtg	ggcaagcccg	cggagatcat	ggccgcgctg	360
aagaagaaga	aggtggaccc	gtcgaggacg	cttcatgtcc	gc		402

<210> 8

<211> 505

<212> DNA

<213> *Alexandrium catenella*

<400> 8

gtcccgaact	cctacgcccc	actgctggac	aggtaccaca	gcattcctctt	cgagaatccc	60
ggctgggggt	tcgccggcgc	cggccgggac	tcgcaggagc	aggaggtcca	cgtccaccgg	120
acgctgaacg	tggtgggcag	cggggcgcag	caccagacgc	tcttcacgga	cctcgtgcgg	180
ctgacgcact	cggctctcgc	gggcggggac	ttcgcggcgc	agccggcggt	cgtcgtggac	240
acgggggtgcg	gcgacggccg	cttgctcagg	cgcattctacg	agcacgtgaa	gagcaacacg	300
ccgcgcggga	agggcgtcgc	cgagcaccgc	ctcacgatgg	tcggcgtcga	cttcaacaag	360
gactctcggg	tgccacggga	gtcacaacctg	agcaggcacg	cgggtcccga	caatggtgct	420
gttcggcgac	gtcggcaagc	ccgccgacat	cacggagctc	ctcgggcgga	agggggtgga	480
ccctagcagg	tcctccacg	tgccg				505

<210> 9

<211> 504

<212> DNA

<213> *Alexandrium catenella*

<400> 9

gtcccgaact	cctacgcccc	actgctggac	aggtaccacc	gcattcctctt	cgagaatccc	60
ggctgggggt	tcgccggcgc	cggccgggac	tcgcaggagc	aggaggtcca	cgtccaccgg	120
acgctgaacg	tggtgggcag	cggggcgcag	caccagacgc	tcttcacgga	tctcgtgcgg	180
ctcattgact	cggctctcgc	gggcggggac	ttcgcggcgc	agccggcggt	cgtcgtggac	240
acgggggtgcg	gcgacggccg	cttgctcagg	cgcattctacg	agcacgtgaa	gagcaacacg	300
ccgcgcggga	agggcgtcgc	cgagcaccgc	ctcacgatgg	tcggcgtcga	cttcaacaag	360
gactctcggg	tgccacggga	gtcacaacctg	agcaggcacg	cgggtcccga	cctggtgctg	420
ttcggggacg	tcggcaagcc	cgccgacatc	atggagctcc	tcgggcggag	gggggtggac	480
ccgagcaagt	ccctccacgt	gcgc				504

<210> 10

<211> 504

<212> DNA

<213> *Alexandrium catenella*

<400> 10

gtcccagtg	cgtacgcacc	actgatggcc	cagatctcac	cgattcctctt	tgatgatgag	60
ggctgggggt	tcactgacgc	ggggacagac	tccttcgacg	tgaggagagca	tggtgacaga	120
atcttgaatg	tcgtgggcag	tggtgcgcaa	caccggaccc	tctttaagga	tctgatgcga	180
cacatcagtg	ccgtgttcaa	gggcgaggca	tttgctcgc	agccaaattt	tggtgtggac	240
actggctgtg	gcgacgggag	cctgctcata	cacgtctacg	agcacatcaa	ggagcacacg	300
ccccggggga	aagtgtcga	cgagttccct	ctgacgatgg	tcggcggtga	cctcaacgag	360
gagccgcgag	tgacgacggc	cgtgaatctg	agcaagcagg	gcgtcccga	cgtggtcatc	420
tcgggcgacg	tgggcaagcc	cgcggagatc	aaggccgcgc	tgaagaagaa	gaaggtggac	480
ccgtcgagga	cgcttcatgt	ccgc				504

<210> 11

<211> 504

<212> DNA

<213> *Alexandrium catenella*

<400> 11

gtcccgaact	cctacgcccc	accgctggac	atgtaccacc	gcattcctctt	cgagaatccc	60
agctgggggt	tcgccggcgc	cggccgggac	tcgcaggagc	aggaggtcca	cgtccaccgg	120
acgctgaacg	tggtgggcag	cggggcgcag	caccagacgc	tcttcacgga	tctcgtgcgg	180
ctgattgact	cggctctcgc	gggcggggac	ttcgcggcgc	agccggcggt	cgtcgtggac	240
acaggggtgcg	gcgacggccg	cttgctcagg	cgcattctacg	agcacgtgaa	gagcaacacg	300

ccgcgcggga	aggcgctcgg	cgagcaccgg	ctcacgatgg	tcggcgtcga	cttcaacaag	360
gactctcggg	tggccacgga	gctcaacctg	agcaggcacg	cggtcccgca	cctggtgctg	420
ttcggggacg	tcggcaagcc	cgccgacatc	atggagctcc	tcgggcggag	gggggtggac	480
ccgagcaggt	ccctccacgt	gcgc				504

<210> 12

<211> 448

<212> DNA

<213> Alexandrium tamarense

<400> 12

cccgggtggg	ggttcgccgg	cgccggccgg	gactcgccgg	agcaggaggt	ccacgtccac	60
cggacgctga	acgtgggtgg	cagcggggcg	cagcaccaga	cgctcttcac	ggatctcgtg	120
cggctcattg	actcggtctt	cgccggggcg	gacttcgctg	cgcagccggc	gttcgtcgtg	180
gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	acgagcacgt	gaagagcaac	240
acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	tggtcggcgt	cgacttcaac	300
aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	acgcggtccc	gcacctggtg	360
ctgttcgggg	acgttcggca	agcccggcga	catcatggag	atcctcgggc	ggaagggggg	420
ggacccgagc	aggtccctcc	acgtgcgc				448

<210> 13

<211> 504

<212> DNA

<213> Alexandrium tamarense

<400> 13

gtcccagcgt	cctacgcccc	actgctggac	aggtaccaca	gcacccctct	cgagaatccc	60
ggctgggggt	tcgctgggtg	cgcccgggac	tcgcaggagc	aggaggtcca	cgtccaccgg	120
acgctgaacg	tggtgggcag	cggggcgcag	caccagacgc	tcttcacgga	cctcgtgcgg	180
ctcattgact	cggtcttcgc	gggcggggac	ttcgcatcgc	agccggcggt	catcgtggac	240
acggggtgcg	gcgacggccg	cttgctcagg	cgcactctac	agcacgtgaa	gagcaacacg	300
ccgcgcggga	aggcgctcgc	cgagcaccgg	ctcacgatgg	tcggcgtcga	cttcaacaag	360
gactctcggg	tggcgacgga	gctcaacctg	agcaggcacg	cggtcccgca	cctggtgctc	420
ttcggggacg	tcggcaagcc	cgccgacatc	atggagaccc	tcgggcggaa	tgggggtggac	480
ccgagcaggt	ccctccacgt	gcgc				504

<210> 14

<211> 504

<212> DNA

<213> Alexandrium tamarense

<400> 14

gtcccagcgt	cctacgcccc	actgctggac	aggtaccaca	gcacccctct	cgagaatccc	60
ggctgggggt	tcgctgggtg	cgcccgggac	tcgcaggagc	aggaggtcca	cgtccaccgg	120
acgctgaacg	tggtgggcag	cggggcgcag	caccagacgc	tcttcacgga	cctcgtgcgg	180
ctcattgact	cggtcttcgc	gggcggggac	ttcgcatcgc	agccggcggt	catcgtggac	240
acggggtgcg	gcgacggccg	cttgctcagg	cgcactctac	agcacgtgaa	gagcaacacg	300
ccgcgcggga	aggcgctcgc	cgagcaccgg	ctcacgatgg	tcggcgtcga	cttcaacaag	360
gactctcggg	tggcgacgga	gctcaacctg	agcaggcacg	cggtcccgca	cctggtgctc	420
ttcggggacg	tcggcaagcc	cgccgacatc	atggagaccc	tcgggcggaa	tgggggtggac	480
ccgagcaggt	ccctccacgt	gcgc				504

<210> 15

<211> 505

<212> DNA

<213> Alexandrium tamarense

<400> 15

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ggctgggggt	tcgctgggtg	cgcccgggac	tcgcaggagc	aggaggtcca	cgtccaccgg	120
acgctgaacg	tggtgggcag	cggggcgcag	caccagacgc	tcttcacgga	cctcgtgcgg	180
ctcattgact	cggtcttcgc	gggcggggac	ttcgcatcgc	agccggcggt	catcgtggac	240
acggggtgcg	gcgacggccg	cttgctcagg	cgcactctac	agcacgtgaa	gagcaacacg	300
ccgcgcggga	aggcgctcgc	cgagcaccgg	ctcacgatgg	tcggcgtcga	cttcaacaag	360
gactctcggg	tggcgacgga	gctcaacctg	agcaggcacg	cggtcccgca	cctggtgctc	420

ttcggggacg tcggcaagcc cgccgacgat catggagacc ctcgggcgga atgggggtgga 480
cccagacgag tccctccacg tgcgc 505

<210> 16

<211> 505

<212> DNA

<213> *Alexandrium tamarense*

<400> 16

gtcccgacgt cctacgcccc cctgctggac aggtaccaca gcatcctctt cgagaatccc 60
ggctgggggt tcgcccgcgc cggccgggac tcgcaggagc aagaggtcca cgtccaccgg 120
acgtgaacg tggtaggcag cggggcgag caccagacgc tcttcacgga cctcgtgcgg 180
ctcattgact cggctcttcgc gggcggggac ttcgctgcgc agccggcggt cgtcgtggac 240
acggggtgcg gcgacggccg cttgctcagg cgcattctac agcacgtgaa gagcaacacg 300
ccgcgcggga aggcgtctgc cgagcaccgc ctcacgatgg tcggcgtcga cttcaacaag 360
gactctcggg tggcgacgga gctcaacctg agcaggcagc cgggtcccga ccatggtgct 420
gttcggggac gtcggcaagc ccgcccacat catggagctc ctcgggcgga atgggggtgga 480
cccagacgag tccctccacg tgcgc 505

<210> 17

<211> 442

<212> DNA

<213> *Alexandrium minutum*

<400> 17

gtcccgacgt cctacgcccc cctgctggac aagtaccaca gcatcctctt cgagaatccc 60
ggctgggggt tcgcccgcgc cggccgggac tcgcaggagc aagaggtcca cgtccaccgg 120
acgtgaacg tggtaggcag cggggcgag caccagacgc tcttcacgga cctcgtgcgg 180
ctcattgact cggctcttcgc gggcggggac ttcgctgcgc cagccggcggt tcgtcgtgga 240
tacagggtgt ggcgacggcc gcttggttcag gcgcttctac gagcacgtga aagagcaaca 300
cttctcgcgc gggaaggcgc tcgcccagca cccgctcacg atggtcggcg tcgacttcaa 360
caaggactct cgggtggcga cggagctcaa cctgagcagg cacgcagtcc cgcaccaagg 420
gctgttcggg gacgtcggca ag 442

<210> 18

<211> 505

<212> DNA

<213> *Gymnodinium catenatum*

<400> 18

gtcccgacgt cctatgcccc cctgctggac aagtaccaca gcatcctctt cgagaacctt 60
ggttgggggt tcgtcggcgc cggccaggac tcgcaggagc aagagatcca cgtccaccgg 120
acgtgaacg tggtaggcag cggggcgag caccagacgc tcttactga cctcgtgcgg 180
cacatcgact ccctcttcac tggaggggac ttcattgtgc agccggcggt cgtcgtggat 240
acagggtgtg gcgacggccg cttgctcagg cgcattctac agcacgtgaa gagcaacacg 300
ccgcgcggga aggcgtctgc cgaacaccgc ctcacgatgg ttggcgtcga cttcaacaag 360
gactcccgcg tggcgacgga gctcaacttg agcaagcatg cagtcccaca cctagtgtctg 420
ttcggggatg ttggcaagcc cgccgacatc atggagctct ctcaggcaga atgggggtgga 480
cccagacgag gccctccacg tgcgc 505

<210> 19

<211> 504

<212> DNA

<213> *Gymnodinium catenatum*

<400> 19

gtcccgacgt cctacgcccc cctgctggac aagtaccaca gcatcctctt cgagaatcct 60
ggctgggggt tcgtcggcgc cggccaggac tcgcaggagc aggaaattca cgtccaccgg 120
acgtgaacg tggtaggcag cggggcgag caccagacgc tcttactga cctcgtgcgg 180
cacatcgact ccctcttcac gggaggggac ttcattgtgc agccggcggt cgtcgtggat 240
acagggtgtg gcgacggccg cttgctcagg cgcattctac agcacgtgaa gagcaacacg 300
ccgcgcggga aggcgtctgc cgaacaccgc ctcacgatgg ttggcgtcga cttcaacaag 360
gactcccgcg tggcgacgga gctcaacttg agcaagcatg cagtcccaca cctagtgtctg 420
ttcggggatg taggcaaacc cgccgacatc atggagctcc tcaggcagaa tgggggtggac 480
ccgagcaggg ccctccacgt gcgc 504

<210> 20
 <211> 504
 <212> DNA
 <213> *Gymnodinium catenatum*
 <400> 20

gtcccgacgt	cctacgcccc	cctgctggac	aaataccaca	gcatcctctt	cgagaatcct	60
ggctgggggt	tcgtcggcgc	cggccaggac	tcgcaggagc	aggaaattca	cgtccaccgg	120
acgtggaatg	tggtagggcag	cggggcgcag	caccagacgc	tcttcaactga	cctcgtgcgg	180
cacatcgact	ccctcttcac	tggaggggac	ttcatgtcgc	agccggcggt	cgtcgtggat	240
acaggggtgtg	gcgacggccg	cttgctcagg	cgcactctacg	agcacgtgaa	gagcaacacg	300
ccgcgcggga	aggctctcgc	cgaacacccg	ctcacgatgg	ttggcgtcga	cttcaacaag	360
gactcccgcg	tggcgacgga	gctcaacttg	agcaaacatg	cagtcccaca	cctagtgtctg	420
ttcgggggatg	ttggcaggcc	cggcgacatc	atggagctcc	tcaggcagaa	tggagtggac	480
ccgagcaggg	ccctccacgt	gcgc				504

<210> 21
 <211> 504
 <212> DNA
 <213> *Gymnodinium catenatum*
 <400> 21

gtcccgacgt	cctacgcccc	cctgctggac	aagtaccaca	gcatcctctt	cgagaatcct	60
ggctgggggt	tcgtcggcgc	cggccaggac	tcgcaggagc	aggaaattca	cgtccaccgg	120
acgtggaacg	tggtagggcag	cggggcgcag	caccagacgc	tcttcaactga	cctcgtgcgg	180
cacatcgact	ccctcttcac	gggaggggac	ttcatgtcgc	agccggcggt	cgtcgtggat	240
acaggggtgtg	gcgacggccg	cttgctcagg	cgcactctacg	agcacgtgaa	gagcaacacg	300
ccgcgcggga	aggcgtctgc	cgaacacccg	ctcacgatgg	ttggcgtcga	cttcaacaag	360
gactcccgcg	tggcgacgga	gctcaacttg	agcaagcatg	cagtcccaca	cctagtgtctg	420
ttcgggggatg	taggcaaacc	cggcgacatc	atggagctcc	tcaggcagaa	tgggggtggac	480
ccgagcaggg	ccctccacgt	gcgc				504

<210> 22
 <211> 504
 <212> DNA
 <213> *Gymnodinium catenatum*
 <400> 22

gtcccgacgt	cctacgcccc	cctgctggac	aagtaccaca	gcatcctctt	cgagaatcct	60
ggctgggggt	tcgtcggcgc	cggccaggac	tcgcaggagc	aggaaattca	cgtccaccgg	120
acgtggaacg	tggtagggcag	cggggcgcag	caccagacgc	tcttcaactga	cctcgtgcgg	180
cacatcgact	ccctcttcac	gggaggggac	ttcatgtcgc	agccggcggt	cgtcgtggat	240
acaggggtgtg	gcgacggccg	cttgctcagg	cgcactctacg	agcacgtgaa	gagcaacacg	300
ccgcgcggga	aggcgtctgc	cgaacacccg	ctcacgatgg	ttggcgtcga	cttcaacaag	360
gactcccgcg	tggcgacgga	gctcaacttg	agcaagcatg	cagtcccaca	cctagtgtctg	420
ttcgggggatg	taggcaaacc	cggcgacatc	atggagctcc	tcaggcagaa	tgggggtggac	480
ccgagcaggg	ccctccacgt	gcgc				504

<210> 23
 <211> 447
 <212> DNA
 <213> *Gymnodinium catenatum*
 <400> 23

cctgggttggg	ggttcgtcgg	cgccggccag	gactcgcagg	agcaggaaat	ccacgtccac	60
cggacgctga	acgtgggtggg	cagcggggcg	cagcaccaga	cgctcttcac	tgacctcgtg	120
cggcacatcg	actccctctt	cacgggaggg	gacttcatgt	cgcagccggc	gttcgtcgtg	180
gatacagggt	gtggcgacgg	ccgcttgctc	aggcgcactc	acgagcacgt	gaagagcaac	240
acgccgcgcg	ggaaggcgct	cggcgaacac	ccgctcacga	tggttggcgt	cgacttcaac	300
aaggactccc	gcgtggcgac	ggagctcaac	ttgagcaagc	atgcagtccc	acacctagtg	360
ctgttcgggg	atgttggcaa	gcccgcgac	atcatggagc	tcctcaggca	gaatgggggtg	420
gacccgagca	gggccctcca	cgtgcgc				447

<210> 24

<211> 649

<212> DNA

<213> *Alexandrium catenella*

<400> 24

gttcctcctc	ctgtacataa	acgcccacga	ctgcgtgcag	acggccgcca	ggctctgcaa	60
gaagggcgcc	accgtggtgc	gcctgaagca	caacgacacg	gaacagcccg	agcacatgct	120
ctcgtcgatc	ccgcaggggg	ccgacatcac	ctacgtgtgc	gacggcgtgt	actccacgga	180
cgaagagctc	gccgacttgc	ccgccatatg	tgcttggttg	aggccgcgcg	gggccaagat	240
actcgtagac	gactcgcgat	gctgcggcgt	tcttgggcgc	aaccccaact	cggagcaacc	300
cctcgggtat	ggtggcgcg	gcgtcatcga	gtacttcggg	ctggactacg	cggagaacaa	360
catcatctac	gccgggcagc	tgagcaaggc	gttcaattcg	cccggcggat	tcgtcagctg	420
tgcgcgcgag	accgacgaga	atttcggcgt	tctgaacttg	gccaagaact	cgaacacact	480
cgtgttcaca	gggccgatct	gtactgccgg	cctgtcgcgt	gcgaagacga	ccttcgacct	540
caacgcgcgc	gagggggacc	ttcagcgcaa	gcggcttctg	gcggctaccc	tcgaattctg	600
cgaggggctc	aaggcgctcg	ggtgccccca	cacctaccac	gagttcccc		649

<210> 25

<211> 576

<212> DNA

<213> *Alexandrium catenella*

<400> 25

tggtgcgcct	gaagcacaac	gacacggaac	agcccgagca	catgctctcg	tcgatcccg	60
agggggcgca	catcacctac	gtgtgcgacg	gcgtgtactc	cacggacgaa	gagctcgccg	120
acttgcccc	catatgtgct	tggttgaggc	cgcgcggggc	caagatactc	gtagacgact	180
cgcattggctg	cggcgttctt	ggccgcaacc	ccaactcgga	gcaaccctc	gggtatgggtg	240
gcggcgcgct	catcgagtac	ttcgggctgg	actacgcgga	gaacaacatc	atctacgccc	300
ggcagctgag	caaggcgctt	aattcgcccc	gcggattcgt	cagctgtgcg	cgcgagaccg	360
acgagaattt	cggcgttctg	aacttgacca	agaactcgaa	cacactcgtg	tatcacaggg	420
ccgatctgta	ctgccgcctc	gtcgagtacg	aagacaacct	tcgacctcaa	cgccgcgcgag	480
ggggaccttc	agcgcaagcg	gcttctggcg	gctacctctg	aattctgcga	ggggctcaag	540
gcgctcgggt	gccccacac	ctaccacgag	ttcccc			576

<210> 26

<211> 600

<212> DNA

<213> *Alexandrium catenella*

<400> 26

ggttcctcct	cctgtacata	aacgcccacg	actgcgtgca	gacggccgccc	aggctctgca	60
agaagggcg	caccgtggtg	cgctgaagc	acaacgacac	ggaacagccc	gagcacatgc	120
tctcgtcgat	ccgcagggg	gccgacatca	cctacgtgtg	cgacggcgtg	tactccacgg	180
acgaagagct	cgccgacttg	cccgccatat	gtgcttggtt	gaggccgcgc	ggggccaaga	240
tactcgtaga	cgactcgcgt	ggctgcggcg	ttcttgggcg	caaccccaac	tcggagcaaac	300
ccctcgggta	tggtggcggc	ggcgatcatg	agtacttcgg	gctggactac	gcggagaaca	360
acatcatcta	cgccgggcag	ctgagcaagg	cgttcaattc	gcccggcgga	ttcgtcagct	420
gtgcgcgcga	gaccgacgag	aatttcggcg	ttctgaactt	ggccaagaac	tcgaacacac	480
tcgtgttcac	agggccgatc	tgtactgccg	gcctgtcgag	tgcaagacg	accttcgacc	540
tcaacgcgcg	cgagggggac	cttcagcgca	agcggcttct	ggcggtacc	ctcgaattct	600

<210> 27

<211> 653

<212> DNA

<213> *Alexandrium tamarense*

<400> 27

ccagcctcgc	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
agacggccgc	caggctctgc	aagaaggcg	tcaccgtggt	gcgcctgaag	cacaacgaca	120
cggagcagct	ggagcgcatg	ctctcctcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
gcgacggcgt	gtactccaca	gacggagagc	tcgcccactt	gcccgcata	tgtgcttggt	240
tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	tggtgcggc	gttcttgccc	300
gaaacccaga	ctcggagcaa	cccttcgggt	atggtggcgg	tggcgtcgtc	gagtacttcg	360
ggctggacta	cgccggagaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaact	420
cgcccggcgg	attcgtcggc	tgcgcgcgcg	agaccgacga	gaagttcggc	atcctgaact	480

tggccaagaa	ctcgaacaca	ctcgtgttca	cagggccgat	ctgtaccgcc	ggcctgtcga	540
gtgcaaagac	gaccctggac	ctcaacgccg	ccgaggggga	ccttcagcgc	aggcggctcc	600
tggcgggcgc	ccctcgagtt	ctgcgagggg	ctcaaggcgc	tcgggtgccc	cca	653

<210> 28

<211> 639

<212> DNA

<213> *Alexandrium tamarense*

<400> 28

ctggacataa	acgcccacga	ctgcgtgcag	acggccgcca	ggctctgcaa	gaaggggtcaa	60
ccgtgggtgcg	cctgaagcac	aacgacacgg	agcagctgga	gcgcatgctc	tcctcgatcc	120
cgcagggggc	cgacatcacc	tacgtgtgcg	acggcgtgta	ctccacagac	ggagagctcg	180
ccgacttgcc	cgccatatgt	gcttgtttga	ggccgcgcgg	ggccaagata	ctcgtggacg	240
actcgcattgg	ctgcggcggtt	cttggccgaa	acccagactc	ggagcaaccc	ttcgggtatg	300
gtggcgggtgg	cgtcgtcgag	tacttcgggc	tggactacgc	ggagaacaac	atcatctacg	360
ccgggcagct	gagcaaggcg	ttcaactcgc	ccggcggatt	cgtcggctgc	gcgcgcgaga	420
ccgacgttta	agttcggcat	cctgaacttg	gccaagaact	cgaacacact	cgtgttcaca	480
gggcccgatct	gtaccgcccg	cctgtcgagt	gcaaagacga	ccctggacct	caacgccgcc	540
gagggggacc	ttcagcgcag	gcggctcctg	gcggcgaccc	tcgagttctg	cgaggggctc	600
agggcgctcg	ggtgccccca	cacctaccac	ggcttcccc			639

<210> 29

<211> 671

<212> DNA

<213> *Alexandrium tamarense*

<400> 29

ccagcctcgc	ggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
agacggccgc	caggctctgc	aagaagggcg	tcaccgtggt	gcgcctgaag	cacaacgaca	120
cggagcagct	ggagcgcag	ctctcctcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
gcgacggcgt	gtactccaca	gacggagagc	tcgccgactt	gcccgccata	tgtgcttggt	240
tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	tggctgcggc	gttcttgggc	300
gaaacccaaa	ctcggagcaa	cccttcaggt	atggtggcgg	tggcgtcgtc	gagtacttcg	360
ggctggacta	cgcgagaaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaact	420
cgcccggcgg	attcgtcggc	tgcgcgcgcg	agaccgacga	gaagttcggc	atcctgaact	480
tggccaagaa	ctagaacaca	ctcgtgttca	cagggccgat	ctgtaccgcc	ggcctgtcga	540
gtgcaaagac	gaccctggac	ctcaacgccg	ccgaggggga	ccttcagcgc	aggcggctcc	600
tggcgccgac	cctcgagttc	tgcgaggggc	tcagggcgct	cgggtgcccc	cacacctacc	660
acggcttccc	c					671

<210> 30

<211> 624

<212> DNA

<213> *Alexandrium minutum*

<400> 30

tcctcctgga	cataaacgcc	cacgactgcg	tgcagacggc	agccaggctc	tgcaagaagg	60
gagtcaccgt	cgtgcgcctg	aagcacaacg	acacggagca	gctcgagcgc	gtgctctcgt	120
cgatcccggga	gggggcccgc	atcacctacg	tgtgcgacgg	cgtctactcc	acggacggag	180
agctcgccga	cttgcccgcg	atatgtgctt	gtttgagggc	gcgcggggcc	aagatactcg	240
tggacgactc	gcacggttgc	ggcgttcttg	gccgcaaccc	cgactcggag	caacccttcg	300
gatattggcgg	cggcgccgctc	gtcaagtact	tcgggctgga	ctacgcggag	aacaacatca	360
tctacgccgg	gcagctgagc	aaggcgttca	attcgcccgg	cggattcgtg	ggctgcgcac	420
gcgagaccga	cgagaagtgc	ggcattctga	acttggccaa	gaactcgaac	acgctcgtgt	480
tcacagggcc	gatctgtact	gccggcctgt	cgagtgcgaa	gacgaccctc	gacctcaact	540
ttgccgaggg	ggaccgtcag	cgcaagcggc	ttcttgaggc	gaccctggaa	tttgcgaggg	600
gctcaaggcg	ctcgggtgcc	ccca				624

<210> 31

<211> 671

<212> DNA

<213> *Gymnodinium catenatum*

<400> 31

cgccctcgt	aggcgagaat	ggattccttc	tcttggacat	aatgcccac	gattgtgtgc	60
agacagctgc	caggctttgc	aagaaaggca	ccaccaccgt	acgcttgaag	cacaatgacg	120
cagagcagct	cgagcgcgta	cttgcgtcga	tcccagaggg	ggccgacatc	acctacgtgt	180
gcgacgggtgt	gtactccacg	gacggggaag	tcgctgactt	gcccggccata	tgtgcttgtt	240
tgaggcccg	cggggccaag	atactcggtg	acgactcgca	tggctgcggc	gttcttggcc	300
gcaatcccga	ctcggagcag	ccctacgggt	atggcgggcg	cgcgctcgtc	aagtacttcg	360
ggctggatta	tgcggagAAC	aacatcatct	acgcggggca	gttgagcaag	gcgttcaatt	420
caccgcggcg	attcgctcgt	tgcgcacgtg	agaccgacga	gaaattcggc	attctgagct	480
tggccaagaa	ttcgaacacg	ctcgtgttca	cggggcccga	ttgtactgcc	ggcctatcga	540
gtgcgaagac	aaccctcgac	ctcaacgccg	ccgaggggga	ccttcagcgc	aagcggttc	600
tggaggcgac	cctcagattt	tgtgaggggc	tcaaggcgct	cggttgcccc	cacacttacc	660
atgggttccc	c					671

<210> 32

<211> 546

<212> DNA

<213> Alexandrium minutum

<400> 32

tgcagcggtg	ctactcctac	tacgtcccga	cgctcctacgc	cccactgctg	gacaggtacc	60
acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtggtggg	cagcgggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcgtggg	actcggctctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgctcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcacat	300
acgagcacgt	gaagagcaac	acgcgcgcgc	ggaaggcgct	cgccgagcac	ccgctcacga	360
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acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcggac	atcatggagc	480
tccacggggc	gaaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 33

<211> 546

<212> DNA

<213> Alexandrium minutum

<400> 33

tgcagcgatg	ctactcctac	tacgtcccga	cgctcctacgc	cccactgctg	gacaggtacc	60
acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtggtggg	cagcgggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcgtggg	actcggctctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgctcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcacat	300
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tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcggac	atcatggagc	480
tcctcggggc	gaaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 34

<211> 546

<212> DNA

<213> Alexandrium minutum

<400> 34

tgcagcgatg	ctactcctac	tacgtcccga	cgctcctacgc	cccactgctg	gacaggtacc	60
acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtggtggg	cagcgggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcgtggg	actcggctctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgctcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcacat	300
acgagcacgt	gaagagcaac	acgcgcgcgc	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcggac	atcatggagc	480
ccctcggggc	gaaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
ccgacc						546

<210> 35

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 35

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acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	gggcctcgtg	cggtcgtggg	actcgggtttt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcacat	300
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acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcgcgac	atcatggagc	480
tcctcgggcg	gaagggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 36

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 36

tgcagcgatg	ctactcctac	tacgtcccga	cgctcctacgc	cccactgctg	gacaggtacc	60
acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcgtggg	actcgggtctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcacat	300
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acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcgcgac	atcatggagc	480
tcctcgggcg	gaagggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 37

<211> 545

<212> DNA

<213> *Alexandrium minutum*

<400> 37

gcagcgatgc	tactcctact	acgtcccgcg	gtcccacgcc	ccactgctgg	acaggtacca	60
cagcatcatc	ttcgagaatc	ccgggtgggg	gttcgcgggc	gccggcgggg	actcgcagga	120
gcaggaggtc	cacgtccaca	ggacgctgaa	cgtgggtggg	agcggggcg	agcaccagac	180
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ggccggcgctc	gacttcaaca	aggactctcg	gggtggcgacg	gagctcaacc	tgagcaggca	420
cgcggtcccc	cacctgggtg	tggtcgggga	cgtcggcaag	cccgcgcgaca	tcattggagct	480
cctcgggcg	aagggggtgg	acccgagcag	gtccctccac	gtgcgctcct	tcctggacca	540
cgacc						545

<210> 38

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 38

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acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcatg	cggtcgtggg	actcgggtctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcacat	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcgcgac	atcatggagc	480

tcctcgggcg gaagggggtg gacccgagca ggtccctcca cgtgcgctcc ttcctggacc 540
acgacc 546

<210> 39

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 39

tgcagcgatg ctattcctac tacgtcccgga cgtcctacgc cccactgctg gacaggtacc 60
acagcatcat cttcgagaat cccgggtggg ggttcgccgg cgccggcggg gactcgcagg 120
agcaggaggt ccacgtccac aggacgtga acgtgggtggg cagcggggcg cagcaccaga 180
cgctcttcac ggacctcgtg cggctcgtgg actcgggtctt cgccggcggg gacttcgcgt 240
cgcagccggc gttcgtcgtg gacacggggg gggcgacgg ccgcttgctc aggcgcattct 300
acgagcacgt gaagagcaac acgccgcgg ggaaggcgct cgccgagcac ccgctcacga 360
tggtcggcgt cgacttcaac gaggactctc ggggtggcgac ggagctcaac ctgagcaggc 420
acgcgggtccc gcacctggtg ctgttcgggg acgtcggcaa gcccgccgac atcatggagc 480
tcctcgggcg gaagggggtg gacccgagca ggtccctcca cgtgcgctcc ttcctggacc 540
acgacc 546

<210> 40

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 40

tgcagcgatg ctactcctac tacgtcccgga cgtcctacgc cccactgctg gacaggtacc 60
acagcatcat cttcgagaat cccgggtggg ggttcgccgg cgccggcggg gactcgcagg 120
agcaggaggt ccacgtccac aggacgtga acgtgggtggg cagcggggcg cagcaccaga 180
cgctcttcac ggacctcgtg cggctcgtgg actcgggtctt cgccggcggg gacttcgcgt 240
cgcagccggc gttcgtcgtg gacacggggg gggcgacgg ccgcttgctc aggcgcattct 300
acgagcacgt gaagagcaac acgccgcgg ggaaggcgct cgccgagcac ccgctcacga 360
tggtcggcgt cgacttcaac aaggactctc ggggtggcgac ggagctcaac ctgagcaggc 420
acgcgggtccc gcacctggtg ctgttcgggg acgtcggcaa gcccgccgac atcatggagc 480
tcctcgggcg gaagggggtg gacccgagca ggtccctcca cgtgcgctcc ttcctggacc 540
acgacc 546

<210> 41

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 41

tgcagcgatg ctactcctac tacgtcccgga cgtcctacgc cccactgctg gacaggtacc 60
acagcatcat cttcgagaat cccgggtggg ggttcgccgg cgccggcggg gactcgcagg 120
agcaggaggt ccacgtccac aggacgtga acgtgggtggg cagcggggcg cagcaccaga 180
cgctcttcac ggacctcgtg cggctcgtgg actcgggtctt cgccggcggg gacttcgcgt 240
cgcagccggc gttcgtcgtg gacacggggg gggcgacgg tcgcttgctc aggcgcattct 300
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tggtcggcgt cgacttcaac aaggactctc ggggtggcgac ggagctcaac ctgagcaggc 420
acgcgggtccc gcacctggtg ctgttcgggg acgtcggcaa gcccgccgac atcatggagc 480
tcctcgggcg gaagggggtg gacccgagca ggtccctcca cgtgcgctcc ttcctagacc 540
acgacc 546

<210> 42

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 42

tgcagcgatg ctactcctac tacgtcccgga cgtcctacgc cccactgctg gacaggtacc 60
acagcatcat cttcgagaat cccgggtggg ggttcgccgg cgccggcggg gactcgcagg 120
agcaggaggt ccacgtccac aggacgtga acgtgggtggg cagcggggcg cagcgccaga 180
cgctcttcac ggacctcgtg cggctcgtgg actcgggtctt cgccggcggg gacttcgcgt 240
cgcagccggc gttcgtcgtg gacacggggg gggcgacgg ccgcttgctc aggcgcattct 300

acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcgac	ctgagcaggc	420
acgcggtccc	gcacctgggtg	ctgttcgggg	acgtcggcaa	gcccgcggc	atcatggagc	480
tcctcgggcg	gaaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 43

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 43

tgcagcgatg	ctactcctac	tacgtcccga	cgctcctacgc	cccactgctg	gacaggtacc	60
acagcatcat	cttcgagaat	cccgggtggg	gggttcgctgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcgtggg	actcggctctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcattct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctgggtg	ctgttcgggg	acgtcggcaa	gcccgcggc	atcatggagc	480
tcctcgggcg	gaaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 44

<211> 546

<212> DNA

<213> *Alexandrium catenella*

<400> 44

tgcagcgctg	ctactcctac	tacgtcccag	tgctcgtacgc	accactgatg	gcccagatct	60
caccgatcct	ctttgatgat	gcgggctggg	gggttcactga	cgcggggaca	gactccttcg	120
acgtggagga	gcatgttgac	agaatcttga	atgtcgttgg	cagtgggtgcg	caacaccgga	180
ccctctttaa	ggatctgatg	cgacacatca	gtgccgtgtt	caagggcgag	gcatttccct	240
cgcagccaaa	ttttgttggtg	gacactgggt	gtggcgacgg	gagcctgctc	atacacgtct	300
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agggcgctcc	gcacgtgggtc	atctccggcg	acgtgggcaa	gcccgcggag	atcatggccg	480
cgctgaagaa	gaagaagggtg	gacccatcga	ggacgcttca	tgtccgctcc	ttcctagacc	540
acgtcc						546

<210> 45

<211> 546

<212> DNA

<213> *Alexandrium catenella*

<400> 45

tgcagcgatg	ctactcctac	tacgtcccga	cctcctacgc	cccactgctg	gacaggtacc	60
accgcatacct	cttcragaat	cccggctggg	gggttcgccg	cgccggccgg	gactcgcagg	120
arcaggaggt	ccacgtccac	cggacgctga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggatctcgtg	cggtcgattg	actcggctctt	cgcgggcggg	gacttcgcgg	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcattct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cggcgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggccac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctgggtg	ctgttcgggg	acgtcggcaa	gcccgcggc	atcatggagc	480
tcctcgggcg	gaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 46

<211> 546

<212> DNA

<213> *Alexandrium catenella*

<400> 46

tgcagcgatg	ctactcctac	tacgtcccga	cctcctacgc	cccactgctg	gacaggtacc	60
accgcatacct	cttcgagaat	cccggctggg	gggttcgccg	cgccggccgg	gactcgcagg	120

agcaggaggt	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggatctcgtg	cggtcgattg	actcgggtctt	cgcgggcggg	gacttcgcgg	240
cgcagccggc	gttcgctcgtg	gacacgggggt	gcggcgacgg	ccgcttgctc	aggcgcacatct	300
atgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cggcgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggccac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcgcgac	atcatggagc	480
tcctcggggcg	gaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 47

<211> 546

<212> DNA

<213> *Alexandrium catenella*

<400> 47

tgcagcgatg	ctactcctac	tacgtcccga	cctcctacgc	cccactgctg	gacaggtacc	60
accgcatacct	cttcgagaat	cccggctggg	ggttcgccgg	cgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggatctcgtg	cggtcgattg	actcgggtctt	cgcgggcggg	gacttcgcgg	240
cgcagccggc	gttcgctcgtg	gacacgggggt	gcggcgacgg	ccgcttgctc	aggcgcacatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cggcgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggccac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcgcgac	atcatggagc	480
tcctcggggcg	gaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 48

<211> 546

<212> DNA

<213> *Alexandrium catenella*

<400> 48

tgcagcgatg	ctactcctac	tacgtcccga	cctcctacgc	cccactgctg	gacaggtacc	60
accgcatacct	cttcgagaat	cccggctggg	ggttcgccgg	cgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggatctcgtg	cggtcgattg	actcgggtctt	cgcgggcggg	gacttcgcgg	240
cgcagccggc	gttcgctcgtg	gacacagggt	gcggcgacgg	ccgcttgctc	aggcgcacatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cggcgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggccac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcgcgac	atcatggagc	480
tcctcggggcg	gaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 49

<211> 546

<212> DNA

<213> *Alexandrium tamarense*

<400> 49

tgcagcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccgtgctg	gacaggtacc	60
acagcatacct	cttcgataat	cccggctggg	ggttcgccgg	tgccggccgg	gactcgcagg	120
agcaggagat	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcattg	actcgggtctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgctcgtg	gacacgggggt	gtggcgactg	ccgcttgctc	aggcgcacatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cggcgagcac	ccgctcacga	360
tggtcggcat	agacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtt	ctgttcgggg	acgtcggcaa	gcccgcgcgac	atcatggaga	480
tcctcggggcg	gaaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 50

<211> 546

<212> DNA

<213> *Alexandrium tamarense*

<400> 50

tgcagcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccgtctgtg	gacaggtacc	60
acagcattct	cttcgataat	cccggctggg	ggttcgccgg	tgccggccgg	gactcgcagg	120
agcaggagat	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	agacctcgtg	cggctcattg	actcggctct	cgcgggcccgg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gtggcgactg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcat	agacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctgggt	ctgttcgggg	acgtcggcaa	gcccgcggac	atcatggaga	480
tcctcggggc	gaaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 51

<211> 546

<212> DNA

<213> *Alexandrium tamarense*

<400> 51

tgcagcgatg	ctactcctac	tacgtcccac	tgctcgtacgc	acctctgatg	gcccagatct	60
cgcggatcct	gtttgatgat	gcggactggg	ggttcgccga	cgcggggaca	gactccttcg	120
acgtggagga	gcatgttgac	agaatcttga	atgttggttg	cagtgggtgcg	caacaccgga	180
ccctctttta	ggatctgatg	cgacacatca	gtgccgtgtt	caagggcgag	gcatttgcct	240
tgcagccaaa	tttcgttggtg	gacactgggt	gtggcgacgg	gggcctgctc	atgcatatct	300
atgaacatat	caaacagcac	acgccccggg	ggaaaatgct	cgatgagttc	cctctgacaa	360
tggtcggcgt	tgacctcaat	gaggagccgc	gagtgacaac	agccgtgaat	ctgagcaagc	420
agggcgctcc	gcacgtggtc	atctccggcg	acgtgggtag	gcccgcggag	ataattgccg	480
cgtgaagaa	gaagaagggtg	gacccgtcga	ggacgcttca	cgtccgctcc	ttcctggacc	540
acgacc						546

<210> 52

<211> 546

<212> DNA

<213> *Alexandrium tamarense*

<400> 52

tgcagcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccaactgctg	gacaggtacc	60
acagcattct	cttcgagaat	cccggctggg	ggttcgctgg	tgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcggctct	cgcgggcccgg	gacttcgcgt	240
cgcagccggc	gttcacgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctgggt	ctcttcgggg	acgtcggcga	gcccgcggac	atcatggaga	480
ccctcggggc	gaatgggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 53

<211> 546

<212> DNA

<213> *Alexandrium tamarense*

<400> 53

tgcagcgatg	ctactcctac	tacgtcccac	tgctcgtacgc	accactgatg	gcccagatct	60
caccgatcct	gtttgatgat	gcgggctggg	ggttcactga	cgcggggaca	gactcctttg	120
acgtggagga	gcatgttgac	agaattttga	atgttggttg	cagtgggtgcg	caacaccgga	180
ccctatttta	ggatctgatg	cgacacatca	gtgccgtgtt	caagggcgag	gcatttgcct	240
tgcagccaaa	ttttgttggtg	gacactgggt	gtggcgacgg	gagcctgctc	atacatatct	300
atgaacacat	caagcagcac	acgccccggg	ggaaagtgtc	cgatgagttc	cctctaacga	360
tggtcggcgt	tgacctcaat	gaggagccgc	gagtgacaac	agccgtgaat	ctgagcaagc	420
agggcgctcc	gcacgtggtc	atctccggcg	acgtgggtta	gcccgcggag	ataatggccg	480
cgtgaagaa	gaagaagggtg	gacccgtcga	ggacgcttca	tgcccgctcc	ttcctagacc	540
acgacc						546

<210> 54

<211> 546

<212> DNA

<213> Alexandrium tamarense

<400> 54

tgcagcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcctcct	cttcgagaat	cccggctggg	ggttcgctgg	tgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcattg	actcgggtctt	cgcgggcggg	gacttcgcat	240
cgcagccggc	gttcacgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
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acggggtccc	gcacctggtg	ctcttcgggg	acgtcggcaa	gcccgccgac	atcatggaga	480
ccctcggggc	gaatgggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 55

<211> 546

<212> DNA

<213> Alexandrium tamarense

<400> 55

tgcagcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcctcct	cttcgagaat	cccggctggg	ggttcgctgg	tgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcattg	actcgggtctt	cgcgggcggg	gacttcgcat	240
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tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggg	420
acggggtccc	gcacctggtg	ctcttcgggg	acgtcggcaa	gcccgccgac	atcatggaga	480
ccctcggggc	gaatgggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 56

<211> 546

<212> DNA

<213> Alexandrium tamarense

<400> 56

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acagcctcct	cttcgagaat	cccggctggg	ggttcgctgg	tgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcattg	actcgggtctt	cgcgggcggg	gacttcgcat	240
cgcagccggc	gttcacgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	tcgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcggc	ggagctcaac	ctgagcaggg	420
acggggtccc	gcacctggtg	ctcttcgggg	acgtcggcaa	gcccgccgac	atcatggaga	480
ccctcggggc	gaatgggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 57

<211> 549

<212> DNA

<213> Alexandrium fundyense

<400> 57

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cgccgctcct	gtttgatgat	gcgggctggg	ggttcactga	cgcggggaca	gactccttcg	120
acgacgtgga	ggagcatgtt	gacagaatct	tgaatgttgt	tggcagtggg	gcgcaacacc	180
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tctatgaaca	tatcaaacag	cacacacccc	gggggaaaagt	gcttgatcag	ttccctctga	360
cgatggtcgg	cgttgacctc	aatgaggatc	cgcgagtgtg	aacagctgtg	aatctgagca	420
agcagggcgt	cccgacgtg	gtcatctctg	gcgatgtggg	taagcctgcg	gagatacttg	480
ccgcgctgaa	gaagaagaag	gtggacgcgt	cgaggacgct	tcatgtccgc	tccttctctg	540

accacgacc

549

<210> 58

<211> 487

<212> DNA

<213> *Alexandrium fundyense*

<400> 58

tgcagcgatg	ctactcctac	tacgtcccac	tgtcgtacgc	accgctgatg	gcccagatct	60
cgccgatcct	gtttgatgat	gcgggctggg	ggttcactga	cgcggggaca	gactccttcg	120
acgacgtgga	ggagcatggt	gacagaatct	tgaatgttgt	tggcagtggt	gcgcaacacc	180
ggaccctctt	taaggatatg	atgcgacaca	tcagtaccgt	gttcaagggc	gaggcatttg	240
ccttgacgcc	aagtctcggt	gtggacactg	gctgtggcga	cgggagcctg	ctcatacata	300
tctatgaaca	tatcaaacag	cacacacccc	gggggaaagt	gcttgatcag	ttccctctga	360
cgatggtcgg	cgttgacctc	aatgaggatc	cgcgagtgcg	aacagctgtg	aatctgagca	420
agcagggcgt	cccgacgtg	gtcatctctg	gcgatgtggg	taagcctgcg	gagatacttg	480
ccgcgct						487

<210> 59

<211> 546

<212> DNA

<213> *Alexandrium fundyense*

<400> 59

tgcagcgatg	ctactcctac	tacgtcccga	cgctcctacgc	cccactgctg	gacaggtacc	60
acagcctcct	cttcgagaat	cccggctggg	ggttcgccgg	tgccagccgg	gactcgcagg	120
agcaggagat	ccacgtccac	cggacgctga	acgtggctgg	cagcggggcg	cagcaccaga	180
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cgagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggg	420
acggggtccc	gcacctgggtg	ctgttcgggg	acgtcggcaa	gccggccgac	atcatggagc	480
tcctcggacg	gaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 60

<211> 545

<212> DNA

<213> *Alexandrium fundyense*

<400> 60

gcagcgctgc	tactcctact	acgtcccga	gtcctacgcc	ccaatgctgg	acaggtacca	60
cagtatcctc	ttcgagaatc	ccggctgggg	gttcgcgggt	gccggccggg	actcgcagga	120
gcaggagatc	cacgtccacc	ggacgctgaa	cgtggctggc	agcggggcg	agcaccagac	180
gctcttcacg	gacctcgtgc	ggctcattga	ctcggctctt	gcggggcggg	acttcgcgtc	240
gcagccggcg	ttcgtcgtgg	acacgggggtg	cggcgacggc	cgcttgctca	ggcgcatcta	300
cgagcacgtg	aagagcaaca	cgccgcgcgg	gaaggcgctc	gccgagcacc	cgctcacgat	360
ggtcggcgct	gacttcaaca	aggactctcg	ggtggcgacg	gagctcaacc	tgagcaggca	420
cgcggtccc	cacctgggtg	tggtcgggga	cgtcggcaag	ccggccgaca	tcattggagct	480
cctcggacgg	aggggggtgg	acccgagcag	gtccctccac	gtgcgctcct	tcctagacca	540
cgacc						545

<210> 61

<211> 546

<212> DNA

<213> *Alexandrium fundyense*

<400> 61

tgcagcgatg	ctactcctac	tacgtcccga	cgctcctacgc	cccactgctg	gacaggtacc	60
acagcctcct	cttcgagaat	cccggctggg	ggttcgccgg	tgccggccgg	gactcgcagg	120
agcaggagat	ccacgtccac	cggacgctga	acgtggctgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcattg	actcggtctt	cgcgggcggg	gacttcgcgt	240
cgagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggg	420

acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccggccgac	atcatggaga	480
tcctcggggc	gaacgggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 62

<211> 546

<212> DNA

<213> Alexandrium fundyense

<400> 62

tgcagcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcatcct	cttcgagaat	cccggctggg	ggttcgccgg	tgccggccgg	gactcgcagg	120
agcaagagat	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcattg	actcggctctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgctcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcattct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagtac	ccgctcacga	360
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tcctcggggc	gaacgggggtg	gatccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 63

<211> 546

<212> DNA

<213> Alexandrium fundyense

<400> 63

tgcagcgctg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggtacc	60
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agcaggagat	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
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acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgatcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccggccgac	atcatggaga	480
tcctcggggc	gaacgggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 64

<211> 546

<212> DNA

<213> Alexandrium fundyense

<400> 64

tgcagcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcatcct	cttcgagaat	ctcggctggg	ggttcgccgg	tgccggctcg	gactcgcagg	120
agcaggagat	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcattg	actcggctctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgctcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcattct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttctggg	acgtcggcaa	gcccggccgac	atcatggaga	480
tcctcggggc	gaacgggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 65

<211> 545

<212> DNA

<213> Alexandrium fundyense

<400> 65

gcagcgatgc	tactcctact	acgtcccagc	gtcctacgcc	ccactgctgg	acaggtacca	60
cagcatcctc	ttcagagaat	ccggctgggg	ggttcgccgg	gccggccggg	actcgcagga	120
gcaggagatc	cacgtccacc	ggacgctgaa	cgtggtgggc	agcggggcgc	agcaccagac	180
gctcttcacg	gacctcgtgc	ggctcattga	ctcggctctt	gcggggcggg	acttcgcgtc	240

gcagccggcg	ttcgtcgtgg	acacgggggtg	cgccgacggc	cgcttgctca	ggcacatcta	300
cgagcacgtg	aagagcaaca	cgccgcgcgg	gaaggcgctc	gccgagcacc	cactcacgat	360
ggtcggcgctc	gacttcaaca	aggactctcg	ggtggcgacg	gagctcaacc	tgagcaggca	420
cgcggtcccg	cacctgggtg	tggtcgggga	cgtcggcaag	cccgccgaca	tcatggagct	480
cctcggacgg	aggggggtgg	acccgagcag	gtccctccac	gtgcgctcct	tcctggacca	540
cgacc						545

<210> 66

<211> 546

<212> DNA

<213> Alexandrium fundyense

<400> 66

tgcagcgatg	ctacttctac	tacgtcccg	cgctctacgc	cccactgctg	gacaggtacc	60
acagcatcct	cttcgagaat	cccggctggg	ggttcgcggg	tgccggccgg	gactcgcagg	120
agcaggagat	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcggctct	cgcgggcggg	gacttcgcgt	240
cgagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggaccctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcggag	acgtcggcaa	gcccgcggac	atcatggaga	480
tcctcggacg	gagcgggggtg	gacccgagca	ggtccctcca	cgtagcgctcc	tcctggacc	540
acgacc						546

<210> 67

<211> 545

<212> DNA

<213> Alexandrium fundyense

<400> 67

tgcagcgatg	ctactcctac	tacgtcccg	cgctctacgc	cccactgctg	gacaggtacc	60
acagcatcct	cttcgagaat	cccggctggg	ggttcgcggg	tgccggccgg	gactcgcagg	120
agcaggagat	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcggctct	cgcgggcggg	gacttcgcgt	240
cgagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgat	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcggac	atcatggagc	480
tcctcggacg	gaggggggtg	gacccgagca	ggtccctcca	cgtagcgctcc	tcacagacca	540
cgacc						545

<210> 68

<211> 546

<212> DNA

<213> Alexandrium minutum

<400> 68

tgcagcgatg	ctactcctac	tacgtcccg	cgctctacgc	cccactgctg	gacaggtacc	60
acagcatcct	cttcgagaat	cccggctggg	ggttcgcggg	tgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcggctct	cgcgggcggg	gacttcgcgt	240
cgagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	caccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctcttcgggg	acgtcggcaa	gcccgcggac	atcatggaga	480
ccctcggggc	gaatgggggtg	gacccgagca	ggtccctcca	cgtagcgctcc	tcctggacc	540
acgacc						546

<210> 69

<211> 546

<212> DNA

<213> Alexandrium minutum

<400> 69

tgcagcgatg	ctactcctac	tacgtcccg	cgctctacgc	cccactgctg	gacaggcacc	60
------------	------------	-----------	------------	------------	------------	----

acagcatcat	cttcgagaat	cccggttggg	ggttcgcccg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgcggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcgtgg	actcgggtctt	cgccggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctgggtg	ctgttcgggg	acgtcggcaa	gcccgcgcgac	atcatggagc	480
tcctcggggc	gaaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 70

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 70

tgcagcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcatcat	cttcgagaat	cccggttggg	ggttcgcccg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcgtgg	actcgggtctt	cgccggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
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tcctcggggc	gaaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 71

<211> 545

<212> DNA

<213> *Alexandrium minutum*

<400> 71

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acagcatcat	cttcgagaat	cccggttggg	ggttcgcccg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	gcgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcgtgg	actcgggtctt	cgccggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
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cgcggtccc	cacctgggtg	tggttcgggga	cgtcggcaag	cccgcgcgaca	tcattggagct	480
cctcggggcg	aaggggggtg	acccgagcag	gtccctccac	gtgcgctcct	tcctggacca	540
cgacc						545

<210> 72

<211> 545

<212> DNA

<213> *Alexandrium minutum*

<400> 72

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agcaggaggt	ccacgtccac	aggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcgtgg	actcgggtctt	cgccggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctgggtg	ctgttcgggg	acgtcggcaa	gcccgcgcgac	atcatggagc	480
tcctcggggc	gaggggggtg	acccgagcag	gtccctccac	gtgcgctcct	tcctggacca	540
cgacc						545

<210> 73

<211> 546

<212> DNA

<213> Alexandrium fundyense

<400> 73

tgcagcgctg	ctactcctac	tacgtcccga	cgctcctacgc	cccactgctg	gacaggtacc	60
acagcatcct	cttcgagaat	cccggctggg	ggttcgccgg	tgccggccgg	gactcgagc	120
agcaggagat	ccacgtccac	cggacgctga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcggctct	cgcgggcggg	gacttcgcgt	240
cgcagccggg	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaat	acgccgcgcg	ggaaggcgct	cgcttagcac	ccgctcatga	360
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tccttggggc	gaaggggggtg	gacccgagca	ggtccctcca	ggtgcgctcc	ttcctggacc	540
acgacc						546

<210> 74

<400> 74

000

<210> 75

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 75

cgagcctggc	gggcgagagc	gggttcctcc	tcctggacat	caacgcccac	gactgcgtgc	60
agacggccgc	caggctctgc	aagaagggag	tcaccgtcgt	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagcgctg	ctctcgtcga	tcccggagg	ggccgacatc	acctacgtgt	180
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tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	cggttgccgg	gttcttgggc	300
gcaaccccga	ctcggagcaa	cccttcggat	atggcgccgg	cgccgctcgtc	aagtaacttcg	360
ggctggacta	cgcggagaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	420
cgcgcggcag	attcgtgggc	tgccgacgcg	agaccgacga	gaagttcggc	atcctgaact	480
tggccaagaa	ctcgaacatg	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcgaagac	gaccctcgac	ctcaactttg	ccgaggggga	ccgtcagcgc	aagcggcttc	600
ttcaggcgac	cctcgaattt	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
acgggttccc						670

<210> 76

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 76

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agacggcagc	caggctctgc	aagaagggag	tcaccgtcgt	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagcgctg	ctctcgtcga	tcccggagg	ggccgacatc	acctacgtgt	180
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tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	cggttgccgg	gttcttgggc	300
gcaaccccga	ctcggagcaa	cccttcggat	atggcgccgg	cgccgctcgtc	aagtaacttcg	360
ggctggacta	cgcggagaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	420
cgcgcggcgg	attcgtgggc	tgccgacgcg	agaccgacga	gaagttcggc	attctgaact	480
tggccaagaa	ctcgaacacg	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcgaagac	gacccgcgac	ctcaactttg	ccgaggggga	ccgtcagcgc	aagcggcttc	600
ttgaggcgac	cctggaattt	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
acgggttccc						670

<210> 77

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 77

cgagcctggc	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
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cggagcagct	cgagcgctg	ctctcgtcga	tcccggagg	ggccgacatc	acctacgtgt	180

gagacggcgt	ctactccacg	gacggagagc	tgcgcgactt	gcccgccata	tgtgcttggt	240
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gcaaccccga	ctcggagcaa	cccttcggat	atggcggcgg	cggcgtcgtc	aagtacttcg	360
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tggccaagaa	ctcgaacacg	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcgaagac	gacctcgcg	ctcractttg	ccgaggggga	ccgtcagcgc	aagcggcttc	600
ttgagggcgc	cctggaattt	tgcgaggggc	tcaaggcgct	cgggtgcccc	crcacctacc	660
acgggttccc						670

<210> 78

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 78

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cggagcagct	cgagygcgtg	ctctcgtcga	tcccggaggg	ggccgacatc	acctacgtgt	180
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tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	cggttgcggc	gttcttgggc	300
gcaaccccga	ctcggagcaa	cccttcggat	atggcggcgg	cggcgtcgtc	aagtacttcg	360
ggctggacta	cgcggagaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	420
cgcccggcgg	attcgtgggc	tgcgcacgcg	agaccgacga	gaagttcggc	attctgaact	480
tggccaagaa	ctcgaacacg	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcgaagac	gacctcgcg	ctcractttg	ccgaggggga	ccgtcagcgc	aagcggcttc	600
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acgggttccc						670

<210> 79

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 79

cgagcctggc	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
agacggyagc	caggctctgc	aagaagggag	tcaccgtcgt	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagygcgtg	ctctcgtcga	tcccggaggg	ggccgacatc	acctacgtgt	180
gagacggcgt	ctactccacg	gacggagagc	tgcgcgactt	gcccgccata	tgtgcttggt	240
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cgcccggcgg	attcgtgggc	tgcgcacgcg	agaccgacga	gaagttcggc	attctgaact	480
tggccaagaa	ctcgaacacg	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcgaagac	gacctcgcg	ctcaactttg	ccgaggggga	ccgtcagcgc	aagcggcttc	600
ttgagggcgc	cctggaattt	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
acgggttccc						670

<210> 80

<211> 627

<212> DNA

<213> Alexandrium minutum

<400> 80

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cctgaagcac	aacgacacgg	agcagctcga	gcgcgtgctc	tcgtcgatcc	cggaggggac	120
cgacatcacc	tacgtgtgcy	acggcgtcta	ctccacggac	ggagagctcg	ccgacttgcc	180
cgccatatgt	gcttggttga	ggccgcgcgg	ggccaagata	ctcgtggacg	actcgcacgg	240
ttgcggcggt	cttgcccgca	accccgactc	ggagcaaccc	ttcggatatg	gcggcgccgg	300
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gagcaaggcg	ttcaattcgc	ccggcggatt	cgtgggctgc	gcacgcgaga	ccgacgagaa	420
gttcggcatt	ctgaacttgg	ccaagaactc	gaacacgctc	gtgttcacag	ggccgatctg	480
tactgccggc	ctgtcgggtg	cgaagacgac	cctcgacctc	aactttgccg	agggggaccg	540
tcagcgcaag	cggcttcttg	aggcgacctt	ggaattttgc	gaggggctca	aggcgctcgg	600

gtgccccac acctaccacg gggtccc

627

<210> 81

<211> 670

<212> DNA

<213> *Alexandrium minutum*

<400> 81

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cggagcagct	cgagcgcgtg	ctctcgtcga	tcccggagg	ggccgacatc	acctacgtgt	180
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ggctggacta	cgcgagaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	420
cgcccggcgg	attcgtgggc	tgcgcacgcg	agaccgacga	gaagttcggc	atcctgaact	480
tgccaagaa	ctcgaacacg	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcgaagac	gaccctcgac	ctcaactttg	ccgaggggga	ccgtcagcgc	aagcggcttc	600
ttcaggcgac	cctcgaattt	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
acgggttccc						670

<210> 82

<211> 669

<212> DNA

<213> *Alexandrium minutum*

<400> 82

cgagcctggc	gggcgagagc	gggttcctcc	tcctggacat	caacgcccac	gactgcgtgc	60
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cggagcagct	cgagcgcgtg	ctctcgtcga	tcccggagg	ggccgacatc	acctacgtgt	180
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gcaaccccga	ctcggagcaa	cccttcggat	atggcggcgg	cggcgtcgtc	aagtactcgg	360
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tgcgaagacg	accctcgacc	tcaactttgc	cgagggggac	cgtcagcgca	agcggcttct	600
tgaggcgacc	ctggaatttt	gcgaggggct	caaggcgctc	gggtgcccc	acacctacca	660
cgggttccc						669

<210> 83

<211> 670

<212> DNA

<213> *Alexandrium minutum*

<400> 83

agcctttgtg	ggcgagagca	gggtcccccg	cctgtgcata	aacgcctacg	attgcgcgca	60
gacggccgcc	aggctctgca	agaagggcgc	caccgtgggtg	cgcttgaagc	acaacgacac	120
ggagcagctc	gagcacatgc	tctcgtcgat	cctgcagggg	ccgacatcac	ctacgtgtgc	180
gacggcgtgt	actccacgga	cggagagctc	gccgacttgc	ccgccatatg	tgttttggtg	240
gaggccgcgt	ggggccaata	tactcgtaga	cgactcgcat	ggctgcggcg	ttcttgggcg	300
cgaccccgac	tcggagcaac	ccctcgggta	tggtggcggc	ggcgccgtcg	agtatttcgg	360
gctgggctac	gcggagaaca	acatcagcta	cgccgggcag	ctgagcaagg	cgttcaattc	420
gcccggcggg	atcgtcgggt	gtgcgcgcga	gaccgacgag	aatttcggcg	ctctgaactt	480
ggccaagaac	tcgagcacac	tcgcgctcac	agggccgatc	tgtactgtcg	gcctgtcgag	540
tgcgaagacg	accttcgacc	tcaacgcctg	cgagggggac	ttttcagcgc	aagcggctgc	600
tggcgactac	cctcgaattc	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
acgggttccc						670

<210> 84

<211> 671

<212> DNA

<213> *Alexandrium minutum*

<400> 84

cgagcctggc	gggcgagagc	ttgttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
agacggcagc	caggctctgc	aagaagggag	tcaccgtcgt	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagcacatg	ctctcgtcga	tcctgcaggg	gccgacatca	cctacgtgtg	180
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gcgaccccga	ctcggagcaa	cccctcgggt	atggtggcgg	cggcgccgtc	gagtatttcg	360
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gtgcgaagac	gaccttcgac	ctcaacgccg	tcgaggggga	cttttcagcg	caagcggctg	600
ctggcgacta	ccctcgaatt	ctgcgagggg	ctcaaggcgc	tcgggtgcc	ccacacctac	660
cacgggttcc	c					671

<210> 85

<211> 672

<212> DNA

<213> Alexandrium minutum

<400> 85

cgagcctttg	tgggagagag	cagggtcccc	cgctgtgca	taaacgccta	cgattgcgcg	60
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acggagcagc	tcgagcacat	gctctcgtcg	atcctgcagg	ggccgacatc	acctacgtgt	180
gcgacggcgt	gtactccacg	gacggagagc	tcgccgactt	gcccgccata	tgtgttttgt	240
gtgaggccgc	gtggggccaa	tatactcgta	gacgactcgc	atggctgcgg	cgttcttggc	300
cgcgactccg	actcggagca	accctcggg	tatggtggcg	gcggcgccgt	cgagtatttc	360
gggctgggct	acgcggagaa	caacatcagc	tacgccgggc	agctgagcaa	ggcgttcaat	420
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gctggcgact	accctcgaat	tctgcgaggg	gctcaaggcg	ctcgggtgcc	cccacaccta	660
ccacgggttc	cc					672

<210> 86

<211> 672

<212> DNA

<213> Alexandrium minutum

<400> 86

cgagcctttg	tgggagagag	cagggtcccc	cgctgtgca	taaacgccta	cgattgcgcg	60
cagacggccg	ccaggctctg	caagaagggc	gccaccgtgg	tgcgcttgaa	gcacaacgac	120
acggagcagc	tcgagcacat	gctctcgtcg	atcctgcagg	ggccgacatc	acctacgtgt	180
gcgacggcgt	gtactccacg	gacggagagc	tcgccgactt	gcccgccata	tgtgttttgt	240
gtgaggccgc	gtggggccaa	tatactcgta	gacgactcgc	atggctgcgg	cgttcttggc	300
cgcgacccc	actcggagca	accctcggg	tatggtggcg	gcggcgccgt	cgagtatttc	360
gggctgggct	acgcggagaa	caacatcagc	tacgccgggc	agctgagcaa	ggcgttcaat	420
tcgcccggcg	gaatcgtcgg	ttgtgcgcgc	gagaccgacg	agaatttcgg	cgctctgaac	480
ttggccaaga	actcagacac	actcgcgctc	acagggccga	tctgtactgt	cggcctgtcg	540
agtgcgaaga	cgaccttcga	cctcaacgcc	gtcgaggggg	acttttcagc	gcaagcggct	600
gctggcgact	accctcgaat	tctgcgaggg	gctcaaggcg	ctcgggtgcc	cccacaccta	660
ccacgggttc	cc					672

<210> 87

<211> 672

<212> DNA

<213> Alexandrium minutum

<400> 87

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cagacggccg	ccaggctctg	caagaagggc	gccaccgtgg	tgcgcttgaa	gcacaacgac	120
acggagcagc	tcgagcacat	gctctcgtcg	atcctgcagg	ggccgacatc	acctacgtgt	180
gcgacggcgt	gtactccacg	gacggagagc	tcgccgactt	gcccgccata	tgtgttttgt	240
gtgaggccgc	gtggggccaa	tatactcgta	gacgactcgc	atggctgcgg	cgttcttggc	300
cgcgactccg	actcggagca	accctcggg	tatggtggcg	gcggcgccgt	cgagtatttc	360
gggctgggct	acgcggagaa	caacatcagc	tacgccgggc	agctgagcaa	ggcgttcaat	420

tgcgccggcg	gaatcgctcg	ttgtgcgcgc	gagaccgacg	agaatttcgg	cgctctgaac	480
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agtgcgaaga	cgaccttcga	cctcaacgcc	gtcggagggg	acttttcagc	gcaagcggct	600
gctggcgact	accctcgaat	tctgcgaggg	gctcaaggcg	ctcgggtgcc	cccacaccta	660
ccacgggttc	cc					672

<210> 88

<211> 671

<212> DNA

<213> *Alexandrium minutum*

<400> 88

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cggagctgct	cgagcgctg	ctctcgctga	tcccggaggg	ggccgacatc	acctacgcgt	180
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tgaggccgcg	cggggccaaag	atactcgtag	acgactcgca	tggctgcggc	gttcttgggc	300
gcgaccccga	ctcggagcaa	cccctcgggt	atgggtggcg	cgccgcgcgt	gagtatttcg	360
ggctgggcta	cgcgagagac	aacatcagct	acgccgggca	gctgagcaag	gcgttcaatt	420
cgcccggcgg	aatcgctcgt	tgtgcgcgcg	agaccgacga	gaatttcggc	gctctgaact	480
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gtgcgaagac	gaccttcgac	ctcaacgccg	tcgaggggga	cttttcagcg	caagcggcgt	600
ttggcgacta	ccctcgaatt	ctgcgagggg	ctcaaggcgc	tagggtgccc	ccacacctac	660
cacgggttcc	c					671

<210> 89

<211> 714

<212> DNA

<213> *Alexandrium minutum*

<400> 89

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tgcgcctgaa	gcacaacgac	acggagcagc	tcgagcgctg	gctctcgctg	atcccggagg	180
gggcccagac	cacctacgtg	tgcgacggcg	tctactccac	ggacggagag	ctcgcgcgact	240
tgcccgccat	atgtgctcgt	ttggggccgc	gcggggcccga	gatactcgtg	gacgactcgc	300
acgggttgccg	cgttcttgcc	cgcaacccc	actcggagca	acccttcgga	tatggcggcg	360
gcggcgctcg	ctagtacttc	gggctggact	acgcggagaa	caacatcatc	tacgccgggc	420
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agaagttcgg	cattctgaac	ttggccaaga	actcgaacac	gctcgtgttc	acagggcccga	540
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accgtcagcg	caagcggcgt	cttgaggcga	ccctggaatt	ttgcgagggg	ctcaaggcgc	660
tcgggtgccc	ccacacctac	cacgggttcc	ccatcgtcaa	catctactgg	accc	714

<210> 90

<211> 714

<212> DNA

<213> *Alexandrium minutum*

<400> 90

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taaacgccc	cgactgcgtg	cagacggcag	ccaggctctg	caagaaggga	gtcaccgtcg	120
tgcgcctgaa	gcacaacgac	acggagcagc	tcgagcgctg	gctctcgctg	atcccggagg	180
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tgcccgccat	atgtgctcgt	ttggggccgc	gcggggcccga	gatactcgtg	gacgactcgc	300
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accgtcagcg	caagcggcgt	cttgaggcga	ccctggaatt	ttgcgagggg	ctcaaggcgc	660
tcgggtgccc	ccacacctac	cacgggttcc	ccatcgtcaa	catctactgg	accc	714

<210> 91

<211> 714

<212> DNA

<213> *Alexandrium minutum*

<400> 91

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accgtcagcg	caagcggcct	cttgaggcga	ccctggaatt	ttgcgagggg	ctcaaggcgc	660
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<210> 92

<211> 713

<212> DNA

<213> *Alexandrium minutum*

<400> 92

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gcgcctgaag	cacaacgaca	cggagcagct	cgagcgcgtg	ctctcgtcga	tcccggaggg	180
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ccgtcagcgc	aagcggcctc	ttgaggcgac	cctggaattt	tgcgaggggc	tcaaggcgct	660
cgggtgcccc	cacacctacc	acgggttccc	catcgtcaac	atctactgga	ccc	713

<210> 93

<211> 713

<212> DNA

<213> *Alexandrium minutum*

<400> 93

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ccgtcagcgc	aagcggcctc	ttcaggcgac	cctcgaattt	tgcgaggggc	tcaaggcgct	660
cgggtgcccc	cacacctacc	acgggttccc	catcgtcaac	atctactgga	ccc	713

<210> 94

<211> 670

<212> DNA

<213> *Alexandrium catenella*

<400> 94

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cgggaacagcc	cgagcacatg	ctctcgtcaa	tcccgcaggg	ggccgacatc	acctacgtgt	180

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gtgcgaagac	gaccttcgac	ctcaacgccg	ccgaggggga	ccttcagcgc	aagcggcttc	600
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acgagttccc						670

<210> 95

<211> 670

<212> DNA

<213> *Alexandrium tamarense*

<400> 95

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cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
gcgacggcgt	gtactccacg	gacggagagc	tcgccgactt	gcccgccata	tgtgcttgtt	240
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cgcccggcgg	attcgtcggc	tgtgcgcgcg	agacagacga	gaagtgcggc	attctgagct	480
tggccaagaa	ctcgaacaca	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcaatgac	gaccttcgac	ctcaacgccg	ccgaggggga	ccttcagcgc	aagcggcttc	600
tggcggcgac	cctcgaattc	tgcgaggggc	tcaaggcgct	cggttgcccc	cacacctacc	660
acgggctccc						670

<210> 96

<211> 670

<212> DNA

<213> *Alexandrium tamarense*

<400> 96

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cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
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cgcccggcgg	attcgtcggc	tgtgcgcgcg	agacagacga	gaagtgcggc	attctgagct	480
tggccaagaa	ctcgaacaca	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcaatgac	gaccttcgac	ctcaacgccg	ccgaggggga	ccttcagcgc	aagcggcttc	600
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acgggctccc						670

<210> 97

<211> 670

<212> DNA

<213> *Alexandrium tamarense*

<400> 97

ccagcctcgc	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	ggctgcgtgc	60
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cggagcagct	ggagcgcacg	ctctcctcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
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gaaaccccaga	ctcggagcaa	cccttcgggt	atggtggcgg	tgcgctcgtc	gagtacttcg	360
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tgcccggcgg	attcgtcggc	tgcgcgcgcg	agaccgacga	gaagttcggc	atcctgaact	480
tggccaagaa	ctcgaacaca	ctcgtgttca	cagggccgat	ctgtaccgcc	ggcctgtcga	540
gtgcaaagac	gaccttgac	ctcaacgccg	ccgaggggga	ccttcagcgc	aggcggctcc	600

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acggcttccc 670

<210> 98
<211> 713
<212> DNA
<213> *Alexandrium tamarense*
<400> 98

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taaagcccca cgactgcgtg cagacggccg ccaggctctg caagaagggc gtcaccgtgg 120
tgcgcctgaa gcacaacgac acggagcagc tggagcgcat gctctcctcg atcccgcagg 180
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ccttcagcgc aggcggctcc tggcggcgac cctcagagttc tgcgaggggc tcagggcgct 660
cgggtgcccc cacacctacc acggcttccc catcgtcaac atctactgga ccc 713

<210> 99
<211> 713
<212> DNA
<213> *Alexandrium tamarense*
<400> 99

tgctcaacat gggagtcac cccagcctcg cgggcgggag cgggttcctc ctcttgga 60
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gcgccctgaag cacaacgaca cggagcagct ggagcgcatg ctctcctcga tcccgcaggg 180
ggccgacatc acctacgtgt gcgacggcgt gtactccaca gacggagagc tcgcccactt 240
gcccgcata tgtgcttgtt tgaggccgcg cggggccaag atactcgtgg acgactcgc 300
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gaagttcggc atcctgaact tggccaagaa ctcgaacaca ctctgtttca cagggccgat 540
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ccttcagcgc aggcggctcc tggcggcgac cctcagagttc tgcgaggggc tcagggcgct 660
cgggtgcccc cacacctacc acggcttccc catcgtcaac atctactgga ccc 713

<210> 100
<211> 713
<212> DNA
<213> *Alexandrium tamarense*
<400> 100

tgctcaacat gggagtcac cccagcctcg cgggcgggag cgggttcctc ctcttgga 60
taaagcccca cgactgcgtg cagacggccg ccaggctctg caagaagggc gtcaccgtgt 120
ggccctgaag cacaacgaca cggagcagct ggagcgcatg ctctcctcga tcccgcaggg 180
ggccgacatc acctacgtgt gcgacggcgt gtactccaca gacggagagc tcgcccactt 240
gcccgcata tgtgcttgtt tgaggccgcg cggggccaag atactcgtgg acgactcgc 300
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gctgagcaag gcgttcaact cgcggcgcg attcgtcggc tgcgcgcgcg agaccgacga 480
gaagttcggc atcctgaact tggccaagaa ctcgaacaca ctctgtttca cagggccgat 540
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ccttcagcgc aggcggctcc tggcggcgac cctcagagttc tgcgaggggc tcagggcgct 660
cgggtgcccc cacacctacc acggcttccc catcgtcaac atctactgga ccc 713

<210> 101
<211> 714
<212> DNA
<213> *Alexandrium tamarense*

<400> 101

tgctcaacat	gggagtcac	cccagccccg	cgggcgagag	cgggttcctc	ctcctggaca	60
taaagcccca	cgactgcgtg	cagacggccg	ccaggctctg	caagaagggc	gtcaccgtgg	120
tgcgcctgaa	gcacaacgac	acggagcagc	tggagcgcac	gctctcctcg	atcccgcagg	180
gggccgacat	cacctacgtg	tgcgacggcg	tgtactccac	agacggagag	ctcgcgact	240
tgcccgccat	atgtgattgt	ttgagggcgc	gcggggccaa	gatactcgtg	gacgactcgc	300
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agctgagcaa	ggcgttcaac	tcgcccggcg	gattcgtcgg	ctgcgcgcgc	gagaccgacg	480
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accttcagcg	caggcggtc	ctggcgggcg	ccctcgagtt	ctgcgagggg	ctcagggcgc	660
tcgggtgccc	ccacacctac	cacggcttcc	ccatcgtcaa	catctactgg	accc	714

<210> 102

<211> 667

<212> DNA

<213> Alexandrium fundyense

<400> 102

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cggaaacagcc	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
gcgacgtact	ccacggacga	agagctcgcc	gacttgcccg	ccatatgtgc	ttgtttgagg	240
ccgcgcgggg	ccaagatact	cgtagacgac	tcgcatggct	gcggcggttc	tgccgcgaac	300
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gactacgcgg	agaacaccat	catatacgcc	gggcagctga	gcaaggcggt	caattcgccc	420
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ccaagaactc	gaacacactc	gtgttcacag	ggccgatctg	tactgccggc	ctgtcgagtg	540
cgaagacgac	cttcgacctc	aacgcgcgcg	agggggacct	tcagcgcaag	cggcttctgg	600
cggctaccct	cgaattctgc	gaggggctca	aggcgctcgg	gtgccccac	acctaccacg	660
ggttccc						667

<210> 103

<211> 670

<212> DNA

<213> Alexandrium fundyense

<400> 103

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cggaaacagcc	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
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gcaaccccaa	ctcggagcaa	ccccgcgggt	atggtggtgg	cggcgatcatg	gagtacttcg	360
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tggcggctac	cctcgaattc	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
acgggttccc						670

<210> 104

<211> 670

<212> DNA

<213> Alexandrium fundyense

<400> 104

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cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
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tgaggccgcg	cggggccaag	atactcgtag	acgactcgca	tggttgccgg	gttcttgacc	300
gcaacccga	ctcggagcaa	cccttcgggt	atggtggcgg	cggcgctcgc	gagtacttcg	360

ggctggacta	cgcgagagac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	420
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tggcgggcgac	cctcgaattc	tgcgaggggc	tcaaggcgct	cggttgcccc	cacacctacc	660
acgggttccc						670

<210> 105

<211> 667

<212> DNA

<213> *Alexandrium fundyense*

<400> 105

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cggaacagcc	cgagcacata	ctctcgtcga	tcccgagg	ggcgacatc	acctacatgt	180
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cgaagacgac	cttcgacctc	aacgcgcgcg	agggggacct	tcagcgcaag	cggttctctg	600
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ggttccc						667

<210> 106

<211> 670

<212> DNA

<213> *Alexandrium fundyense*

<400> 106

cgagcctcgt	ggcgagagc	aggttcctcc	tcctgtacat	aaacgcccac	gactgcgtgc	60
agacagccgc	caggctctgc	aagaaggag	ccaccgtggt	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagcacata	ctctcgtcga	tcccgagg	ggcgacatc	acctacgtgt	180
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acgggttccc						670

<210> 107

<211> 668

<212> DNA

<213> *Alexandrium fundyense*

<400> 107

cgggcctcgt	ggcgagagc	gggttcctcc	tcctgtacat	aaacgcccac	gactgcgtgc	60
agacggccgc	caggctctgc	aagaaggag	ccaccgtggt	gcgcctgaag	cacaacgaca	120
cggaacagcc	cgagcacatg	ctctcgtcga	tcccgagg	gccgacatca	cctacgtgtg	180
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tgcgaagacg	accttcgacc	tcaacgccgc	cgagggggac	cttcagcgca	agcggcttct	600
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gggttccc						668

<210> 108

<211> 673

<212> DNA

<213> *Alexandrium fundyense*

<400> 108

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cggagcagct	cgagcacatg	ctctcgccga	tcctgcaggg	gggggcgaca	tcacctacat	180
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accacgggtt	ccc					673

<210> 109

<211> 669

<212> DNA

<213> *Alexandrium fundyense*

<400> 109

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cggaaacagc	cgagcacatg	ctctcgctga	tcccgaggg	ggccgacatc	acctacgtgt	180
gtgacggcgt	gtactccacg	gacgaagagc	tcgccgactt	gcccggccata	tgtgcttggt	240
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ggcggctacc	ctcgaattct	gcgaggggct	caaggcgctc	gggtgcccc	acacctacca	660
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<210> 110

<211> 673

<212> DNA

<213> *Alexandrium fundyense*

<400> 110

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accacgggtt	ccc					673

<210> 111

<211> 668

<212> DNA

<213> *Alexandrium fundyense*

<400> 111

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cggagcagct	cgagcacatg	ctctcgctga	tcccgaggcg	gccgacatca	cctacgtgtg	180
cgacggcgcg	tactccacgg	acagagagct	cgccgacttg	cccgccatat	gtgcttggtt	240
gaggccgcgc	ggggccaaga	tactcgtaga	cgactcgcat	ggctgcggcg	ttcttggccg	300
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gctggactac	gcagagaaca	acatcatcta	cgccgggcag	ctgatcaagg	cgttcaattc	420
gcccggcgga	ttcgtcggct	gtgcgcgcga	gaccgacgag	aatttaggcg	ttctgagctt	480
ggccaagaac	tcgaacacac	tcgggttcac	agggccgac	tgtactgcca	gcctgtcgag	540
tgcgaagacg	accttcgacc	tcaacgccgc	caagggggac	cttcagcgca	agcggcttct	600
ggcggctacc	ctcgaattct	gcgaggggtt	caggcgctcg	ggtgccccca	cacctaccat	660
gggttccc						668

<210> 112

<211> 668

<212> DNA

<213> Alexandrium minutum

<400> 112

agcctggcgg	gcgagagcgg	gttctctctc	ctggacatca	acgcccacga	ctgcgtgcag	60
acggccgcca	ggctctgcaa	gaagggagtc	accgtcgtgc	gcctgaagca	caacgacacg	120
gagcagctcg	agcgcgtgct	ctcgtcgatc	ccggaagggg	ccgacatcac	ctacgtgtgc	180
gacggcgtct	actccacggg	cggagagctc	gccgacttgc	ccgccatatg	tgcttggttg	240
aggccgcgcg	gggccaagat	actcgtggac	gactcgcacg	ggtgcggcgt	tcttggccgc	300
aaccccgact	cggagcaacc	cttcggatat	ggcggcgggc	gcgtcgtcaa	gtacttcggg	360
ctggactacg	cggagaacaa	catcatctac	gccggggcagc	tgagcaaggc	gttcaattcg	420
cccggcggat	tcgtgggctg	cgcacgcgag	accgacgaga	agttcggcat	cctgaacttg	480
gccaagaact	cgaacacgct	cgtgttcaca	gggccgatct	gtactgccgg	cctgtcgagt	540
gcgaagacga	ccctcgacct	caactttgcc	gagggggacc	gtcagcgcaa	gcggcttctt	600
caggcgaccc	tcgaattttg	cgagggggctc	aaggcgctcg	ggtgccccca	cacctaccac	660
gggttccc						668

<210> 113

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 113

cgagcctggc	gggcgagagc	gggttctctc	tcctggacat	aaacgcccac	gactgcgtgc	60
agacggcagc	caggctctgc	aagaagggag	tcaccgtcgt	gcgcctgaag	cacaacgaca	120
cgagcgagct	cgagcgcgtg	ctctcgctga	tcccgaggcg	ggccgacatc	acctacgtgt	180
gcgacggcgt	ctactccacg	gacggagagc	tcgccgactt	gcccgccta	tgtgcttggt	240
tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	cggttgcggc	gttcttggcc	300
gcaaccccgga	ctcggagcaa	cccttcggat	atggcgggcg	cggcgtcgtc	aagtacttcg	360
ggctggacta	cgcggagaa	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	420
cgcgcggcgg	attcgtgggc	tgcgcacgcg	agaccgacga	gaagtccggc	attctgaact	480
tggccaagaa	ctcgaacacg	ctcgtgttca	cagggccgat	ctgtactacc	ggcctgtcga	540
gtgcgaagac	gaccctcgac	ctcaactttg	ccgaggggga	ccgtcagcgc	aagcggcttc	600
ttgaggcgac	cctggaattt	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
acgggttccc						670

<210> 114

<211> 711

<212> DNA

<213> Alexandrium minutum

<400> 114

tgctcaacat	gggagtcac	ccgagcctgg	cgggcgagag	cgggctctc	ctcctggaca	60
taaacgccc	cgactgcgtg	cagacggcgg	ccaggtctctg	taagaaggga	gtcaccgtcg	120
tgcgcctgaa	gcacaacgac	acggagcagc	tcgagcgcgt	gctctcgtcg	atcccggagg	180
gggcccagac	cacctacgtg	tgcgacggcg	tctactccac	ggacggagag	ctcgcgcgact	240
tgcccgccat	atgtgcttgt	ttgaggccgc	gcggggccaa	gatactcgtg	gacgactcgc	300
acgggttgccg	cgttcttggc	cgcaaccccg	actcggagca	acccttcgga	tatggcggcg	360
gcgtcgtcaa	gtacttcggg	ctggactacg	cggagaacaa	catcatctac	gccgggcagc	420
tgagcaaggc	gttcaattcg	cccggcggat	tcgtgggctg	cgcacgcgag	accgacgaga	480
agttcggcat	tctgaacttg	gccaagaact	cgaacacgct	cgtgttcaca	gggccgatct	540

gtactgccgg	cctgtcgagt	gcgaagacga	ccctegacct	caactttgcc	gagggggacc	600
gtcagcgtaa	gcggcttctt	gaggcgaccc	tggatttttg	cgaggggctc	aaggcgctcg	660
ggtgccccca	cacctaccac	gggttccccca	tcgtcaacat	ctactggacc	c	711

<210> 115

<211> 714

<212> DNA

<213> *Alexandrium minutum*

<400> 115

tgctcaacat	gggagtcac	ccgagcctgg	cgggcgagag	cggggttcctc	ccccctggaca	60
tcaacgcccc	cgactgcgtg	cagacggccg	ccaggctctg	caagaaggga	gtcaccgtcg	120
tgcgccctgaa	gcacaacgac	acggagcagc	tcgagcgctg	gctctcgctg	atccccggaag	180
gggcccacat	cacctacgtg	tgcgacggcg	tctaccccac	ggacggagag	ctcgccgact	240
tgcccgccat	atgtgcttgt	ttgaggccgc	gcggggccaa	gatactcgctg	gacgactcgc	300
acggttgcgg	cggttcttggc	cgcaaccccc	actcggagca	acccttcgga	tatggcggcg	360
gcggcgctcgt	caagtacttc	gggctggact	acgcggagaa	caacatcatc	tacgccgggc	420
agctgagcaa	ggcgttcaat	tcgcccggcg	gattcgtggg	ctgcgcacgc	gagaccgacg	480
agaagttcgg	catcctgaac	ttggccaaga	actcgaacac	gctcgtgttc	acagggccga	540
tctgtactgc	cggcctgtcg	agtgcgaaga	cgaccctcga	cctcaacttt	gccgaggggg	600
accgtcagcg	caagcggtt	cttcaggcga	ccctcgaatt	ttgcgagggg	ctcaaggcgc	660
tcgggtgccc	ccacacctac	cacgggttcc	ccatcgtcaa	catctactgg	accc	714

<210> 116

<211> 714

<212> DNA

<213> *Alexandrium minutum*

<400> 116

tgctcaacat	gggagtcac	ccgagcctgg	cgggcgaggag	cggggttcctc	ctcctggaca	60
taaacgcccc	cgactgcgtg	cagacggcag	ccaggctctg	caagaaggga	gtcaccgtcg	120
tgcgccctgaa	gcacaacgac	acggagcagc	tcgagcgctg	gctctcgctg	atccccgagg	180
gggcccacat	cacctacgtg	tgcgacggcg	tctactccac	ggacggagag	ctcgccgacc	240
tgcccgccat	atgtgcttgt	ttgaggccgc	gcggggccaa	gatactcgctg	gacgactcgc	300
acggttgcgg	cggttcttggc	cgcaaccccc	actcggagca	acccttcgga	tatggcggcg	360
gcggcgctcgt	caagtacttc	gggctggact	acgcggagaa	caacatcatc	tacgccgggc	420
agctgagcaa	ggcgttcaat	tcgcccggcg	gattcgtggg	ctgcgcacgc	gagaccgacg	480
agaagttcgg	cattctgaac	ttggccaaga	actcgaacac	gctcgtgttc	acagggccga	540
tctgtactgc	cggcctgtcg	agtgcgaaga	cgaccctcga	cctcaacttt	gccgaggggg	600
accgtcagcg	caagcggtt	cttcaggcga	ccctggaatt	ttgcgagggg	ctcaaggcgc	660
tcgggtgccc	ccacacctac	cacgggttcc	ccatcgtcaa	catctactgg	accc	714

<210> 117

<211> 663

<212> DNA

<213> *Alexandrium fundyense*

<400> 117

gagcctcgtg	ggcgagagcg	ggttcctcct	cctggacata	cacgcccacg	actgcgtgca	60
gacggccgccc	aggctctgca	aacaggggtg	caccgtgggtg	cgccctgaggc	gcaacgacac	120
ggagcagctc	gagcacatgc	tctcgtcgac	cccgcagggg	ccgacatcac	ctacgtgtgc	180
gacggcggtg	actccacgga	cggagagctc	gccgacttgc	ccgccatatg	tgcttgtttg	240
aggccgcacg	gggccaatat	actcgtagac	gactcgcacg	gttgcggcgt	tcttggccgc	300
aaccccgaact	cggagcaacc	cctcgggtat	ggtggcgggc	tcgtctagta	cttcgggctg	360
ggctacgcgg	agcgcaacat	catctacgcc	tggcagttga	gcaaggcggt	caattcgccc	420
ggcggattcg	ccggtgttac	cggagaccga	cgataagttc	ggcggttctga	gcttggccaa	480
gactcgaac	acactcgtgt	gcacagggcc	gatctgtact	gccggcctgc	cgagtgcgaa	540
gacgaccttc	gacctcaacg	ccgcgagggg	ggaccttcag	cgcaagcggc	ttctggcggt	600
gaccttcgga	ttctgcgagg	ggctcaaggc	gctcgggtgc	ccccacacct	accacgggct	660
ccc						663

<210> 118

<211> 671

<212> DNA

<213> Alexandrium fundyense

<400> 118

cgagcctttg	tgggagagag	caggttcctc	ctcctggaca	taaagcccca	cgactgcgtg	60
cagacggccg	ccaggctctg	caagaagggc	gccaccgtgg	tgcgccctgag	gcacaacgac	120
gcggagcagc	tcgagcacat	gctctcgtcg	atcccgaggg	gggcccacat	cacctacgtg	180
tgcgacggcg	tgtactccac	ggacggagag	ctcgccgact	tgcccgccat	atgtgcttgt	240
ttgaggccgc	gcggggccaa	gatactcgta	gacgactcgc	atggctgcgg	cgttcttggc	300
cgcaaccccg	actcggagca	acccttcggg	tatgggtggc	gcggcgctcg	cgagtacttc	360
gggctggact	acgcggagaa	caacatcatc	tacgcggggc	agctgagcaa	ggcggttcaat	420
tcgcccggcg	gattcgctcg	ctgtgcgcgc	gagaccgacg	agaagttcgg	cattctgaac	480
ttggccaaga	actcaaacac	actcgcgttc	acagggccga	tctgtactgc	cggcctgtcg	540
agtgcgatga	cgaccctcga	cctcaacgcc	gccgaggggg	accttcagcg	caagcggcctt	600
ctggaggcgg	ccctcgaatt	ctgcgagggg	ctcaaggcgc	tcgggtgccc	ccacacctac	660
cacgggttcc	c					671

<210> 119

<211> 669

<212> DNA

<213> Alexandrium fundyense

<400> 119

cgagcctcgt	gggagagagc	gggttcctcc	tcctgtacat	aaacgcccgc	gactgcgcgc	60
agacggccgc	caggctctgc	aagaaggggtg	ccaccgtggt	gcgcctgaag	cacaacgaca	120
cgctacagcc	cgagcgcagc	ctctcgctcg	tcccgagggg	gccgacatca	cctacgtgtg	180
cgacggcggtg	tactccacgg	acgaagagct	cgccgacttg	cccgccatat	gtgcttgttt	240
gaggccgcgc	ggggccaaga	tactcgtaga	cgactcgcat	ggctgcggcg	ttcttggccg	300
caacccaac	tcggagcaac	ccctcgggta	tggtggcggc	ggcgatcatg	agtacttcgg	360
gctggactac	gcggagaacg	acatcatcta	cgccgggcag	ctgagcaagg	cggttcaattc	420
gcccggcgga	ttcgtcagtt	gtgcgcgcga	gaccgacgct	aatttcggcg	ttctgaactt	480
ggccaagaac	tcgaacacac	tcgtgttcac	agggccgacg	tgactgcgcg	gcctgtcgag	540
tgcaagacg	accttcgacc	tcaacgccgc	cgagggggac	cttcagcgca	agcggcttct	600
ggcggctacc	ctcgaattct	gcgagggggt	caaggcgctc	gggtgcccc	acacctacca	660
cgggttccc						669

<210> 120

<211> 669

<212> DNA

<213> Alexandrium fundyense

<400> 120

cgagcctcgt	gggagagagc	agggttcctcc	tcctgtacat	caacgcccac	gactgcgtgc	60
agacagccgc	caggctctgc	aagaagggcg	ccaccgtggt	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagcacatg	ctctcgctcg	tcccgagggg	ggccgacatc	acctacgtgt	180
gcgacggcgc	gtactccaca	gacagagagc	tcgcccactt	gcccgccata	tgtgcttgtt	240
tgaggccgcg	cggggccaag	atactcgtag	acgactcgca	tggtgcgggc	gttcttggcc	300
gcaaccccg	ctcggagcaa	ccctcaagt	atggtggcgg	cggcgtcgtc	gagtacttcg	360
ggctggacta	cgcagagaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	420
cgcccggcgg	attcgctcgg	tgtgcgcgcg	agaccgacga	gaatttcggc	gttctgaact	480
tggccaagaa	ctcgaacaca	ctcgggttca	cagggccgat	ctgtactgcc	ggcctgtgga	540
gtgcgaagac	gaccttcgac	ctcaacgccg	ccaaggggga	ccttcagcgc	aagcggcttc	600
tggcggctac	cctcgaattc	cgcgaggggc	tcaggcgctc	gggtgcccc	acacctacca	660
cgggttccc						669

<210> 121

<211> 668

<212> DNA

<213> Alexandrium fundyense

<400> 121

cgggcctcgt	gggagagagc	gggttcctcc	tcctgtacat	aaacgcccac	gactgcgtgc	60
agacggccgc	caggctctgc	aagaagggcg	ccaccgtggt	gcgcctgaag	cacaacgaca	120
cggaacagcc	cgagcacatg	ctctcgctcg	tcccgagggg	gccgacatca	cctacgtgtg	180
cgacggcggtg	tactccacgg	acgaagagct	cgccggcttg	cccgccatat	gtgcttgttt	240
gaggccgcgc	ggggccaaga	tactcgtaga	cgactcgcat	ggctgcggcg	ttcttggccg	300

caaccccaac	tccgagcaac	ccctcgggta	tgggtggcggc	ggcgtcatcg	agtacttcgg	360
gctggactac	gcggagaaca	acatcatcta	cgccgggag	ctgagcaagg	cggttcaattc	420
gcccggcgga	ttcgtcagct	gtgcgcgcga	gaccgacgag	aatttcggcg	ttctgaactt	480
ggccaagaac	tcgaacacac	tcgtgctcac	agggccgac	tgtactgccg	gcctgtcgag	540
tgcgaagacg	accttcgacc	tcaacgcgc	cgagggggac	cttcagcgca	agcggcttct	600
ggcggcgacc	ctcgaattct	gcgaggggct	caaggcgctc	gggtgcccc	caactaccac	660
gggttccc						668

<210> 122

<211> 1428

<212> DNA

<213> Alexandrium fundyense

<400> 122

tccgtagcca	ttttggctca	agagttggat	cccaagctgc	tcttccgcag	ccaggcggcc	60
ggcgaccccg	ctcccgcga	tcgggtccgc	tctgtctccg	ttcctcccaa	gccaagcgca	120
tgccgcagct	tctgagcacc	cctgtagcac	cggacagcgc	tggatcttgt	gagagcgtcg	180
cgggggacag	gcacggggcc	tccggacgca	acgagctcga	ggaggcttcc	gccaagtcga	240
acatccacgg	cctcgacctc	ggcaccgatg	ccttcatgct	ggcgacggg	tggacttgcg	300
ggcccttgct	cctggaattt	gttgcgagct	tcctgcagcc	cctgcagcgg	cagcccatga	360
ccgcccagca	gctcgccg	gagacaaacg	caggggaagg	gcccgtggcg	atcactctgc	420
ggacaatggc	catcctcggg	tacttggacc	tggaccctga	gaccgatgtg	tatgccgtgg	480
tccccggggc	gggattcagg	cgctcgccgc	gctcctccgg	ctagcggcgc	ccaccagcgc	540
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ggcgcaactgc	ttgcggattt	gggcgggagca	ccagcccacc	tggagaagg	cggtttgcaa	660
gcgggtggcc	ctcctgctcg	acggggccgt	cctcgtcccg	ctgttgacct	cgatcacata	720
ctttgcgagg	tgggacgagg	aggggctgga	ttccggcaag	gagggcgccct	tggaccgcct	780
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gggcgtgggc	acagtggacg	gcaagggcac	cgtgaccttg	accgcggagg	gctcgctcgc	900
cctgcagcgt	agctactcct	actacgtccc	gacgtcctac	gccccactgc	tggacaggta	960
ccacagcatc	ctcttcgaga	atcccggctg	gggattcgcc	ggtgccggcc	gggactcgca	1020
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gacgctcttc	acggacctcg	tgcggctcat	tgactcggtc	ttcgcgggcg	gggacttcgc	1140
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gcacgcggtc	ccgcacctgg	tgctgttcgg	ggacgtcggc	aagccggccg	acatcatgga	1380
gatcctcggg	cggaaacgggg	tggacccgag	caggtccctc	cacgtgcg		1428

<210> 123

<211> 925

<212> DNA

<213> Alexandrium fundyense

<400> 123

tccgtagcca	ttttggctca	agagttggat	cccaagctgc	tcttccgcag	ccaggcggcc	60
ggcgaccccg	ctcccgcga	tcgggtccgc	tctgtctccg	ttcctcccaa	gccaagcgca	120
tgccgcagct	tctgagcacc	cctgtagcac	cggacagcgc	tggatcttgt	gagagcgtcg	180
cgggggacag	gcacggggcc	tccggacgca	acgagctcga	ggaggcttcc	gccaagtcga	240
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ccgcccagca	gctcgccg	gagacaaacg	caggggaagg	gcccgtggcg	atcactctgc	420
ggacaatggc	catcctcggg	tacttggacc	tggaccctga	gaccgatgtg	tatgccgtgg	480
tccccggggc	gggattcagg	cgctcgccgc	gctcctccgg	ctagcggcgc	ccaccagcgc	540
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gggcgtgggc	acagtggacg	gcaagggcac	cgtgaccttg	accgcggagg	gctcgctcgc	900
cctgcagcgt	agctactcct	actacgtccc	gacgtcctac	gccccactgc	tggacaggta	925

<210> 124

<400> 124
000

<210> 125

<211> 1450

<212> DNA

<213> *Alexandrium fundyense*

<400> 125

accgtagcca	ttttagctca	agagttggat	cccaagctgc	tcttccgcag	ccaggcggcc	60
ggcgaccccg	ctcccgtga	tcgggtccgc	tctgtcccg	ttctcccaa	gccaaagcgca	120
tgccgcagct	tctgagcacc	cttgtagcac	cggacagcgc	tggatcttgt	gagagcgctcg	180
cgggggacag	ccacggggcc	tccggacgca	acgagctcga	ggaggcttcc	gccaaagtcga	240
acatccacgg	cctcgacctc	ggcaccgatg	ccttcattgt	ggtgcacggg	tggaacttgcg	300
ggcccttgct	cctggagttt	gttgcgagct	tctgcagcc	cttgcagcgg	cagcccatga	360
cgcccgagca	gctcgccgcg	gagacaaacg	cgggggaagg	gcccgtggcg	atcactctgc	420
ggacaatggc	catcctcggg	tacttgacc	tggaccctga	gaccgatgtg	tttgccgtgg	480
tccccggggc	ggggattcag	gcgctcactg	cgctcctccg	gccagcggcg	cccaccagcg	540
cggccttgca	aagcatctac	cagcacgccc	agccgcccgt	cagggtgccc	tcatccgagg	600
cggcgactg	cttgcgatt	tgggaggagc	accggcccac	ctggagaagg	gcggcttgca	660
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ccctgcagcg	ttgtactcc	tactacgtcc	cgacgtccta	cgcaccaatg	ctggacaggt	960
accacagcat	cctcttcgag	aatcccggct	gggggttcgc	cgggtgccggc	cgggactcgc	1020
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agacgtctct	cacggacctc	gtgcggctca	ttgactcggg	cttcgcgggc	ggggacttcg	1140
cgtcgcagcc	ggcggttcgtc	gtggacacgg	ggtgcggcga	cggccgcttg	ctcaggcgca	1200
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tgatggtcgg	cgtcgacttc	aacaaggact	ctcgggtggc	gacggagctc	aacctgagca	1320
ggcacgcggt	cccgcacctg	gtgctgttcg	gggacgtcgg	caagcccgcc	gacatcatgg	1380
agatcctcgg	gcggaagggg	gtggaccgca	gcaggtccct	ccgcgtgcgc	tccttcctgg	1440
accacgacca						1450

<210> 126

<211> 1449

<212> DNA

<213> *Alexandrium fundyense*

<400> 126

accgtagcca	ttttggctca	agagttggat	cccaagctgc	tcttccgcag	ccaggcagcc	60
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<210> 127

<211> 1449

<212> DNA

<213> Alexandrium fundyense

<400> 127

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tgccgcagct	tctgagcacc	cttgtagcac	cggacagcgc	tggatcttgt	gagagcgctg	180
cgggggacag	gcacggggcc	tccggacgca	acgagctcga	ggaggttcc	gccaaagtcga	240
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accacgacc						1449

<210> 128

<211> 882

<212> DNA

<213> Alexandrium fundyense

<400> 128

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atcttgtgag	agcgtcggg	gggacaggca	cggggcctcc	ggacgcaacg	agctcgagga	180
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gttgacctcg	atcacatact	ttgcgaggtg	ggacgaggag	gggctggatt	ccggcaagga	720
gggcgccttg	gaccgcctcg	acttcagcaa	ggccaatgcc	gcggcaaggg	cggccctcgg	780
gggcatcttc	ggcgagttgg	gcgtgggcac	agtggacggc	gagggcaccg	tgaccttgac	840
cgcggagggc	tcgttcgccc	tgcagcgctg	ctactcctac	ta		882

<210> 129

<211> 815

<212> DNA

<213> Alexandrium fundyense

<400> 129

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agagcgt	cgc gggggac	agg cacgggg	cct ccggac	gcaa cgagctc	gag gaggctt	ccg 120
ccaagtc	gaa catccac	ggc ctcgac	cctcg gcacc	gatgc cttcatg	ctg gcgcac	gggt 180
ggacttg	cgg gccctt	gctc ctggag	tttg ttgcg	agctt cctgc	agccc ttgcag	cggc 240
agcccat	gac cgccgag	cag ctgcgc	cgg agacaa	acgc gggggg	aggg cccgtg	gcga 300
tcactct	gcg gacaat	ggcc atcctc	gggt acttg	gacct ggacc	ctgag accgat	gtgt 360
atgccgt	gggt ccccg	ggccg gggat	tgagg cgctc	gcgc gctcct	ccg ccagc	ggcgc 420
ccaccag	cgc ggcctt	gcga agcat	ctacc agcac	gccc agctt	cgc aggg	gtccct 480
catccga	ggc ggcg	actgc ttgcg	gattt gggcg	gagca ccggt	ccacc tggaga	aggg 540
cggcttg	gcaa gcggt	ggcc ctctg	ctcg acggg	gccgt cctcg	tccc ttgtt	gacct 600
cgatcac	ata ctttg	cgaagg tggg	acgagg agggg	ctgga ttccg	gaa gagg	ggcgc 660
tggaccg	cct cgactt	cagc aaggc	caatg ccgcg	gcaag ggcgg	ccctc ggggg	catct 720
tcggcga	ggt aggcg	tgggc acagt	ggacg gcgag	ggcac cgtga	acctt acccg	ggagg 780
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<210> 130

<211> 480

<212> DNA

<213> Alexandrium fundyense

<400> 130

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ccgggc	cggg gattg	aggcg ctgc	gcgc tcctc	ggcc agc	ggcgccc	accagcgcg 120	
ccttgca	aaag catct	accag cagccc	agc cgccg	ttcag ggtgc	cctca tccg	aggcgg 180	
cgcactg	ctt gcg	gatttgg gcgg	agcacc ggccc	acctg gaga	agggcg	gcttgcaagc 240	
ggctggc	cct cctg	cagc ggggc	cgtec tcgtc	ccgt gttga	acctc atcac	atact 300	
ttgcggg	gtg ggacg	aggag gggc	tggatt ccgg	caagga gggc	gccttg	gaccgcctc 360	
acttcag	caa ggcca	atgcc gcgga	agggg	ccctc	gggcat	cttc ggcg	agttg 420
gcgtggg	cac agtgg	acggc gagg	gcacg	ggc	tcgtt	cacc 480	

<210> 131

<211> 451

<212> DNA

<213> Alexandrium fundyense

<400> 131

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tccggca	agg agggc	gcctt ggacc	gcctc gactt	cagca aggca	aatgc cgcg	gaagg 360	
gcggcc	cctc ggggc	gtcct cggcg	agttg ggcgt	gggca cagt	ggacg	caggc 420	
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<210> 132

<211> 397

<212> DNA

<213> Alexandrium fundyense

<400> 132

gcgcg	ctcc tccgg	ccagc ggcgc	ccacc agc	cgccgt tgca	agcat ctacc	agcac 60
gcccag	cgc cgttc	agggt gccct	catcc gagg	cggcg actg	cttgcg gattt	ggggc 120
gagcacc	ggc ccacct	ggag aacgg	cggtc tgca	agcggc tggc	ctcct gctc	gaggg 180
gccgtcc	ctcg tccc	gttgtt gacct	cgatc acata	ctttg cgagg	tga gggg	ctggat 240
ctggatt	ccg gcaag	gaggg cgctt	ggac cgctc	gactt cagca	aggca atgc	cgcgg 300
gcaaggg	cgg ccctc	ggggg catct	tcggc gagtt	ggggc cagtg	gggac	ggcg 360
ggcaccg	tga ccttg	accgc ggagg	gctcg ttcgc	cc		397

<210> 133

<211> 234

<212> DNA

<213> Alexandrium fundyense

<400> 133

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ggtgggacga	ggaggggctg	gattccggca	aggagggcgc	cttggaccgc	ctcgacttca	120
gcaaggccaa	tgccgcggca	agggcgggcc	tcgggggcat	cttcggcgag	ttgggcgtgg	180
gcacagtgga	cggcgagggc	accgtgacct	tgaccgcgga	gggctcgttc	gccc	234

<210> 134

<211> 254

<212> DNA

<213> Alexandrium fundyense

<400> 134

tcctgctcga	cggggcccgc	ctcgctcccg	tggtgacctc	gatcacatac	tttgccgaggt	60
gggacgagga	ggggctggat	tcgggcaagg	agggcgccct	ggaccgcctc	gacttcagca	120
aggccaatgc	cgagcaagg	gcccgcctcg	ggggcatcct	cggcgagttg	ggcgtgggca	180
cagtggacgg	cgagggcacc	gtgaccttga	ccgcggaggg	ctcgctcgcc	ctgcagcgtc	240
gctactccta	ctac					254

<210> 135

<211> 561

<212> DNA

<213> Alexandrium fundyense

<400> 135

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cccagcgtcc	tacgccccac	tgctggacag	gtaccacagc	atcctcttcg	agaatcccgg	120
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ctctcgggtg	gcgacggagc	tcaacctgag	caggcacgcg	gttcgcgacc	tggtgctggt	480
cgggggcgctc	ggcaagcccg	ccgacatcat	ggagatcctc	gggcggaacg	gggtggaccc	540
gagcaggtcc	ctccacgtgc	g				561

<210> 136

<211> 553

<212> DNA

<213> Alexandrium fundyense

<400> 136

ccttgaccgc	ggagggctcg	ttcgccctgc	agcgctcgcta	ctcctaactac	atcccgcagct	60
cctacgcccc	actgctggac	aggtaccaca	gcacccctctt	cgagaatccc	ggctgggggt	120
tcgcccgtgc	cgcccgggac	tcgcaggagc	aggagatcca	cgtccaccgg	acgctgaacg	180
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tcggcaagcc	cgccgacatc	atggagctcc	tcggacggag	gggggtggac	ccgagcaggt	540
ccctccacgt	gcg					553

<210> 137

<211> 1880

<212> DNA

<213> Alexandrium fundyense

<400> 137

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tcctggacca	cgaccggccg	tacgtcccc	cggcccgcga	gatggaccgc	gacagcgcgg	180
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<210> 138

<211> 2570

<212> DNA

<213> Alexandrium fundyense

<400> 138

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tcctggacca	cgaccggccg	tacgtcccc	cggcccgca	gatggacc	gacagcgcg	180
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<210> 139

<400> 139

000

<210> 140

<211> 2574

<212> DNA

<213> *Alexandrium fundyense*

<400> 140

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<210> 141

<211> 1881

<212> DNA

<213> Alexandrium fundyense

<400> 141

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<210> 142

<211> 2575

<212> DNA

<213> Alexandrium fundyense

<400> 142

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<210> 143

<211> 1209

<212> DNA

<213> Alexandrium fundyense

<220>

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<222> (314)..(314)

<223> n is a, c, g, or t

<400> 143

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<210> 144

<211> 1208

<212> DNA

<213> *Alexandrium fundyense*

<400> 144

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<210> 145

<211> 1209

<212> DNA

<213> *Alexandrium fundyense*

<400> 145

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<210> 146

<211> 1207

<212> DNA

<213> *Alexandrium fundyense*

<400> 146

catggacctc	ctggactccc	tcaacttcac	cgacttcgca	ggtcagctgg	acgccgcgct	60
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ccccgtgccc	gtctccgctcg	ggctgctctt	cgaggcgctcc	acgcccagga	agctggccgc	120
gcacctccac	cgcgagatgc	agcggctggc	cgccaggcg	gacggggggc	cgcgctcgg	180
ccccgcaccg	gccgccgcg	ccgcgccgc	gcccgtgctg	gccaggagg	aggccgcgga	240
ggctccgctg	gcctcctttg	actcagtgtg	cgccaagctc	gaggggtgct	ccgcgctggt	300
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cgagatcgcc	gatggcgctgg	accgggacgt	gcgcacttgg	ggcgctccacc	ccccgtggac	420
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cggcatctgg	gagtgcgttc	tgtaccgcag	cgttaccatg	ctcaacatgg	gagtcacccc	540
gagcctcgtg	ggcgagagcg	ggttcctcct	cctgacataa	acgcccacga	ctgcgtgcag	600
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cccggcggat	tcgtcggtcg	tgcgcgcgag	accgacgaga	agttcggcat	tctgaacttg	1020
gccaagaact	cgaacacact	cgtgttcaca	gggcccgatct	gtactgccgg	cctgtcgagt	1080
gcgatgacga	ccctcgacct	caacgccgcc	gaggggacct	tcagcgcaag	cggcttctgg	1140
tggcgaccct	cgaattctgt	gaggggctca	aggcgctcgg	gtgccccccac	acctaccacg	1200
ggttccc						1207

<210> 147

<211> 873

<212> DNA

<213> Alexandrium fundyense

<400> 147

ggacgagatc	gccgatggcg	tggaccggga	cgtgcgcact	tggggcgctcc	accccccgctg	60
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gaccggcatc	tggaaagtgcg	ttctgtaccc	gagcggtacc	atgctcaaca	tgggagtcac	180
cccagacctc	gtgggcgaga	gcgggttcc	cctcctggac	ataaacgccc	acgactgcgt	240
gcagacggcc	gccaggctct	gcaagaagg	cgccaccgtg	gtgcgcctga	ggcacaacga	300
cgcgagagcag	ctcgagcaca	tgctctcgtc	gatcccgcag	gggcccagac	cacctacgtg	360
tgcgacggcg	tgtactccac	ggacggagag	ctgcgcgact	agccaccat	atgtgcttgt	420
ctgaggccgc	gtggggccaa	gatacccgtg	gacgactcgc	atggctgcgg	cgttcttggc	480
cgcaaccccg	actcggagca	acccttcggg	tatggtggcg	gcggcgctcg	cgagtacttc	540
gggctggact	acgcggagaa	caacatcatc	tacgcggggc	agctgagcaa	ggcgttcaat	600
tcgcccgcgcg	gatcgtcg	ctgtgcgcgc	gagaccgacg	agaagttcgg	cattctgaac	660
ttggccaaga	actcgaacac	actcgtgttc	acagggccga	tctgtactgc	cagcctgtcg	720
agtgcgatga	cgaccctcga	cctcaacgcc	gccgaggggg	accttcagcg	caagcggctt	780
ctggcggcga	ccctcgaatt	ctgtgagggg	ctcaaggcgc	tcgggtgccc	cacacctacc	840
acgggttccc	catcgtcaac	atctactgga	ccc			873

<210> 148

<211> 597

<212> DNA

<213> Alexandrium fundyense

<400> 148

acgagatcgc	cgatggcgctg	gaccgggacg	tgcgcacttg	gggcgtccac	ccccgtgga	60
ccaggctcgt	ctcgtctccg	aagctgtacg	acgacgtcga	ggcgcgctgt	tgcgagctga	120
ccggcatctg	gaagtgcgtt	ctgtaccgga	gcgttaccat	gctcaacatg	ggagtcaccc	180
cgagcctcgt	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	240
agacggccgc	caggctctgc	aagaaggcg	ccaccgtggt	gcgcctgagg	cacaacgacg	300
cggagcagct	cgagcacatg	ctctcgtcga	tcgccgaggg	ggccgacatc	acctacgtgt	360
gcgacggcgt	gtactccacg	gacggagagc	tcgccgactt	gcccgcata	tgtgcttgtc	420
tgaggccgcg	cggggccaag	atactcgtag	acgactcgca	tggctgcggc	gttcttggcc	480
gcaaccccgga	ctcggagcaa	cccttcgggt	atggtggcgg	cggcgtcgtc	gagtacttcg	540
rgctggacta	cgcgagaaac	aacatcatct	acgcggggca	gctgagcaag	gcgttca	597

<210> 149

<211> 723

<212> DNA

<213> Alexandrium fundyense

<400> 149

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ccaggctcgt	ctcgtctccg	aagctgtacg	acgacgtcga	ggcgcgtgtg	tgcgagctga	120
ccggcatctg	gaagtgcgtt	ctgtaccoga	gcgttaccat	gctcaacatg	ggagtcaccc	180
cgagcctcgt	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	240
agacggccgc	caggctctgc	aagaaggggc	ccaccgtggg	gcgcctgagg	cacaacgacg	300
cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	360
gcgacggcgt	gtactccacg	gacggagagc	tcgcccactt	gcccgccata	tgtgcttggt	420
tgaggccgcg	cggggccaag	atactcgtag	acgactcgca	tggctgcggc	gttcttggtc	480
gcaaccccga	ctcggagcaa	cccttcgggt	atggtggcgg	cggcgtcgtc	gagtacttcg	540
ggctggacta	cgcgagaaac	aacatcatct	acgcccggga	gctgagcaag	gcgttcaatt	600
cgcccggcgg	attcgtcggc	tgtgcgcgcg	agaccgacga	gaagttcggc	attctgaact	660
tggccaagaa	ctcgaacaca	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	720
gta						723

<210> 150

<211> 722

<212> DNA

<213> Alexandrium fundyense

<400> 150

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ccaggctcgt	ctcgtctccg	aagctgtacg	acgacgtcgg	ggcgcgtgtg	tgcgagctga	120
ccggcatctg	gaagtgcgtt	ctgtaccoga	gcgttaccat	gctcaacatg	ggagtcaccc	180
cgagcctcgt	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	240
agacggccgc	caggctctgc	aagaaggggc	ccaccgtggg	gcgcctgagg	cacaacgacg	300
cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	360
gcgacggcgt	gtattccacg	gacggagagc	tcgcccactt	gcccgccata	tgtgcttggt	420
tgaggccgcg	cggggccaag	atactcgtag	acgactcgca	tggctgcggc	gttcttggtc	480
gcaacccctg	actcggagca	acccttcggg	tatggtagcg	gcggcgtcgt	cgagtacttc	540
gggctggact	acgcggagaa	caacatcatc	tacgccgggc	agccgagcaa	ggcgttcaat	600
tcgcccggcg	gattcgtcgg	ctgtgcgcgc	gagaccgatg	agaagttcgg	cattctgaac	660
ttggccaaga	actcgaacac	actcgtgttc	acagggccga	tctgtactgc	cggcctgtcg	720
ag						722

<210> 151

<211> 721

<212> DNA

<213> Alexandrium fundyense

<400> 151

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ccaggctcgt	ctcgtctccg	aagctgtacg	acgacgtcga	ggcgcgtgtg	tgcgagctga	120
ccggcatctg	gaagtgcgtt	ctgtaccoga	gcgttaccat	gctcaacatg	ggagtcaccc	180
cgagcctcgt	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	240
agacggccgc	caggctctgc	aagaaggggc	ccaccgtggg	gcgcctgagg	cacaacgacg	300
cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	360
gcgacggcgt	gtactccacg	gacggagagc	tcgcccactt	gcccgccata	tgtgcttggt	420
tgaggccgcg	cggggccaag	atactcgtag	acgactcgca	tggctgcggc	gttcttggtc	480
gcaaccccga	ctcggagcaa	cccttcgggt	atggtggcgg	cggcgtcgtc	gagtacttcg	540
ggctggacta	cgcgagaaac	aacatcatct	acgcccggga	gctgagcaag	gcgttcaatt	600
cgcccggcgg	attcgtcggc	tgtgcgcgcg	agaccgacga	gaagttcggc	attctgaact	660
tggccaagaa	ctcaaacaca	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	720
g						721

<210> 152

<211> 872

<212> DNA

<213> Alexandrium fundyense

<400> 152

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caggctcgtc	tcgtctccga	agctgtacga	cgacgtcgag	gcgcgtgtgt	gcgagctgac	120

cggcatctgg	aagtgcgttc	tgtacccgag	cgttaccatg	ctcaacatgg	gagtcacccc	180
gagcctcgtg	ggcgagagcg	ggttcctcct	cctggacata	aacgcccacg	actgcggtgca	240
gacggccgcc	aggctctgca	ggaagggcgc	caccgtgggtg	cgctgagggc	acaacgacgc	300
ggagcagctc	gagcacatgc	tctcgtcgat	cccgcagggg	gccgacatca	cctacgtgag	360
cgacggcgtg	tactccacgg	acggagagct	cgccgacttg	cccgccatat	gtgcttgtct	420
gaggccgcgc	ggggccaaga	tactcgtaga	cgactcgcat	ggctgcggcg	tccttggccg	480
caaccccgac	tcggagcaac	ccttcgggta	tgggtggcgg	ggcgctcgcg	agtacttcgg	540
gctggactac	gcggagaaca	acatcatcta	cgccgggcag	ctgagcaagg	cgttcaattc	600
gcccggcgga	ttcgtcggct	gtgcgcgcga	gaccgacgag	aagttcggca	ttctgaactt	660
ggccaagaac	tcgaacacac	tcgtgttcac	agggccgatc	tgtactgccg	gcctgtcgag	720
tgcgatgacg	acctcgcacc	tcaacgccgc	cgagggggac	cttcagcgca	agcggtctct	780
ggcggcgacc	ctcgaattct	gtgaggggct	caaggcgctc	gggtgcccc	acacctacca	840
cgggttcccc	atcgtcaaca	tctactggac	cc			872

<210> 153

<211> 873

<212> DNA

<213> Alexandrium fundyense

<400> 153

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ccggcatctg	gaagtgcgtt	ctgtacccga	gcgttaccat	gctcaacatg	ggagtcaccc	180
cgagcctcgt	ggcgagagac	gggttcctcc	tcctggacat	aaacgcccac	gactgcggtg	240
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cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	360
gcgacggcgt	gtactccacg	gacggagagc	tcgcccactt	gcccgcata	tgtgcttgtc	420
tgaggccgcg	cggggccaag	atactcgtag	acgactcgca	tggctgcggc	gttcttggcc	480
gcaacccgca	ctcggagcaa	cccttcgggt	atgggtggcg	cggcgctcgc	gagtacttcg	540
ggctggacta	cgcggagaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	600
cgcccggcgg	attcgtcggc	tgtgcgcgcg	agaccgacga	gaagttcggc	attctgaact	660
tggccaagaa	ctcgaacaca	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcaa	720
gtgcgatgac	gacctcgcac	ctcaacgccg	ccgaggggga	ccttcagcgc	aagcggcttc	780
tggcggcgac	cctcgaattc	tgtgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	840
acgggttccc	catcgtcaac	atctactgga	ccc			873

<210> 154

<211> 827

<212> DNA

<213> Alexandrium fundyense

<400> 154

ccaccccccg	tggaccaggc	tcgtctcgtc	ttcgaagctg	tacgacgacg	tcgaggcgcg	60
ctgttgcgag	ctgaccggca	tctggaagtg	cgttctgtac	ccgagcggtta	ccatgctcaa	120
catgggagtc	atcccagacc	tcgtgggcga	gagcgggttc	ctcctcctag	acataaacgc	180
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catatgtgct	tgtctgtggc	cgcgcggggc	caagatactc	gtagacgact	cgcatggctg	420
cggcgcttctt	ggccgcaacc	ccgactcgga	gcaacccttc	gggtatgggtg	gcggcgggct	480
cgctcgagtac	tacgggctgg	actacgcgga	gaacaacatc	atctacgcgc	ggcagctgaa	540
caaggcggttc	aattcgcccc	gcggattcgt	cggctgtgcg	cgcgagaccg	acgagaagtt	600
cggcattctg	aacttgggtca	agaactcgaa	cacacttggt	ttcacagggc	cgatctgtac	660
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gcgcaagcgg	cttctggcgg	cgacctcgga	attctgtgag	gggtcaagg	cgctcggggtg	780
ccccacacc	taccacgggt	tccccatcgt	caacatctac	tggaccc		827

<210> 155

<211> 670

<212> DNA

<213> Alexandrium fundyense

<400> 155

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ttgcgagctg	accggcatct	ggaagtgcgt	tctgtacccg	agcgttacca	tgctcaacat	120
gggagtcac	ccgagcctcg	tgggcgagag	cgggttcctc	ctcctgggca	taaacgcccc	180
cgactgcgtg	cagacggccg	ccaggctctg	caagaagggc	gccaccgtgg	tgcgccctgag	240
gcacaacgac	gcgagcagc	tcgagcacat	gctctcgctg	atcccgcagg	gggcccacat	300
cacctacgtg	tgcgacggtg	tactccacgg	acggagagct	cgccgacttg	cccgccatat	360
gtgcttgctc	gaggccgcgc	ggggccaagg	tactcgtaga	cgactcgcat	ggctgcggcg	420
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agtacttcgg	gctggactac	gcggagaaca	acatcatcta	cgccgggcag	ctgagcaagg	540
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ttctgagctt	ggccaagaac	tcgaacacac	tcgtgttcac	agggccgata	tgtactgccg	660
gcctgtcgag						670

<210> 156

<211> 533

<212> DNA

<213> *Alexandrium fundyense*

<400> 156

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acataaatgc	ccacgactgt	gtgcagacgg	ccgccaggct	ctgcaagaag	ggcgccaccg	180
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gcggcgcggt	cgtcgagtag	ttcgggctgg	actacgcgga	gaacaacatc	atctacgccg	480
ggcagctgag	caaggcggtc	aattcgcccc	gcggattcgt	cggctgtgcg	cgc	533

<210> 157

<211> 1414

<212> DNA

<213> *Alexandrium fundyense*

<400> 157

tgctcaacat	gggagtcac	ccgagcctcg	tgggcgagag	cgggttcctc	ctcctggaca	60
tcaacgcccc	cgactgtgtg	cagacggccg	ccaggctctg	caagaagggc	gccaccgtgg	120
tgcgctgaa	gcacaacgac	acggagcagc	tcgagcacat	gctctcgctg	atcccgcagg	180
gggcccagat	cacctacgtg	tgcgacggcg	tgtagctccac	ggacggagag	ctcgctgact	240
tgccccccat	atgtgcttgt	ttgaggccac	gcggggccaa	gatactcgta	gacgactcgc	300
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gccagttcac	gtcgctccac	gacgaggccg	ccgtgcgcca	catcctcggtg	atcctcgagg	900
acctgatcaa	gcgctacccg	ccctccgccc	tgccgcccgc	catctgatcg	gccgcccagag	960
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ccaagggcca	ggcagggttt	ggctgccgcc	gttttgatcc	tgctgtgttg	tcgtagcgtg	1140
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ggtagcgcc	gtccgtgtct	gccatcttag	ctggtcacta	ttcgcatcaa	cactcgcaag	1380
gtacgcgtct	gctaaaaaaa	aaaaaaaaaa	aaaa			1414

<210> 158

<211> 1315

<212> DNA

<213> *Alexandrium fundyense*

<400> 158

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tgcgcctgag	gcacaacgac	gcggagcagc	tcgagcacat	gctctcgtcg	atccccgagg	180
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tgcccgccat	atgtgcttgt	ctgagggcgc	gcggggccaa	gatactcgta	gacgactcgc	300
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gcggcgctgt	cgagtacttc	gggctggact	acgcggagaa	caacatcatc	tacgccgggc	420
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agaagttcga	cattctgaac	ttggccaaga	actcgaacac	actcgtgttc	acagggccga	540
tctgtactgc	cggcctgtcg	agtgcgatga	cgaccctcga	cctcaacgcc	gccgaggggg	600
accttcagcg	caagcggcgt	ctggcgggcg	cccccgaa	ctgtgagggg	ctcaaggcgc	660
tcgggtgccc	ccacacctac	cacgggttcc	ccatcgctca	catctactgg	accccggtcg	720
aggtgtgcgc	agaggtgtac	agcgagctga	tgagcgcgag	gcagggcgcg	ttccagctgg	780
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tcaggttca	gtcgctccac	gacgaggcgc	ccgtgcgcca	catcctcgta	atcctcgagg	900
acctgatcaa	gcgctaccgc	ccctccgcgc	tgccgcgcgc	catctgatcg	gccgcccag	960
ccgcaggacc	agcgccgctc	atcccagggg	ttgtttaagg	gattgtttta	tcttctcaat	1020
ctagtacgcg	tgttttta	gtgcaagcag	caagggtcaa	gcggattctg	ggcttgtaca	1080
ccaagggcca	ggcaggtttt	ggctgcgcgc	atcttgatcc	tgctgtgttg	tcgtagcgtg	1140
caagcagcaa	gggcccagcg	gagtcgtgtg	ttgtacacca	agggccaggc	aggttttggc	1200
tgccgcggtt	tttatccggc	tgtgttgtgg	tagcgtgcaa	gcagcaaggg	tcaggcggat	1260
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<210> 159

<211> 1453

<212> DNA

<213> *Alexandrium fundyense*

<400> 159

gctcaacatg	ggagtcaccc	cgagcctcgt	gggcgagagc	gggttcctcc	tcctggacat	60
aaacgcccac	gactgcgtgc	agacggccgc	caggctctgc	aagaaggggc	ccaccgtggg	120
gcgcctgaag	cacaacgacg	cggagcagct	cgagcacatg	ctctcgtcga	tcgccgaggg	180
ggccgacatc	acctacgtgt	gcgacggcgt	gtactccacg	gacggagagc	tcgccgactt	240
gcccgcata	tgtgcttgtt	tgaggccgcg	cggggccaa	atactcgtag	acgactcgca	300
tggctgcggc	gttcttgccc	gcaaccccga	ctcggagcaa	cccttcgggt	atgggtggcg	360
cggcgctcgc	gagtacttcg	ggctggacta	cgcggagaac	aacatcatct	acgccgggca	420
gctgagcaag	cggttcaatt	cgcccggcgg	attcgtcggc	tgtgcgcgcg	agaccgacga	480
gaagttcggc	attctgaact	tggccaagaa	ctcaaacaca	ctcgtgttca	cagggccgat	540
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ccttcagcgc	aagcggcttc	tggcggcgac	cctcgaattc	tgcgaggggc	tcaaggcgct	660
cgggtgcccc	cacacctacc	acgggttccc	catcgtcaac	atctactgga	ccccggtcga	720
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cgctgcacg	acccccatgt	ggcaccat	cgcgccaaag	ggccacgaga	tactgcgctt	840
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tgtagcgctt	gtccatgtct	gccatcttag	ctggctacta	tttgcacaa	cactcgcaag	1380
gtacgcgtct	gctacgcaca	ggtgacaatt	gacattgtgg	atcgagccac	ggaagggaga	1440
aaaaaaaa	aaa					1453

<210> 160

<211> 469

<212> DNA

<213> *Alexandrium fundyense*

<400> 160

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aaacgcgcac	gactgcgtgc	agacggccgc	caggctctgc	aagaagggcg	ccaccgtggg	120
gcgcctgagg	cacaacgacg	cggagcagct	cgagcacatg	ctctcgtcga	ccccgcaggg	180
ggccgacatc	acctacgtgt	gcgacggcgt	gtactccacg	gacggagagc	tcgccgactt	240
gcccgcata	tgtgcttgtt	tgaggccgcg	cggggccaag	atactcgtag	acgactcgca	300
tggtgcggc	gttcttggcc	gcaaccccg	ctcggagcaa	cccttcgggt	atgggtggcg	360
cggcgtcgtc	gagttacttcg	ggctggacta	cgcggagaac	aacatcatct	gcgcggggca	420
gctgagcaag	gcgttcaatt	cgcccggcgg	attcgtcggc	tgtgcgcgc		469

<210> 161

<211> 457

<212> DNA

<213> Alexandrium fundyense

<400> 161

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ctgtgtgcag	acggcccgcca	ggctctgcaa	gaagggcgcc	accgtgggtgc	gcctgaagca	120
caacgacacg	gagcagctcg	agcacatgct	ctcgtcgtatc	ccgcaggggg	ccgacatcac	180
ctacgtgtgc	gacggcgtgt	actctacgga	cggagagctc	gccgacttgc	ccgccatag	240
tgcttgtttg	aggccgcgcg	gggccaagat	actcgtagac	gactcacatg	gctgcggcgt	300
tcttgccgcg	aaccccgact	cggagcaacc	cttcgggtat	ggtggcgggc	gcgtcgtcga	360
gtacttcggg	ctggactacg	cggagaacaa	catcatctac	gccgggcagc	tgagcaaggc	420
gttcaattcg	cccggcggat	tcgtcggctg	tgcgcg			457

<210> 162

<211> 424

<212> DNA

<213> Alexandrium fundyense

<400> 162

cctcctcctg	gacataaacg	cccacgactg	cgtgcagacg	gccgccaggc	tctgcaagaa	60
ggggccacc	gtggtgcgcc	tgaagcacia	cgacgcggag	cagctcgagc	acatgctctc	120
gtcgatcccc	cagggggccg	acatcaccta	cgtgtgcgac	gacgtgtact	ccacggacgg	180
agagctcgcc	gacttgcccc	ccatatgtgc	ttgtttgagg	ccgcgcgggg	ccaagatact	240
cgtagacgac	tcgcatggct	gcggcgttct	tggccgcaac	cccgactcgg	agcaaccctt	300
cgggtatggg	ggcggcggcg	tcgtcgagta	cttcgggctg	gactacgcgg	agaacaacat	360
catctacgcc	gggcagctga	gcaaggcggt	caattcgccc	ggcggattcg	tcggctgtgc	420
gcgc						424

<210> 163

<211> 503

<212> DNA

<213> Alexandrium fundyense

<400> 163

taaacgcccc	cgactgcgtg	cagacggccg	ccaggctctg	caagaagggc	gccaccgtgg	60
tgcgccctgag	gcacaacgac	gcggagcagc	tcgagcacat	gctctcgtcg	atcccgcagg	120
gggcccacat	cacctacgtg	tgcgacggcg	tgtactccac	ggacggagag	ctcgccgact	180
tgcccgccat	atgtgcttgt	ctgaggccgc	gcggggccaa	gatactcgta	gacgactcgc	240
atggctgcgg	cgttcttggc	cgcaaccccg	actcggagca	acccttcggg	tatgggtggc	300
gcggcgctcg	cgagtacttc	gggctggact	acgcggagaa	caacatcatc	tacgccgggc	360
agctgagcaa	ggcgttcaat	tcgccggcg	gattcgtcgg	ctgtgcgcgc	gagaccgacg	420
agaagttcgg	cattctgaac	ttggccaaga	actcgaacac	actcgtgttc	acagggccga	480
tctgtactgc	cggcctgtcg	agt				503

<210> 164

<211> 344

<212> DNA

<213> Alexandrium fundyense

<400> 164

tgaggcacia	cgacgcggag	cagctcgagc	acatgctctc	gtcgatcccc	cagggggccg	60
acatcaccta	cgtgtgcgac	ggcgtgtact	ccacggacgg	agagctcgcc	gacttgcccc	120
ccatatgtgc	ttgtttgagg	ccgcgcgggg	ccaagatact	cgtagacgac	tcgcatggct	180
gcggcgttct	tggccgcaac	cccgactcgg	agcaaccctt	cgggtatggg	ggcgccggcg	240
tcgtcgagta	cttcgggctg	gactacgcgg	agaacaacat	catctacgcc	gggcagctga	300

gcaaggcggtt caattcgccc ggcggattcg tcggctgtgc gcgc

344

<210> 165

<211> 302

<212> DNA

<213> Alexandrium fundyense

<400> 165

cgatcccgca	gggggcccgc	atcacctacg	tgtgcgacgg	cgtgtactcc	acggacggag	60
agctcgccga	cttgcccgc	atatgtgctt	gtttgaggcc	gcgcggggcc	aagatactcg	120
tagacgactc	gcatggctgc	ggcggttctt	gccgcaaccc	cgactcggag	caacccttcg	180
ggtatggtgg	cgggcgcgtc	gtcgagtact	tcgggctgga	ctacgcggag	aacaacatca	240
tctacgccgg	gcagctgagc	aaggcggttca	attcgcccgg	cggattcgtc	ggctgtgcgc	300
gc						302

<210> 166

<211> 1286

<212> DNA

<213> Alexandrium fundyense

<400> 166

accgtagcca	ttttggctca	agtgaggcct	gtgcgcgcca	gccaaactcg	gatcattcct	60
ggccactgcy	ccgccatctg	tgccggcgcc	ccgaccgggg	gcacctcatg	tccgtggagc	120
atgcgacgat	cgcggaacgc	gccccgaacg	ggatcgacct	ggcgacaaat	gccttcatgc	180
tcgtccacgg	ctggacggcg	gcgcccctgc	tcctggagct	cgtggccaac	ttcagcgcg	240
ccctggaggg	gcgggcccag	accgccccgg	agctggccgc	ggagacgggc	gccgaggagg	300
ggcccctggc	gatacctctc	cgcgccctga	gcgtcctggg	ctacgtgcgc	ttcgacgccc	360
agagcagggc	gtactccctg	gtcccggggc	cggagctgga	cgagctcagg	accgtgctcc	420
accctgcgtc	ggaggctcgc	aggggcctgc	aggagctgta	cagcgaggtc	gccccccct	480
tccagctgcc	ctcgaggagc	gcggcgcggt	gcctggccct	ctgggaggag	cagtggccct	540
cctggagcca	gtgcaggagc	agggccctgg	gcgtcctgct	ggacggcgct	gtgctggcgc	600
cgctgcttgt	gtccgtgacg	tactcctcga	ggtgggacga	ggaggggccag	gagcacggca	660
gggataacgt	catggagcgc	ttcgacttca	gcaagatgtt	gccggcgcgag	cggtccgcgc	720
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acgcaccgct	gatggcccag	atctcgccga	tcctgtttga	tgatgcgggc	tgggggttca	900
ctgacgcggg	gacagactcc	ttcgacgacg	tggaggagca	tggtgacaga	atcttgaatg	960
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gcgacgggag	cctgctcata	catatctatg	aacatatcaa	acagcacaca	ccccggggga	1140
aagtgttgca	tcagttccct	ctgacgatgg	acggcggttg	ccacaatgag	gatccgcgag	1200
tgacaacagc	tgtgaatctg	agcaagcagg	gcgtcccgcg	cgtgggtcatc	tctggcgatg	1260
tgggtaagcc	tgcgagagata	cttgcc				1286

<210> 167

<211> 1282

<212> DNA

<213> Alexandrium fundyense

<400> 167

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actgcgccc	catccgtgcc	ggcgccccga	ccgggggcac	ctcatgtccg	tggagcatgc	120
gacgatcgcy	gacgcgggtc	cgaacgggat	cgacctggcg	acaaatgcct	tcatgtcgt	180
ccacggctgg	acggcgggcg	ccctgctcct	ggagctcgtg	gccaaactca	gcgcgcccct	240
ggagggggcg	gcccagaccg	cgggggagct	ggccgcggag	acgggcgcgc	aggagggggc	300
cctggcgatc	ctcctccgcg	cctgcagcgt	cctgggctac	gtgcgcttcg	acgcccagag	360
cagggcgctac	tccctgggtc	cgggggccga	gctggacgag	ctcaggaccg	tgctccaccc	420
tgctgcggag	gtcgcgaggg	gcctgcagga	gctgtacagc	gaggtcgccc	cccccttcca	480
gctgccctcg	gaggacgcgg	cgcggtgcct	ggccctctgg	gaggagcagc	ggccctcctg	540
gagccagtgc	aggagcaggg	ccctgggcgt	cctgctggac	ggcgctgtgc	tggcgccgct	600
gcttgtgtcc	gtgacgtact	cctcgagggt	ggacgaggag	ggccaggagc	acggcaggga	660
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ggacatcttc	gagcagttgg	gcgtcggcac	tatgaacgcg	aagggcggtga	tcatgatgtc	780
gtcaaagggg	gccatgggtg	tgacgcgatg	ctactcctac	tacgtcccac	tgctgtacgc	840

accgctgatg	gcccagatct	cgccgatect	gtttgatgat	gcgggctggg	ggttcactga	900
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tggcagtggg	gcgcaacacc	ggaccctctt	taaggatatg	atgcgacaca	tcagtaccgt	1020
gttcaagggc	gaggcatttg	ccttgacgac	aagtttcgtt	gtggacactg	gctgtggcga	1080
cgggagcctg	ctcatataca	tctatgaaca	tatcaaacag	cacacacccc	gggggaaagt	1140
gcttgatcag	ttccctctga	cgatggctcg	cgttgacctc	aatgaggatc	cgcgagtgcg	1200
aacagctgtg	aatctgagca	agcagggcgt	cccgcacgtg	gtcatctctg	gcgatgtggg	1260
taagcctgcg	gagatacttg	cc				1282

<210> 168

<211> 1267

<212> DNA

<213> Alexandrium fundyense

<400> 168

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gggtcccggac	gggatcgacc	tggtgacaaa	tgccttcattg	ctcgtccacg	gctggacggc	180
ggcgcccctg	ctcctggagc	tctgggcaaa	cttcagcgcg	cccctggagg	ggcgggccca	240
gaccgcgggg	gagctggccg	cggagacggg	cgccgaggag	gggcccctgg	cgatcctcct	300
ccgcgcctgc	agcgtcctgg	gctacgtgcg	cttcgacgcc	cagagcaggg	cgtactccct	360
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cgcgggcgcg	tgcctggccc	tctgggagga	gcagcgggcc	tcctggagcc	agtgcaggag	540
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gtactcctcg	aggtgggacg	aggagggcca	ggagcacggc	agggataacg	tcattggagcg	660
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ggcggttgacg	cgatgctact	cctactacgt	cccactgtcg	tacgcaccgc	tgatggccca	840
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gagcaagcag	ggcgctccgc	acgtggctcat	ctctggcgat	gtgggtaagc	ctgcggagat	1260
acttgcc						1267

<210> 169

<211> 1267

<212> DNA

<213> Alexandrium fundyense

<400> 169

accgtagcca	ttttggctca	agccaaaccc	ggatcattcc	tggccactgc	gccgccatcc	60
gtgccggcgc	cccagaccgg	ggcacctcat	gtccgtggag	catgcgacga	tcgcggacgc	120
gggtcccgaac	gggatcgacc	tggcgacaaa	tgccttcattg	ctcgtccacg	gctggacggc	180
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cgcgggcgcg	tgcctggccc	tctgggagga	gcagcgggcc	tcctggagcc	agtgcaggag	540
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acatatctat	gaacatatca	aacagcacac	accccggggg	aaagtgtctg	atcagttccc	1140

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gagcaagcag	ggcgtccccg	acgtgggtcat	ctctggcgat	gtgggtaagc	ctgcgagat	1260
acttgcc						1267

<210> 170

<211> 1267

<212> DNA

<213> *Alexandrium fundyense*

<400> 170

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gaccgcgggg	gagctggccg	cggagacggg	cgccgaggag	gggcccctgg	cgatcctcct	300
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ggcgttgacg	cgatgctact	cctactacgt	cccactgtcg	tacgcaccgc	tgatggccca	840
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tctgacgatg	gtcggcggtg	acctcaatga	ggatccgcga	gtgacaacag	ctgtgaatct	1200
gagcaagcag	ggcgtccccg	acgtgggtcat	ctctggcgat	gtgggtaagc	ctgcgagat	1260
acttgcc						1267

<210> 171

<211> 1267

<212> DNA

<213> *Alexandrium fundyense*

<400> 171

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ggtcccgaac	gggatcgacc	tggcgacaaa	tgccctcatg	ctcgtccacg	gctggacggc	180
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acttgcc						1267

<210> 172

<211> 1267

<212> DNA

<213> *Alexandrium fundyense*

<400> 172

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acttgcc						1267

<210> 173

<211> 1266

<212> DNA

<213> *Alexandrium fundyense*

<400> 173

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cttgcc						1266

<210> 174

<211> 1102

<212> DNA

<213> *Alexandrium fundyense*

<400> 174

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<210> 175

<211> 1001

<212> DNA

<213> *Alexandrium fundyense*

<400> 175

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<210> 176

<211> 713

<212> DNA

<213> *Alexandrium fundyense*

<400> 176

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<210> 177

<211> 2369

<212> DNA

<213> *Alexandrium fundyense*

<400> 177

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<210> 178

<211> 2374

<212> DNA

<213> *Alexandrium fundyense*

<400> 178

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<210> 179

<211> 2365

<212> DNA

<213> Alexandrium fundyense

<400> 179

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<210> 180

<211> 900

<212> DNA

<213> *Alexandrium fundyense*

<400> 180

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<210> 181

<211> 488

<212> DNA

<213> *Alexandrium fundyense*

<400> 181

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<210> 182

<211> 486

<212> DNA

<213> *Alexandrium fundyense*

<400> 182

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<210> 183

<211> 365

<212> DNA

<213> Alexandrium fundyense

<400> 183

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<210> 184

<211> 2244

<212> DNA

<213> Alexandrium fundyense

<400> 184

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<210> 185

<211> 2243

<212> DNA

<213> *Alexandrium fundyense*

<400> 185

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<210> 186

<211> 2238

<212> DNA

<213> *Alexandrium fundyense*

<400> 186

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<210> 187

<211> 295

<212> DNA

<213> Alexandrium fundyense

<400> 187

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tgaacatata	aaacagcaca	cacccggggg	gaaagtgcct	gatcagttcc	ctctgacgat	240
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<210> 188

<211> 315

<212> DNA

<213> Alexandrium fundyense

<400> 188

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gacacatcag	taccgtgttc	aagggcgggg	catttgccctt	gcagccaagt	ttcgttggtg	120
acactggctg	tggcgacggg	agcctgctca	tacatatcta	tgaacatata	aaacagcaca	180
caccccgggg	gaaagtgcct	gatcagttcc	ctctgacgat	ggtcggcgctt	gacctcaatg	240
aggatccgcg	ggtgacaaca	gctgtgaatc	tgagcaagca	gggcgtcccc	cacgtggtca	300
tctctggcga	tgtgg					315

<210> 189

<211> 293

<212> DNA

<213> Alexandrium fundyense

<400> 189

tggtgcgcaa	caccggaccc	tctttaagga	tatgatgcga	cacatcagta	ccgtgttcaa	60
gggcgaggca	tttgccctgc	agccaagtctt	cggttggtgac	actggctgtg	gcgacgggag	120
ctcgtctata	catatctatg	aacatatcaa	acagcacaca	ccccggggga	aagtgcctga	180
tcagttccct	ctgacgatgg	tggcggttga	cctcaatgag	gatccgcgag	tgacaacagc	240
tgtgaatctg	agcaagcagg	gcgtcccgcga	cgtgggtcatc	tctggcgatg	tgg	293

<210> 190
 <211> 293
 <212> DNA
 <213> Alexandrium fundyense
 <400> 190
 tgggtgcgcaa caccggaccc tctttaagga tatgatgcga cacatcagta ccgtgttcaa 60
 gggcgaggca tttgccttgc agccaagttt cgttgtggac actggctgtg gcgacgggag 120
 cctgctcata catatctatg aacatatcaa acagcacaca ccccggggga aagtgttga 180
 tcagttccct ctgacgatgg tcggcggtga cctcaatgag gatccgcgag tgacaacggc 240
 tgtggatctg agcaagcagg gcgtcccgcga cgtggtcac tctggcgatg tgg 293

<210> 191
 <211> 282
 <212> DNA
 <213> Alexandrium fundyense
 <400> 191
 accggaccct ctttaaggat atgatgcgac acatcagtag cgtgttcaag ggcgaggcat 60
 ttgccttgca gccaaagttt gttgtggaca ctagtgtgg cgacgggagc ctgctcatac 120
 atatctatga acatatcaaa cagcacacac cccgggggaa agtgcttgat cagttccctc 180
 tgacgatggt cgacgttgac ctcaatgagg atccgcgagt gacaacagct gtgaatctga 240
 gcaagcaggg cgtcccgcac gtggtcac tctggcgatg gg 282

<210> 192
 <211> 961
 <212> DNA
 <213> Alexandrium fundyense
 <400> 192
 gagtgagtac gtcaatgcgc acttctctgg ggcccggacc gacagcacgc tggacttcca 60
 ctctccgcc ggagcgagcgt tcttccgctt ggtggagggt tccgccccg aggacaccga 120
 caacggcggc acaggagtggt tcatcgccca cgacatcagg agggctctgc ccaggaggc 180
 ggctgcgggc gcgccccga gcaggccgcc gccgaggacg aagggtccct cgctgcagct 240
 ggtccaggac gtcacgacca gcatcggtta ccccccaac ctcaatgacc tcaccaaggg 300
 cttcttcgac tacggcatgg actccctgga gctcgtccgc atccggaaca agctgagcct 360
 cgccctgcag acggagctcc ccgcgacgct gctcctcgac tccccaccg tgcacgacct 420
 cgtggagcgg ctggaccagg accgggcccc cgagtccgat gaggaggagg aggtacggga 480
 ggaggccaag gccacggcca gagccccggc caaggccaag gccctggcca agggcggcga 540
 ggcgaccag cgcttcgggc cctcgagat catcagcgtg cagaagcgct gcctcaacgt 600
 ctacgccag cccatctacc agaagcggtt cacggacatg gccagaagt gcttcccga 660
 catgctcaag tacatcctcg ccatagagtc catcctggtc gaggtcgagg ggcgggtcct 720
 gcaggagttc cagctgatcc aagatctcga gtacaagtcg gtccagagag gccgcgagaa 780
 tttgatgtac tacatgtcaa gctattggct ggcccacca gagatacgcg atcagagcca 840
 gcagttactc ctctcacgc tgcagaccag tgctggggcc ataaccactt gtaggctggc 900
 gctccgcggg cacctcgaat ctgcggagcc acatacgaga gtctcagtg gaaaaaaaaa 960
 a 961

<210> 193
 <211> 975
 <212> DNA
 <213> Alexandrium fundyense
 <400> 193
 agtgagtacg tcaatgcgca cttctctggg gcccgaccg acagcacgct ggacttccac 60
 tcctccgccg gagcgagtt cgtccgcttg gtggagggt tccgccccga ggacaccgac 120
 aacggcggca caggagtggt catcgccac gacatcagga gggctctgcc caggaggcg 180
 gctgcgggcg cgcgcccgag caggccgcc cggaggacga aggtccctc gctgcagctg 240
 gtccaggacg tcatgaccag catcggtac ccccccaacc tcaatgacct caccaagggc 300
 ttcttcgact acggcatgga ctccctggag ctctcgcga tccggaacaa gctgagcctc 360
 gccctgcaga cggagctccc cgcgacgctg ctctcgcact tccccaccgt gcacgacctc 420
 gtggagcggc tggaccagg cggggcccc gagtccgat agggaggagg ggtgcgggag 480
 gaggccaagg ccacggccag agccccggc aaggccaagg ccctggccaa gggcggcgag 540
 gcgaccagc gcttcggggc ctcgagatc atcagcgtgc agaagcgctg cctcaacgtc 600

tacgcccagc	ccatctacca	gaagcgggttc	acggacatgg	ccaagaagtg	cttcccggac	660
atgctcaagt	acatcctcgc	catagagtcc	atcctggtcg	aggctcgagg	gccggctcctg	720
caggagttcc	agctgatcca	agatctcgag	tacaagtcgg	tccagagagg	ccgcgagaat	780
ttgatgtact	acatgtcaag	ctattggctg	gcccacccag	agatacgcg	tcagagccag	840
cagttactcc	tcctcacgct	gcaggaccag	tgctggggca	ataaccactt	gtaggctggc	900
gctccgcggg	cacctcgaat	ctgcggagcc	acatacgaga	gtcccagtgc	gaaaaaaaca	960
caaaaaaaaa	aaaaa					975

<210> 194

<211> 966

<212> DNA

<213> *Alexandrium fundyense*

<400> 194

agtgagtacg	tcaatgcgca	cttctctggg	gcccggaccg	acagcacgct	ggacttccac	60
tcctccgccc	gagcgcagtt	cgctccgctt	gtggagggtc	tccgccccga	ggacaccgac	120
aacggcggca	caggagtggg	catcgcttac	gacatcagga	gggctctgcc	cagggaggcg	180
gctgcggggc	cgccccgag	caggccggcc	ccgaggacga	aggctccctc	gctgcagctg	240
gtccaggacg	tcatgaccag	catcggctac	ccccccaacc	tcaatgacct	caccaagggc	300
ttcttcgact	acggcatgga	ctccctggag	ctcgtccgca	tctggaacaa	gctgagcctc	360
gccctgcaga	cggagctccc	cgcgacgctg	ctcctcgact	tccccaccgt	gcacgacctc	420
gtggagcggc	tggaccagga	ccggggcccc	gagtcgatg	aggaggagga	gggtgcgggag	480
gaggccaagg	ccacggccag	agccccggcc	aaggccaagg	ccctggccaa	gggcggcgag	540
gcgaccagc	gcttcggggc	ctcggagatc	atcagcgtgc	agaagcgtg	cctcaacgtc	600
tacgcccagc	ccatctacca	gaagcgggttc	acggacatgg	ccaagaagtg	cttcccggac	660
atgctcaagt	acatcctcgc	catagagtcc	atcctggtcg	aggctcgagg	gccggctcctg	720
caggagttcc	agctgatcca	agatctcgag	tacaagtcgg	tccagagagg	ccgcgagaat	780
ttgatgtact	acatgtcaag	ctattggctg	gcccacccag	agatacgcg	tcagagccag	840
cagttactcc	tcctcacgct	gcagaccagt	gctggggcaa	taaccacttg	taggctggcg	900
ctccgcgggc	acctcgaatc	tgcggagcca	catacgagag	tctcagtgcg	aaaaaaaaaa	960
aaaaaa						966

<210> 195

<211> 350

<212> DNA

<213> *Alexandrium fundyense*

<400> 195

gcgggttcacg	gacatggcca	agaagtgctt	cccggacatg	ctcaagtaca	tcctcgccat	60
agagtccatc	ctggtcgagg	tcgagggggc	ggctcctgcag	gagttccagc	tgatccaaga	120
tctcgagtac	aagtcgggtc	agagaggccg	cgagaatttg	atgtactaca	tgtcaagcta	180
ttggctggcc	caccagagga	tacgcgatca	gagccagcag	ttactcctcc	tcacgctgca	240
ggaccagtgc	tggggcaata	accacttgta	ggctggcgct	ccgcggggcac	ctcgaatctg	300
cggagccaca	tacgagagtc	tcagtgcgaa	aaaaaaaaaa	aaaaaaaaaa		350

<210> 196

<211> 358

<212> DNA

<213> *Alexandrium fundyense*

<400> 196

gcgggttcacg	gacatggcca	agaagtgctt	cccggacatg	ctcaagtaca	tcctcgccat	60
agagtccatc	ctggtcgagg	tcgagggggc	ggctcctgcag	gagttccagc	tgatccaaga	120
tctcgagtac	aagtcgggtc	agagaggccg	cgagaatttg	atgtactaca	tgtcaagcta	180
ttggctggcc	caccagagga	tacgcgatca	gagccagcag	ttactcctcc	tcacgctgca	240
ggaccagtgc	tggggcaata	accacttgta	ggctggcgct	ccgcggggcac	ctcgaatctg	300
cggagccaca	tacgagagtc	ccagtgcgaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaa	358

<210> 197

<211> 344

<212> DNA

<213> *Alexandrium fundyense*

<400> 197

gcgggttcacg	gacatggcca	agaagtgctt	cccggacatg	ctcaagtaca	tcctcgccat	60
-------------	------------	------------	------------	------------	------------	----

agagtccatc ctggctcgagg tcgaggggcc ggtcctgcag gagttccagc tgatccaaga 120
 tctcgagtac aagtcgggtcc agagaggccg cgagaatttg atgtactaca tgtcaagcta 180
 ttggctggcc caccagaga tacgcatca gagccagcag ttactcctcc tcacgctgca 240
 ggaccagtgc tggggccata accacttgta ggctggcgct ccgcgggcac ctcgaatctg 300
 cggagccaca tacgagagtc tcagtgcgaa aaaaaaaaaa aaaa 344

<210> 198
 <211> 20
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 198
 ctgagcaagg cgttcaattc

20

<210> 199
 <211> 20
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <220>
 <221> misc_feature
 <222> (8)..(8)
 <223> 'm'= a or c
 <220>
 <221> misc_feature
 <222> (19)..(19)
 <223> 'r'= g or a
 <400> 199
 tacagatmgg ccctgtgarc

20

<210> 200
 <211> 23
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <220>
 <221> misc_feature
 <222> (8)..(8)
 <223> 'm'= a or c
 <400> 200
 tgcagcgmtg ctactcctac tac

23

<210> 201
 <211> 20
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <220>
 <221> misc_feature
 <222> (11)..(11)
 <223> 'y'= t or c
 <400> 201
 ggtcgtggtc yaggaaggag

20

<210> 202
 <211> 22
 <212> DNA

<213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 202
 atgctcaaca tgggagtcac cc 22

<210> 203
 <211> 23
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 203
 ggggtccagta gatgttgacg atg 23

<210> 204
 <211> 23
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <220>
 <221> misc_feature
 <222> (15)..(15)
 <223> 'k' = g or t
 <400> 204
 gtagtaggag tagckacgct gca 23

<210> 205
 <211> 20
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <220>
 <221> misc_feature
 <222> (10)..(10)
 <223> 'r' = g or a
 <400> 205
 ctcttctctr gaccacgacc 20

<210> 206
 <211> 22
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 206
 ggatgactcc catgttgagc at 22

<210> 207
 <211> 23
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 207
 catcgtaac atctactgga ccc 23

<210> 208
 <211> 23

<212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 208
 ggcaagtatc tccgcaggct tac 23

<210> 209
 <211> 25
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 209
 cgtggaggag catgttgaca gaatc 25

<210> 210
 <211> 24
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 210
 actcgacagg ccggcagtag agat 24

<210> 211
 <211> 18
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 211
 tgagcaggca cgcagtcc 18

<210> 212
 <211> 25
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 212
 ggctcgtatg ttgtgtggaa ttgtg 25

<210> 213
 <211> 24
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 213
 agtcacgacg ttgtaaaacg acgg 24

<210> 214
 <211> 10
 <212> PRT
 <213> Alexandrium fundyense
 <400> 214
 Val Asp Thr Gly Cys Gly Asp Gly Ser Leu
 1 5 10

<210> 215

<211> 10
 <212> PRT
 <213> Alexandrium fundyense
 <400> 215
 Val Asp Ala Ser Arg Thr Leu His Val Arg
 1 5 10

<210> 216
 <211> 10
 <212> PRT
 <213> Alexandrium fundyense
 <400> 216
 Leu Glu Val Ser Phe Gly Leu Cys Val Leu
 1 5 10

<210> 217
 <211> 9
 <212> PRT
 <213> Alexandrium fundyense
 <400> 217
 Val Val Asp Thr Gly Cys Gly Asp Gly
 1 5

<210> 218
 <211> 9
 <212> PRT
 <213> Alexandrium fundyense
 <400> 218
 Val Asp Pro Ser Arg Ser Leu His Val
 1 5

<210> 219
 <211> 10
 <212> PRT
 <213> Alexandrium fundyense
 <400> 219
 Leu Gln Gly Ser Phe Gly Leu Cys Met Leu
 1 5 10

<210> 220
 <211> 27
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 220
 ttgatcctgc cagtagtcat atgcttg

27

<210> 221
 <211> 24
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 221
 ccttggtacg acttctcctt cctc

24

<210> 222
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Primer sequence

<400> 222

cctcagttag attgtagtgc

20

<210> 223

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer sequence

<400> 223

gtgcaaaggt aatcaaattgt cc

22

<210> 224

<211> 769

<212> DNA

<213> Alexandrium tamarense

<400> 224

gcggttctcct	cctcctgtac	ataaacgccc	acgactgcgt	gcagacggcc	gccaggtctt	60
gcaagaagg	cgccaccgtg	gtgcgctga	agcacaacga	cacggaacag	cccagacaca	120
tgctctcgtc	gatcccgcag	ggggccgaca	tcacctacgt	gtgcgacggc	gtgtactcca	180
cggacgaaga	gctcgccgac	ttgcccgcga	tatgtgcttg	tttgaggccg	cgcggggcca	240
agatactcgt	agacgactcg	catggctgcg	gcgttcttgg	ccgcaacccc	aactcggagc	300
aacccctcgg	gtatgggtggc	ggcggtgca	tcgagtactt	cgggctggac	tacgaggaga	360
acaacatcat	ctacgcccgg	cagctgagca	aggcgttcaa	ttcgcccggc	ggattcgtca	420
gctgtgcgcg	cgagaccgac	aaaaatttcg	gcgttctgaa	cttgcccaaa	aactcgaaca	480
cactcgtgtt	cacagggccg	atctgtactg	ccggcctgtc	gagtgcgaaa	acaaccttcg	540
acctcaacgc	cgccgagggg	gaccttcaac	gcaagcggct	tctggcggct	accctcgaaa	600
ttctgcgagg	ggctcaaggc	gctcgggtgc	ccccacacct	accacgagtg	ccccatcgtc	660
aatacggggg	gggaacacac	aagctacgca	agcgcttctg	ggtgagccat	aggcgctccc	720
gtggcccaca	aatataacag	gaaaccaccg	cccacttctc	tgtattca		769

<210> 225

<211> 558

<212> DNA

<213> Alexandrium catenella

<400> 225

ttggtcgtgg	tccaggaagg	agcgacgtg	gagggccttg	gtaggggtcca	ccccctccg	60
tccgaggacc	tccatgatgt	cgccgggctc	gccgacgtcc	ccgaacagca	ccaggagagg	120
gaccgcgtgc	cggtcaggt	tgagctccgt	cgccacctcg	agagtccttg	ttgaagtcaa	180
cgcgaccat	ggtgagcgga	tgtcgtctcg	agcgtccttc	ccgcgcggcg	tgttgccttt	240
cacgtgctcg	tagatgcgcc	tgagcaaacg	cccgtcgccg	cacccacagt	tccacgacga	300
acgcgggtg	cgacgcgaag	tccccgccc	cgaagaccga	gtcaatcagc	cgcacgaggt	360
ccgggaagaa	cgtttgggtg	tgcaccccg	tgcccaccac	gttcagcgtc	cggtagacgt	420
ggacctcctg	ctcatgagag	tcccggccgg	cgccggcgaa	ccccagccg	ggattctcga	480
agaggatagc	ggtcaagggtg	gttggtccagc	attggggcgt	aggaggtcgg	gacgtagtag	540
gagtagcacc	gctgcaaa					558

<210> 226

<211> 773

<212> DNA

<213> Alexandrium catenella

<400> 226

cagctatgac	catgattacg	ccaagctatt	taggtgacac	tatagaatac	tcaagctatg	60
catccaacgc	gttgggagct	ctcccatatg	gtcgacctgc	aggcggcacg	cgaattcact	120
agtgatttgc	agcgatgcta	ctcctactac	gtcccagacct	cctacgcccc	actgctggac	180
aggtaccacc	gcacctcttt	cgagaatccc	ggctgggggt	tcgcccggcg	cggccgggac	240
tcgcaggagc	aggaggtcca	cgctccaccg	acgctgaacg	tggtagggcag	cggggcgagc	300
caccagacgc	tcttcacgga	cctcgtgcgg	ctcattgact	cggctcttcg	gggcccggac	360

ttcgcgtcgc	agccggcggt	cgctcgtggac	acgggggtgcg	gcgacggccg	cttgctcagg	420
cgcactctacg	agcacgtgaa	gagcaacacg	ccgcgcggga	aggcgctcgc	cgagcaccgc	480
ctcacgatgg	tcggcgtcga	cttcaacaag	gactctcggg	tggcgacgga	gctcaacctg	540
agcaggcacg	cgggtcccga	cctggtgctg	ttcggagacg	tcggcaagcc	cgccgacatc	600
atggagatcc	tcggacggag	cggggtggac	ccgagcaggt	ccctccacgt	gcgctccttc	660
ctagaccacg	accaatcgaa	ttcccgcggc	cgccatggcg	gccggggagca	tgcgacgtcg	720
ggcccaattc	gccctatagt	gagtcgtatt	acaattcact	ggccgctcgtt	tta	773

<210> 227

<211> 555

<212> DNA

<213> Alexandrium sp.

<220>

<221> misc_feature

<222> (126)..(127)

<223> 'n'= a, c, t or g

<400> 227

tttgacgca	tgctactcct	actacgtccc	tgctctctac	tcgccgatgc	tgtcgaacct	60
gaacactatc	ctccacgagg	acgccggctg	gggcttcgcc	gacgacgggc	tcgtgcgcgc	120
atgggnngcc	gaggtccacg	tgaaccgcac	gctgaacgtc	gtcggcagcg	gcctgcagca	180
ccaaaagtcc	ttccagcacc	tcgtgcagca	gatcagcgcc	atctttgagg	gcgaggactt	240
cacctcgcag	ccatcgttcg	tcgtcgacac	tggcagcggc	gacgggactc	tacttaggca	300
gatctacgag	cacgtgaagt	cgatgacgcc	tcgaggacgt	cacctgagcc	agcatccgct	360
gaccatggta	ggtgttgact	tcagcgagga	gtccagagcc	gcgacctccc	gcaacctgag	420
ccaccacgcc	atccctcaca	tggtgctcct	cggggacatt	ggcgagcccg	cttgagatca	480
cggcgtgcgc	tggcaaggaa	gggtgtcgac	cttgcggaagg	tgctgcacgt	gcgctccttc	540
ctggaccacg	accga					555

<210> 228

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer sequence

<400> 228

cttgcccgcc	atatgtgctt	20
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<210> 229

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer sequence

<400> 229

gcccggcgta	gatgatgttg	20
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<210> 230

<211> 579

<212> DNA

<213> Alexandrium minutum

<400> 230

ttccagggtc	gcctcaagaa	gccgcttgcg	ctgacgggtcc	ccctcggcaa	agttgaggtc	60
gagggtcgtc	ttcgactcgc	acaggccggc	agtacagatc	ggccctgtga	acacgagcgt	120
gttcgagttc	ttggccaagt	tcagaatgcc	gaacttctcg	tcggtctcgc	gtgcgcagcc	180
cacgaatccg	ccgggcgaat	tgaacgcctt	gctcagctgc	ccggcgtaga	tgatgttggt	240
ctccgcgtag	tcagcccga	agtacttgac	gacgccgccg	ccgccatatc	cgaagggttg	300
ctccgagtcg	gggttcgggc	caagaacgcc	gcaaccgtgc	gagtcgtcca	cgagtatctt	360
ggccccgcgc	ggcctcaaac	aagcacatat	ggcgggcaag	tcggcgagct	ctccgtccgt	420
ggagtagacg	ccgtcgacga	cgtaggtgat	gtcggccccc	tccgggatcg	acgagagcac	480
gcgctcgagc	tgctccgtgt	cgttgtgctt	caggcgacag	acggtgactc	ccttcttgca	540

gagcctggct gccgtctgca cgcagtcgtg ggcgtttat

579

<210> 231

<211> 670

<212> DNA

<213> Alexandrium minutum

<220>

<221> misc_feature

<222> (557)..(557)

<223> 's' = g or c

<400> 231

gggaacccgt	ggtaggtgtg	ggggcaccgc	agcgccttga	gcccctcgca	aaattccagg	60
gtcgccctcaa	gaagccgctt	gcgctgacgg	tccccctcgg	caaagttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtacag	atcgggccctg	tgaacacgag	cgtgttcgag	180
ttcttgcca	agttcagaat	gccgaacttc	tcgtcgggtct	cgcgtgcgca	gcccacgaat	240
ccgccgggcg	aattgaacgc	cttgctcagc	tgccccggcgt	agatgatgtt	gttctccgcg	300
tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaaggg	ttgctccgag	360
tcgggggttgc	ggccaagaac	gccgcaaccg	tgcgagtcgt	ccacgagtat	cttggccccg	420
cgcggccctca	aacaagcaca	tatggcgggc	aagtcggcga	gctctccgtc	cgtggagtag	480
acgccgtcgc	acacgtaggt	gatgtcggcc	ccctccggga	tcgacgagag	cacgcgctcg	540
agctgctccg	tgctgttgtg	cttcaggcgc	acgacgggtga	ctcccttctt	gcagagsetg	600
gctgccgtct	gcacgcagtc	gtgggcgttt	atgtccagga	ggaggaaccc	gctctcgccc	660
gccaggctcg						670

<210> 232

<211> 632

<212> DNA

<213> Alexandrium minutum

<400> 232

gggaacccgt	ggtaggtgtg	ggggcaccgc	agcgccttga	gcccctcgca	aaattccagg	60
gtcgccctcaa	gaagccgctt	gcgctgacgg	tccccctcgg	caaagttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtacag	atcgggccctg	tgaacacgag	cgtgttcgag	180
ttcttgcca	agttcagaat	gccgaacttc	tcgtcgggtct	cgcgtgcgca	gcccacgaat	240
ccgccgggcg	aattgaacgc	cttgctcagc	tgccccggcgt	agatgatgtt	gttctccgcg	300
tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaaggg	ttgctccgag	360
tcgggggttgc	ggccaagaac	gccgcaaccg	tgcgagtcgt	ccacgagtat	cttggccccg	420
cgcggccctca	aacaagcaca	tatggcgggc	aagtcggcga	gctctccgtc	cgtggagtag	480
acgccgtcgc	acacgtaggt	gatgtcggcc	ccctccggga	tcgacgagag	cacgcgctcg	540
agctgctccg	tgctgttgtg	cttcaggcgc	acgacgggtga	ctcccttctt	gcagagcctg	600
gckgccgtct	gcacgcagtc	gtgggcgttt	at			632

<210> 233

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 233

gggaacccgt	ggtaggtgtg	ggggcaccgc	agcgccttga	gcccctcgca	aaattccagg	60
gtcgccctcaa	gaagccgctt	gcgctgacgg	tccccctcgg	caaagttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtacag	atcgggccctg	tgaacacgag	cgtgttcgag	180
ttcttgcca	agttcagaat	gccgaacttc	tcgtcgggtct	cgcgtgcgca	gcccacgaat	240
ccgccgggcg	aattgaacgc	cttgctcagc	tgccccggcgt	agatgatgtt	gttctccgcg	300
tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaaggg	ttgctccgag	360
tcgggggttgc	ggccaagaac	gccgcaaccg	tgcgagtcgt	ccacgagtat	cttggccccg	420
cgcggccctca	aacaagcaca	tatggcgggc	aagtcggcga	gctctccgtc	cgtggagtag	480
acgccgtcgc	acacgtaggt	gatgtcggcc	ccctccggga	tcgacgagag	cacgcgctcg	540
agctgctccg	tgctgttgtg	cttcaggcgc	acgacgggtga	ctcccttctt	gcagagcctg	600
gctgccgtct	gcacgcagtc	gtgggcgttt	atgtccagga	ggaggaaccc	gctctcgccc	660
gccaggctcg						670

<210> 234

<211> 636

<212> DNA

<213> *Alexandrium minutum*

<400> 234

gggaacccgt	ggtaggtgtg	ggggcaccgc	agcgccttga	gcccctcgca	aaattccagg	60
gtcgccctcaa	gaagccgctt	gcgctgacgg	tccccctcgg	caaagttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtagac	atcgcccttg	tgaacacgag	cgtgttcgag	180
ttcttgcca	agttcagaat	gccgaacttc	tcgtcgggtct	cgcgtgcgca	gcccacgaat	240
ccgccggggcg	aattgaacgc	cttgctcagc	tgcccggcgt	agatgatgtt	gttctccgcg	300
tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaagg	ttgctccgag	360
tcgggggttgc	ggccaagaac	gccgcaaccg	tgcgagtcgt	ccacgagtat	cttggccccg	420
cgcgccctca	aacaagcaca	tatggcgggc	aagtcggcga	gctctccgtc	cgtggagtag	480
acgccgtcgc	acacgtaggt	gatgtcggcc	ccctccggga	tcgacgagag	cacgcgctcg	540
agctgctccg	tgctgttgtg	cttcaggcgc	acgacggtga	ctcccttctt	gcagagcctg	600
gctgcccgtct	gcacgcagtc	gtgggcgttt	atgtcc			636

<210> 235

<211> 670

<212> DNA

<213> *Alexandrium minutum*

<400> 235

gggaacccgt	ggtaggtgtg	ggggcaccgc	agcgccttga	gcccctcgca	aaattccagg	60
gtcgccctcaa	gaagccgctt	gcgctgacgg	tccccctcgg	caaagttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtagac	atcgcccttg	tgaacacgag	cgtgttcgag	180
ttcttgcca	agttcagaat	gccgaacttc	tcgtcgggtct	cgcgtgcgca	gcccacgaat	240
ccgccggggcg	aattgaacgc	cttgctcagc	tgcccggcgt	agatgatgtt	gttctccgcg	300
tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaagg	ttgctccgag	360
tcgggggttgc	ggccaagaac	gccgcaaccg	tgcgagtcgt	ccacgagtat	cttggccccg	420
cgcgccctca	aacaagcaca	tatggcgggc	aagtcggcga	gctctccgtc	cgtggagtag	480
acgccgtcgc	acacgtaggt	gatgtcggcc	ccctccggga	tcgacgagag	cacgcgctcg	540
agctgctccg	tgctgttgtg	cttcaggcgc	acgacggtga	ctcccttctt	gcagagcctg	600
gctgcccgtct	gcacgcagtc	gtgggcgttt	atgtccagga	ggaggaaccc	gctctcgccc	660
gccaggctcg						670

<210> 236

<211> 670

<212> DNA

<213> *Alexandrium minutum*

<400> 236

gggaacccgt	ggtaggtgtg	ggggcaccgc	agcgccttga	gcccctcgca	aaattcgagg	60
gtcgcmctcaa	gaagccgctt	gcgctgamgg	tccccctcgg	craarttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtagac	atcgcccttg	tgaacacgag	cgtgttcgag	180
ttcttgcca	agttcagaat	gccgaacttc	tcgtcgggtct	cgcgtgcgca	rcsacgaat	240
ccgccggggcg	aattgaacgc	cttgctcarg	tgcccggcgt	agatgatgtt	gttctccgcg	300
tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaagg	ttgctccgag	360
tcgggggttry	ggccaagaac	gccgcaaccg	tgmagtcgt	ccacgagtat	cttggccccg	420
cgcgccctca	aacaagcaca	tayggcgggc	aagtcggcga	gctytccstc	ygtggagtag	480
acsccgtcgc	acacstaggt	gatgtyggcc	ccctcsggga	tygacgagag	cacgcgctcr	540
agstgstccg	tgctgttgtg	cttcaggcgc	acgacggtga	ckcccttctt	gcagagcctg	600
gcggctgtct	gcacgcagtc	gtgggcgttt	atgtccagga	ggaggaascc	gctctcgccc	660
gccaggctcg						670

<210> 237

<211> 670

<212> DNA

<213> *Alexandrium minutum*

<400> 237

gggaacccgt	ggtaggtgtg	ggggcaccgc	agcgccttga	gcccctcgca	aaattcgagg	60
gtcgcmctcaa	gaagccgctt	gcgctgamgg	tccccctcgg	craarttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtagac	atcgcccttg	tgaacacgag	cgtgttcgag	180
ttcttgcca	agttcakaat	gccgaacttc	tcgtcgggtct	cgcgtgcgca	rcsacgaat	240
ccgccggggcg	aattgaacgc	cttgctcarg	tgcccggcgt	agatgatgtt	gttctccgcg	300

tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaaggg	ttgctccgag	360
tcgggggtry	ggccaagaac	gccgcaaccg	tgmgaagtcgt	ccacgagtat	cttggccccg	420
cgcgccctca	aacaagcaca	tayggcgggc	aagtcggcga	gctctccgtc	cgtggagtag	480
acscgcgtcg	acacstaggt	gatgtcggcc	ccctcsggga	tcgacgagag	cacgcgctcr	540
agstgstccg	tgtygttggtg	cttcaggcgc	acgrecgtga	ckcccttctt	gcagagcctg	600
gcggygtcy	gcacgcagtc	gtgggcgttt	atgtccagga	ggaggaascc	gctctcgccc	660
gccaggctcg						670

<210> 238

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 238

gggaaccgct	ggtaggtgtg	ggggcaccgc	agcgccttga	gcccctcgca	aaattcsagg	60
gtcgcmcaaa	gaagccgctt	gcgctgamgg	tccccctcgg	craarttgag	gtcgagggtc	120
gtcttcgcac	tcgacaggcc	ggcagtacag	atcgcccttg	tgaacacgag	cgtgttcgag	180
ttcttgcca	agttcagaat	gccgaacttc	tcgtcgggtst	cgcgtagcga	rcsacgaat	240
ccgccgggcg	aattgaacgc	cttgctcarg	tgccccggcg	agatgatgtt	gttctccgag	300
tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaaggg	ttgctccgag	360
tcgggggtry	ggccaagaac	gccgcaaccg	tgagagtcgt	ccacgagtat	cttggccccg	420
cgcgccctca	aacaagcaca	tatggcgggc	aagtcggcga	gctctccgtc	cgtggagtag	480
acgcgcgtcg	acacgtaggt	gatgtcggcc	ccctcsggga	tcgacgagag	cacgcgctcr	540
agctgctccg	tgctgttggtg	cttcaggcgc	acgacggtga	ckcccttctt	gcagagcctg	600
gcggtgtct	gcacgcagtc	gtgggcgttt	atgtccagga	ggaggaascc	gctctcgccc	660
gccaggctcg						670

<210> 239

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 239

gggaaccgct	ggtaggtgtg	ggggcaccgc	agcgccttga	gcccctcgca	aaattccagg	60
gtcgccctcaa	gaagccgctt	gcgctgacgg	tccccctcgg	caaagttgag	gtcgagggtc	120
gtcttcgcac	tcgacaggcc	ggcagtacag	atcgcccttg	tgaacacgag	cgtgttcgag	180
ttcttgcca	agttcagaat	gccgaacttc	tcgtcgggtct	cgcgtagcga	gcccacgaat	240
ccgccgggcg	aattgaacgc	cttgctcagc	tgccccggcg	agatgatgtt	gttctccgag	300
tagtccagcc	cgaagtactt	gacgacgccg	ccgcgcctat	atccgaaggg	ttgctccgag	360
tcgggggttg	ggccaagaac	gccgcaaccg	tgcgagtcgt	ccacgagtat	cttggccccg	420
cgcgccctca	aacaagcaca	tatggcgggc	aagtcggcga	gctctccgtc	cgtggagtag	480
acgcgcgtcg	acacgtaggt	gatgtcggcc	ccctccggga	tcgacgagag	cacgcgctcg	540
agctgctccg	tgctgttggtg	cttcaggcgc	acgacggtga	ctcccttctt	gcagagcctg	600
gctgccgtct	gcacgcagtc	gtgggcgttt	atgtccagga	ggaggaaccc	gctctcgccc	660
gccaggctcg						670

<210> 240

<211> 670

<212> DNA

<213> Alexandrium catenella

<400> 240

gggaagccgt	ggtaggtgtg	ggggcaccgc	agcgccttga	gcccctcgca	gaactcgagg	60
gtcgccckcca	gragccgcyt	gcgctgaagg	tccccctcgg	cggcgttgag	gtccagggtc	120
gtcytygcr	tcgacaggcc	ggcggtacag	atcgcccttg	tgaacacgag	ygtgttcgag	180
ttcttsgcca	agttcaggat	gccgaacttc	tcgtcgggtct	cgcgtagcga	gcccacgaat	240
ccgccgggcg	agttgaacgc	cttgctcagc	tgccccggcg	agatgatgtt	gttctccgag	300
tagtccagcc	cgaagtactc	gacgacgccr	ccgccrccat	acccgagggg	ttgctccgag	360
tcwgggttkc	ggccaagaac	gccgcagccr	tgcgagtcgt	cyacgagtat	cttggccccg	420
cgcgccctca	aacaagcaca	katggcgggc	aagtcsgcga	gctctccgtc	ygtggagtag	480
acgcgcgtcg	asacgtaggt	gatgtcggcc	ccctgcgggga	tcgasgagag	caygcgctcg	540
agctgctccg	ygtcgttggtg	cttcaggcgc	acsacggtgr	cgcccttctt	gcagagcctg	600
gcgccgctct	gcacgcagtc	gtgggcgtkt	atgtccasga	ggaggaaccc	gctctcgccc	660
gcgaggctcg						670

<210> 241
 <211> 670
 <212> DNA
 <213> *Alexandrium fundyense*
 <400> 241
 gggaacccgt ggtaggtgtg ggggcacccg agcgccttga gcccctcgca gaattcgagg 60
 gtcgccgcca gaagccgctt gcgctgaagg tccccctcgg cggcggttgag gtcgaggggtc 120
 gtcwtcgcac tcgacaggcc ggcagtagag atcgcccttg tgaacacgag tgtgttcgag 180
 ttcttgGCCA agttcagaat gccgaacttc tcgtcgggtct cgcgcgcaca gccgacgaat 240
 ccgcccgggCG aattgaacgc cttgctcagc tgcccggcgt agatgatggt gttctccgCG 300
 tagtccagcc cgaagtactc gacgacgccg ccgccaccat acccgaagggt ttgctccgag 360
 tcgggggttgc ggccaagaac gccgcagcca tgcgagtcgt ctacgagtat cttggccccg 420
 cgcggcctca aacaagcaca tatggcgggc aagtcggcga gctctccgtc cgtggagtac 480
 acgccgctcg acacgtaggt gatgtcggcc ccctgcggga tcgacgagag catgtgctcg 540
 agctgctccg cgtcggttgG cytcaggcgc accacggtgg cgccttctt gcagagcctg 600
 gcggccgtct gcacgcagtc gtgggcgttt atgtccagga ggaggaaccc gctctcgccc 660
 acgaggctcg 670

<210> 242
 <211> 670
 <212> DNA
 <213> *Alexandrium fundyense*
 <400> 242
 gggaacccgt ggtaggtgtg ggggcacccg agcgccttga gcccctcgca gaattcgagg 60
 gtcgccgcca gaagccgctt gcgctgaagg tccccctcgg cggcggttgag gtcgaggggtc 120
 gtchtcgcac tcgacaggcc ggcagtagag atcgcccttg tgaacacgag tgtgttcgag 180
 ttcttgGCCA agttcagaat gccgaacttc tcgtcgggtct cgcgcgcaca gccgacgaat 240
 ccgcccgggCG aattgaacgc cttgctcagc tgcccggcgt agatgatggt gttctccgCG 300
 tagtccagcc cgaagtactc gacgacgccg ccgccaccat acccgaagggt ttgctccgag 360
 tcgggggttgc ggccaagaac gccgcagcca tgcgagtcgt ctacgagtat cttggccccg 420
 cgcggcctca aacaagcaca tatggcgggc aagtcggcga gctctccgtc cgtggagtac 480
 acgccgctcg acacgtaggt gatgtcggcc ccctgcggga tcgacgagag catgtgctcg 540
 agctgctccg cgtcggttgG cytcaggcgc accacggtgg cgccttctt gcagagcctg 600
 gcggccgtct gcacgcagtc gtgggcgttt atgtccagga ggaggaaccc gctctcgccc 660
 acgaggctcg 670

<210> 243
 <211> 20
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <220>
 <221> misc_feature
 <222> (2)..(2)
 <223> 'r'= g or a
 <400> 243
 grctacgcgg agaacaacat 20

<210> 244
 <211> 21
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <220>
 <221> misc_feature
 <222> (5)..(5)
 <223> 'y'= t or c
 <220>

<221> misc_feature
 <222> (12)..(12)
 <223> 'k'= g or t
 <400> 244
 cgagygtggt ckagttcttgg

21

<210> 245
 <211> 19
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Probe sequence
 <220>
 <221> misc_feature
 <222> (14)..(14)
 <223> 's'= g or c
 <400> 245
 ccggcggatt cgtsrgctg

19

<210> 246
 <211> 20
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Probe sequence
 <220>
 <221> misc_feature
 <222> (13)..(13)
 <223> 'y'= t or c
 <400> 246
 caaggcgttc aaytcgccccg

20

<210> 247
 <211> 1319
 <212> DNA
 <213> Alexandrium tamarense
 <400> 247

tcgcgctagt	cagtgtggat	gacgtgcat	acactgcggt	gaacagatgt	ccgctcaggc	60
aatcaaaatg	ccgaataata	gtgttcgctc	gtcaaaactaa	agatccactg	tcgattgaac	120
gcccgttca	gtgatcggc	gagaagagtc	tctgctgcag	tcgtccgagc	aggaagtatt	180
gagaggcgcc	gaccaccaat	actcaaggag	gtgcgcccga	tacgagatcg	ggggctgtaa	240
gcgggggtcc	gtcaaaaagt	ctacgcctat	gtttgtttta	ggaggatcct	gcaccccgcg	300
gcctcaaaca	caacaaatag	gggcggcaat	tggtcacttg	tttgtcccgg	ggtaccaccc	360
gtacctatgt	agggacctcg	cccccatgcg	agaaaaacaa	aagcattgcc	tgggtttttg	420
cgggggggtg	ttccccgggc	ccccaccggg	gggccccttt	tttcagaacc	ccggcggggc	480
cgttttcccc	cccctttttg	ggtttttttt	tttttcaaaa	accaatcatc	ccggaaccta	540
gtgggcgaga	gcgggttcct	cctcctgtac	ataaacgccc	acgactgcgt	gcagacggcc	600
gccaggctct	gcaagaaggg	cgccaccgtg	gtgcgcctga	agcacaacga	cacggaacag	660
cccaggcaca	tgctctcgtc	gatcccgag	ggggccgaca	tcacctacgt	gtgcgacggc	720
gtgtactcca	cggacgaaga	gctcgccgac	ttgcccgcca	tatgtgcttg	tttgaggccg	780
cgcggggcca	agatactcgt	agacgactcg	catggctgcg	gcgttcttgg	ccgcaacccc	840
aactcggagc	aaccctcggg	gtatgggtggc	ggcggcgctca	tcgagtactt	ccggctggac	900
tacgcggaga	acaacatcat	ctacgcccgg	cagctgagca	aggcgttcaa	ttcgcccggc	960
ggattcgtca	gctgtgcgcg	cgagaccgac	aaaaatttcg	gcgtttctgaa	cttggccaaa	1020
aactcgaaca	cactcggtgt	cacaggggccg	atctgtactg	ccggcctgtc	gagtgcgaaa	1080
acaaccttcg	acctcaacgc	cgccgagggg	gaccttcaac	gcaagcggct	tctggcggct	1140
accctcgaaa	ttctgcgagg	ggctcaaggc	gctcgggtgc	ccccacacct	accacgagtg	1200
ccccatcgtc	aatacggggg	gggaacacac	aagctacgca	agcgcttctg	ggtgagccat	1260
aggcgctccc	gtggcccaca	aatataacag	gaaaccaccg	cccacttctc	tgctattca	1319