

SEQUENCE LISTING

<110> NewSouth Innovations Pty Ltd
Universitetet i Oslo

<120> Detection of saxitoxin-producing dinoflagellates

<130> 998829C

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<170> PatentIn version 3.5

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<212> DNA

<213> Alexandrium fundyense

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Lys Arg Leu Ala Leu Leu Leu Asp Gly Ala Val Leu Val Pro Leu Leu
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Thr Ser Ile Thr Tyr Phe Ala Arg Trp Asp Glu Glu Gly Leu Asp Ser

```

145		150		155		160
Gly Lys Glu Gly	Ala Leu Asp Arg Leu Asp Phe Ser Lys Ala Asn Ala					
	165			170		175
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 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 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 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 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

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ggctgggggt	tcgccggcgc	cggccgggac	tcgcaggagc	aggaggtcca	cggtccaccg	120
acgctgaacg	tggtgggcag	cggggcgcag	caccagacgc	tcttcacgga	tctcgtgcgg	180
ctgattgact	cggtcttcgc	gggcggggac	ttcgcggcgc	agccggcggt	cgtcgtggac	240
acagggtgcg	gcgacggccg	cttgctcagg	cgcattctacg	agcacgtgaa	gagcaacacg	300
ccgcgcggga	aggcgctcgg	cgagcaccgc	ctcacgatgg	tcggcgctga	cttcaacaag	360
gactctcggt	tgccacggga	gctcaacctg	agcaggcacg	cggtcccgcg	cctgggtgctg	420
ttcggggacg	tcggcaagcc	cgccgacatc	atggagctcc	tcgggcggag	gggggtggac	480
ccgagcaggt	ccctccacgt	gcgc				504

<210> 6

<211> 504

<212> DNA

<213> Alexandrium catenella

<400> 6

gtcccgacct	cctacgcccc	actgctggac	aggtaccacc	gcatectctt	cgagaatccc	60
ggctgggggt	tcgccggcgc	cggccgggac	tcgcaggagc	aggaggtcca	cggtccaccg	120
acgctgaacg	tggtgggcag	cggggcgcag	caccagacgc	tcttcacgga	tctcgtgcgg	180
ctgattgact	cagtcttcgc	gggcggggac	ttcgcggcgc	agccggcggt	cgtcgtggac	240
acagggtgcg	gcgacggccg	cttgctcagg	cgcattctacg	agcacgtgaa	gagcaacacg	300
ccgcgcggga	aggcgctcgg	cgagcaccgc	ctcacgatgg	tcggcgctga	cttcaacaag	360
gactctcggt	tgccacggga	gctcaacctg	agcaggcacg	cggtcccgcg	cctgggtgctg	420
ttcggggacg	tcagcaagcc	cgccgacatc	atggagctcc	tcgggcggaa	tggggtggac	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	tggctgtggc	gacgggagcc	tgtcataca	cgtctacgag	180
cacatcaagg	agcacacgcc	ccgggggaaa	gtgctcgacg	agttccctct	gacgatggtc	240
ggcgtggacc	tcaacgagga	gccgcgagtg	acgacggccg	tgaatctgag	caagcagggc	300
gtcccgcacg	tggatcatctc	cggcgacgtg	ggcaagcccg	cggagatcat	ggccgcgctg	360
aagaagaaga	aggtggaccc	gtcgaggacg	cttcatgtcc	gc		402

<210> 8

<211> 505

<212> DNA

<213> *Alexandrium catenella*

<400> 8

gtcccgcact	cctacgcccc	actgctggac	aggtaccaca	gcatacctctt	cgagaatccc	60
ggctgggggt	tcgccggcgc	cggccggggac	tcgcaggagc	aggaggtcca	cgccaccggg	120
acgctgaacg	tgggtggcag	cggggcgagc	caccagacgc	tcttcacgga	cctcgtgcgg	180
ctgatcgact	cggctcttcgc	gggcggggac	ttcgcgggcg	agccggcggt	cgctcgtggac	240
acgggggtgcg	gcgacggccg	cttgctcagg	cgcactctacg	agcacgtgaa	gagcaacacg	300
ccgcgcggga	agggcgtcgg	cgagcaccgc	ctcacgatgg	tcggcgctga	cttcaacaag	360
gactctcggg	tggccacgga	gctcaacctg	agcaggcacg	cggccccgca	caatggtgct	420
gttcggcgac	gtcggcaagc	ccgccgacat	cacggagctc	ctcgggcgga	aggggggtgga	480
ccctagcagg	tcctccacg	tgcgc				505

<210> 9

<211> 504

<212> DNA

<213> *Alexandrium catenella*

<400> 9

gtcccgcact	cctacgcccc	actgctggac	aggtaccacc	gcatacctctt	cgagaatccc	60
ggctgggggt	tcgccggcgc	cggccggggac	tcgcaggagc	aggaggtcca	cgccaccggg	120
acgctgaacg	tgggtggcag	cggggcgagc	caccagacgc	tcttcacgga	tctcgtgcgg	180
ctcattgact	cggctcttcgc	gggcggggac	ttcgcgggcg	agccggcggt	cgctcgtggac	240
acgggggtgcg	gcgacggccg	cttgctcagg	cgcactctacg	agcacgtgaa	gagcaacacg	300
ccgcgcggga	agggcgtcgg	cgagcaccgc	ctcacgatgg	tcggcgctga	cttcaacaag	360
gactctcggg	tggccacgga	gctcaacctg	agcaggcacg	cggccccgca	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	cgtagcacc	actgatggcc	cagatctcac	cgatacctctt	tgatgatgcg	60
ggctgggggt	tcactgacgc	ggggacagac	tccttcgacg	tggaggagca	tgttgacaga	120
atcttgaatg	tcgtgggcag	tgggtgcgaa	caccggaccc	tctttaagga	tctgatgcga	180
cacatcagtg	ccgtgttcaa	gggcgaggca	tttgctcgc	agccaaattt	tgttgaggac	240
actggctgtg	gcgacgggag	cctgctcata	cacgtctacg	agcacatcaa	ggagcacacg	300
ccccggggga	aagtgtcga	cgagttccct	ctgacgatgg	tcggcggtga	cctcaacgag	360
gagccgcgag	tgacgacggc	cgtgaatctg	agcaagcagg	gcgtcccgca	cgtaggtcatc	420
tccggcgacg	tgggcaagcc	cgcggagatc	aaggccgcgc	tgaagaagaa	gaagggtggac	480
ccgtcgagga	cgcttcagt	ccgc				504

<210> 11

<211> 504

<212> DNA

<213> *Alexandrium catenella*

<400> 11

gtcccgcact	cctacgcccc	accgctggac	atgtaccacc	gcatacctctt	cgagaatccc	60
agctgggggt	tcgccggcgc	cggccggggac	tcgcaggagc	aggaggtcca	cgccaccggg	120
acgctgaacg	tgggtggcag	cggggcgagc	caccagacgc	tcttcacgga	tctcgtgcgg	180
ctgattgact	cggctcttcgc	gggcggggac	ttcgcgggcg	agccggcggt	cgctcgtggac	240
acaggggtgcg	gcgacggccg	cttgctcagg	cgcactctacg	agcacgtgaa	gagcaacacg	300

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

<210> 12

<211> 448

<212> DNA

<213> *Alexandrium tamarense*

<400> 12

cccgggttggg	ggttcgccgg	cgccggccgg	gactcgcagg	agcaggaggt	ccacgtccac	60
cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	cgctcttcac	ggatctcgtg	120
cggctcattg	actcggctctt	cgccggcggg	gacttcgcgt	cgagccggc	gttcgtcgtg	180
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aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	acgcggctcc	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	gcatectctt	cgagaatccc	60
ggctgggggt	tcgctggtgc	cggccggggac	tcgcaggagc	aggaggtcca	cgccaccggg	120
acgctgaacg	tggtgggcag	cggggcgagc	caccagacgc	tcttcacgga	cctcgtgcgg	180
ctcattgact	cggtcttcgc	gggcgggggac	ttcgcacgc	agccggcggt	catcgtggac	240
acgggggtgcg	gcgacggccg	cttgctcagg	cgcactctacg	agcacgtgaa	gagcaacacg	300
ccgcgcggga	aggcgctcgc	cgagcaccgg	ctcacgatgg	tcggcgctga	cttcaacaag	360
gactctcggg	tggcgacgga	gctcaacctg	agcaggcacg	cggtcccgca	cctggtgctc	420
ttcggggacg	tcggcaagcc	cgccgacatc	atggagaccc	tcggggcgga	tgggggtggac	480
ccgagcaggt	ccctccacgt	gcgc				504

<210> 14

<211> 504

<212> DNA

<213> *Alexandrium tamarense*

<400> 14

gtcccagcgt	cctacgcccc	actgctggac	aggtaccaca	gcatectctt	cgagaatccc	60
ggctgggggt	tcgctggtgc	cggccggggac	tcgcaggagc	aggaggtcca	cgccaccggg	120
acgctgaacg	tggtgggcag	cggggcgagc	caccagacgc	tcttcacgga	cctcgtgcgg	180
ctcattgact	cggtcttcgc	gggcgggggac	ttcgcacgc	agccggcggt	catcgtggac	240
acgggggtgcg	gcgacggccg	cttgctcagg	cgcactctacg	agcacgtgaa	gagcaacacg	300
ccgcgcggga	aggcgctcgc	cgagcaccgg	ctcacgatgg	tcggcgctga	cttcaacaag	360
gactctcggg	tggcgacgga	gctcaacctg	agcaggcacg	cggtcccgca	cctggtgctc	420
ttcggggacg	tcggcaagcc	cgccgacatc	atggagaccc	tcggggcgga	tgggggtggac	480
ccgagcaggt	ccctccacgt	gcgc				504

<210> 15

<211> 505

<212> DNA

<213> *Alexandrium tamarense*

<400> 15

gtcccagcgt	cctacgcccc	actgctggac	aggtaccaca	gcatectctt	cgagaatccc	60
ggctgggggt	tcgctggtgc	cggccggggac	tcgcaggagc	aggaggtcca	cgccaccggg	120
acgctgaacg	tggtgggcag	cggggcgagc	caccagacgc	tcttcacgga	cctcgtgcgg	180
ctcattgact	cggtcttcgc	gggcgggggac	ttcgcacgc	agccggcggt	catcgtggac	240
acgggggtgcg	gcgacggccg	cttgctcagg	cgcactctacg	agcacgtgaa	gagcaacacg	300
ccgcgcggga	aggcgctcgc	cgagcaccgg	ctcacgatgg	tcggcgctga	cttcaacaag	360
gactctcggg	tggcgacgga	gctcaacctg	agcaggcacg	cggtcccgca	cctggtgctc	420

ttcggggacg tcggcaagcc cgccgacgat catggagacc ctcgggcgga atgggggtgga 480
cccagacagg tccctccacg tgcgc 505

<210> 16

<211> 505

<212> DNA

<213> *Alexandrium tamarense*

<400> 16

gtcccgacgt cctacgcccc cctgctggac aggtaccaca gcatcctctt cgagaatccc 60
ggctgggggt tcgcccggcg cgccggggac tcgcaggagc aagaggtcca cgtccaccgg 120
acgctgaacg tgggtgggcag cggggcgag caccagacgc tcttcacgga cctcgtgcgg 180
ctcattgact cggctcttcgc gggcggggac ttcgctgcgc agccggcggt cgtcgtggac 240
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ccgcgcggga aggcgctcgc cgagcaccgc ctcacgatgg tcggcgctga cttcaacaag 360
gactctcggg tggcgacgga gctcaacctg agcaggcagc cggccccga ccatgggtgct 420
gttcggggac gtcggcaagc ccgcccacat catggagctc ctcgggcgga atgggggtgga 480
cccagacagg tccctccacg tgcgc 505

<210> 17

<211> 442

<212> DNA

<213> *Alexandrium minutum*

<400> 17

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ggctgggggt tcgcccggcg cgccggggac tcgcaggagc aagaggtcca cgtccaccgg 120
acgctgaacg tgggtgggcag cggggcgag caccagacgc tcttcacgga cctcgtgcgg 180
ctcattgact cggctcttcgc gggcggggac ttcgctgctc cagccggcggt tcgtcgtgga 240
tacagggtgt ggcgacggcc gcttggtcag gcgcttctac gagcacgtga aagagcaaca 300
cttctcgcgc gggaaggcgc tcgcccagca cccgctcagc atgggtcggc tcgacttcaa 360
caaggactct cgggtggcga cggagctcaa cctgagcagg cagcagctcc cgcaccaagg 420
gctgttcggg gacgtcggca ag 442

<210> 18

<211> 505

<212> DNA

<213> *Gymnodinium catenatum*

<400> 18

gtcccgacgt cctatgcccc cctgctggac aagtaccaca gcatcctctt cgagaaccct 60
ggttgggggt tcgtcggcgc cgccaggac tcgcaggagc aagagatcca cgtccaccgg 120
acgctgaacg tgggtgggcag cggggcgag caccagacgc tcttcactga cctcgtgcgg 180
cacatcgact ccctcttcac tggaggggac ttcattgtgc agccggcggt cgtcgtggat 240
acagggtgtg gcgacggccg cttgctcagg cgcattctac agcacgtgaa gagcaacacg 300
ccgcgcggga aggcctcgc cgaacaccgc ctcacgatgg ttggcgctga cttcaacaag 360
gactcccgcg tggcgacgga gctcaacttg agcaagcatg cagtcccaca cctagtgtctg 420
ttcggggatg ttggcaagcc cgccgacatc atggagctct ctcaggcaga atgggggtgga 480
cccagacagg gccctccacg tgcgc 505

<210> 19

<211> 504

<212> DNA

<213> *Gymnodinium catenatum*

<400> 19

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ggctgggggt tcgtcggcgc cgccaggac tcgcaggagc aggaattcca cgtccaccgg 120
acgctgaacg tgggtgggcag cggggcgag caccagacgc tcttcactga cctcgtgcgg 180
cacatcgact ccctcttcac gggaggggac ttcattgtgc agccggcggt cgtcgtggat 240
acagggtgtg gcgacggccg cttgctcagg cgcattctac agcacgtgaa gagcaacacg 300
ccgcgcggga aggcgctcgc cgaacaccgc ctcacgatgg ttggcgctga 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	gcatacctctt	cgagaatcct	60
ggctgggggt	tcgtcggcgc	cggccaggac	tcgcaggagc	aggaaattca	cgtccaccgg	120
acgctgaatg	tggtgggcag	cggggcgag	caccagacgc	tcttactga	cctcgtgagg	180
cacatcgact	ccctcttcac	tggaggggac	ttcatgtcgc	agccggcggt	cgtcgtggat	240
acaggggtgtg	gcgacggccg	cttgctcagg	cgcatactacg	agcacgtgaa	gagcaacacg	300
ccgcgcggga	aggctctcgc	cgaacacccg	ctcacgatgg	ttggcgctga	cttcaacaag	360
gactcccgcg	tggcgacgga	gctcaacttg	agcaaacatg	cagtcccaca	cctagtgtctg	420
ttcggggatg	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	gcatacctctt	cgagaatcct	60
ggctgggggt	tcgtcggcgc	cggccaggac	tcgcaggagc	aggaaattca	cgtccaccgg	120
acgctgaacg	tggtgggcag	cggggcgag	caccagacgc	tcttactga	cctcgtgagg	180
cacatcgact	ccctcttcac	gggaggggac	ttcatgtcgc	agccggcggt	cgtcgtggat	240
acaggggtgtg	gcgacggccg	cttgctcagg	cgcatactacg	agcacgtgaa	gagcaacacg	300
ccgcgcggga	aggcgctcgc	cgaacacccg	ctcacgatgg	ttggcgctga	cttcaacaag	360
gactcccgcg	tggcgacgga	gctcaacttg	agcaaacatg	cagtcccaca	cctagtgtctg	420
ttcggggatg	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	gcatacctctt	cgagaatcct	60
ggctgggggt	tcgtcggcgc	cggccaggac	tcgcaggagc	aggaaattca	cgtccaccgg	120
acgctgaacg	tggtgggcag	cggggcgag	caccagacgc	tcttactga	cctcgtgagg	180
cacatcgact	ccctcttcac	gggaggggac	ttcatgtcgc	agccggcggt	cgtcgtggat	240
acaggggtgtg	gcgacggccg	cttgctcagg	cgcatactacg	agcacgtgaa	gagcaacacg	300
ccgcgcggga	aggcgctcgc	cgaacacccg	ctcacgatgg	ttggcgctga	cttcaacaag	360
gactcccgcg	tggcgacgga	gctcaacttg	agcaaacatg	cagtcccaca	cctagtgtctg	420
ttcggggatg	taggcaaacc	cggcgacatc	atggagctcc	tcaggcagaa	tgggggtggac	480
ccgagcaggg	ccctccacgt	gcgc				504

<210> 23

<211> 447

<212> DNA

<213> *Gymnodinium catenatum*

<400> 23

cctgggtggg	ggttcgctcg	cgcgggccag	gactcgcagg	agcaggaaat	ccacgtccac	60
cggacgctga	acgtgggtgg	cagcggggcg	cagcaccaga	cgctcttcac	tgacctcggtg	120
cggcacatcg	actccctctt	cacgggaggg	gacttcatgt	cgcagccggc	gttcgctcgtg	180
gatacaggg	gtggcgacgg	ccgcttgctc	aggcgcatct	acgagcacgt	gaagagcaac	240
acgccgcgcg	ggaaggcgct	cgcgaacac	ccgctcacga	tggttggcgt	cgacttcaac	300
aaggactccc	gcgtggcgac	ggagctcaac	ttgagcaagc	atgcagtccc	acacctagtgtg	360
ctgttcgggg	atgttggaac	gcccgcgcgac	atcatggagc	tcctcaggca	gaatgggggtg	420
gaccgagca	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	gacggcggtg	actccacgga	180
cgaagagctc	gccgacttgc	ccgccatatg	tgcttggttg	aggccgcgcg	gggccaagat	240
actcgtagac	gactcgcgat	gctgcggcgt	tcttgccgcg	aaccccaact	cggagcaacc	300
cctcgggtat	ggtggcgggc	gcgtcatcga	gtacttcggg	ctggactacg	cggagaacaa	360
catcatctac	gccgggcagc	tgagcaaggc	gttcaattcg	cccggcggtg	tcgtcagctg	420
tgcgcgcgag	accgacgaga	atttcggcgt	tctgaacttg	gccaaagaact	cgaacacact	480
cgtgttcaca	gggccgatct	gtactgccgg	cctgtcgagt	gcgaagacga	ccttcgacct	540
caacgccgcc	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	agcccagagca	catgctctcg	tcgatcccg	60
agggggccga	catcacctac	gtgtgcgacg	gcgtgtactc	cacggacgaa	gagctcgccg	120
acttgcccc	catatgtgct	tggttgaggc	cgcgcggggc	caagatactc	gtagacgact	180
cgcagggctg	cggcgttctt	ggccgcaacc	ccaactcgga	gcaacccctc	gggtatgggtg	240
gcggcgggcg	catcgagtac	ttcgggctgg	actacgcgga	gaacaacatc	atctacgccc	300
ggcagctgag	caaggcgctc	aattcgcccc	gcggattcgt	cagctgtgcg	cgcgagaccg	360
acgagaattt	cggcgttctg	aacttgccca	agaactcgaa	cacactcgtg	tatcacaggg	420
ccgatctgta	ctgccgcctt	gtcgagtacg	aagacaacct	tcgacctcaa	cgccgcgag	480
ggggaccttc	agcgcaagcg	gcttctggcg	gctaccctcg	aattctgcga	ggggctcaag	540
gcgctcgggg	gccccacac	ctaccacgag	ttcccc			576

<210> 26

<211> 600

<212> DNA

<213> *Alexandrium catenella*

<400> 26

ggttcctcct	cctgtacata	aacgcccacg	actgcgtgca	gacggccgcc	aggctctgca	60
agaagggcg	caccgtggtg	cgctgaagc	acaacgacac	ggaacagccc	gagcacatgc	120
tctcgtcgat	ccgcagggg	gccgacatca	cctacgtgtg	cgacggcggtg	tactccacgg	180
acgaagagct	cgccgacttg	cccgccatat	gtgcttggtt	gagggccgcg	ggggccaaga	240
tactcgtaga	cgactcgcat	ggctgcggcg	ttcttgcccg	caaccccaac	tcggagcaac	300
ccctcgggta	tggtggcggc	ggcgtcatcg	agtacttcgg	gctggactac	gcggagaaca	360
acatcatcta	cgccgggcag	ctgagcaagg	cgttcaattc	gcccggcgga	ttcgtcagct	420
gtgcgcgcga	gaccgacgag	aatttcggcg	ttctgaactt	ggccaagaac	tcgaacacac	480
tcgtgttcac	agggccgac	tgtactgccg	gcctgtcgag	tgcaagacg	accttcgacc	540
tcaacgccgc	cgagggggac	cttcagcgca	agcggcttct	ggcggctacc	ctcgaattct	600

<210> 27

<211> 653

<212> DNA

<213> *Alexandrium tamarense*

<400> 27

ccagcctcgc	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
agacggccgc	caggctctgc	aagaagggcg	tcaccgtggt	gcgcctgaag	cacaacgaca	120
cggagcagct	ggagcgcgat	ctctcctcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
gcgacggcgt	gtactccaca	gacggagagc	tcgccgactt	gcccgcata	tgtgcttggt	240
tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	tggtgcgggc	gttcttgccc	300
gaaaccaga	ctcggagcaa	cccttcgggt	atggtggcgg	tggcgtcgtc	gagtacttcg	360
ggctggacta	cgcggagaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaact	420
cgccggcgcg	attcgtcggc	tgcgcgcgcg	agaccgacga	gaagttcggc	atcctgaact	480

tggccaagaa	ctcgaacaca	ctcgtgttca	cagggccgat	ctgtaccgcc	ggcctgtcga	540
gtgcaaagac	gaccctggac	ctcaacgccg	cggaggggga	ccttcagcgc	aggcggtcc	600
tggcggcgac	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
actcgcagtg	ctgcggcggt	cttggccgaa	acccagactc	ggagcaaccc	ttcgggtatg	300
gtggcggtgg	cgtcgtcgag	tacttcgggc	tggactacgc	ggagaacaac	atcatctacg	360
ccgggcagct	gagcaaggcg	ttcaactcgc	ccggcggtat	cgtcggctgc	gcgcgcgaga	420
ccgacgttta	agttcggcac	cctgaacttg	gccaagaact	cgaacacact	cgtgttcaca	480
gggcccgatct	gtaccgcccg	cctgtcgagt	gcaaagacga	ccctggacct	caacgcgcgc	540
gagggggacc	ttcagcgag	gcggctcctg	gcggcgaccc	tcgagttctg	cgaggggctc	600
agggcgctcg	ggtgccccca	cacctaccac	ggcttcccc			639

<210> 29

<211> 671

<212> DNA

<213> *Alexandrium tamarense*

<400> 29

ccagcctcgc	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
agacggccgc	caggctctgc	aagaagggcg	tcaccgtggt	gcgcctgaag	cacaacgaca	120
cggagcagct	ggagcgcagc	ctctcctcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
gcgacggcgt	gtactccaca	gacggagagc	tcgcccactt	gcccgcata	tgtgtttgtt	240
tgaggccgcg	cggggccaaag	atactcgtgg	acgactcgca	tggctgcggc	gttcttgccc	300
gaaacccaaa	ctcggagcaa	cccttcagggt	atggtggcgg	tggcgtcgtc	gagtacttcg	360
ggctggacta	cgcgagagac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaact	420
cgcccggcgg	attcgtcggc	tgccgcgcgcg	agaccgacga	gaagttcggc	atcctgaact	480
tggccaagaa	ctagaacaca	ctcgtgttca	cagggccgat	ctgtaccgcc	ggcctgtcga	540
gtgcaaagac	gaccctggac	ctcaacgccg	cggaggggga	ccttcagcgc	aggcggtcc	600
tggcggcgac	cctcgagttc	tgcgaggggg	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
cgatcccggg	gggggccgac	atcacctacg	tgtgcgacgg	cgtctactcc	acggacggag	180
agctcgccga	cttgcccggc	atatgtgctt	gtttgaggcc	gcgcggggcc	aagatactcg	240
tggacgactc	gcacgggttc	ggcgttcttg	gccgcaaccc	cgactcggag	caacccttcg	300
gatatggcgg	cggcgggcgt	gtcaagtact	tcgggctgga	ctacgcggag	aacaacatca	360
tctacgccgg	gcagctgagc	aaggcgttca	attcgcccgg	cggattcgtg	ggctgcgcac	420
gcgagaccga	cgagaagttc	ggcattctga	acttggccaa	gaactcgaac	acgctcgtgt	480
tcacagggcc	gatctgtact	gccggcctgt	cgagtgcgaa	gacgacctc	gacctcaact	540
ttgccgaggg	ggaccgtcag	cgcaagcggc	ttcttgaggc	gaccctggaa	tttgcgaggg	600
gctcaaggcg	ctcgggtgcc	ccca				624

<210> 31

<211> 671

<212> DNA

<213> *Gymnodinium catenatum*

<400> 31

cggccctcgt	aggcgagaat	ggattccttc	tcttggacat	aaatgccac	gattgtgtgc	60
agacagctgc	caggctttgc	aagaaaggca	ccaccaccgt	acgcttgaag	cacaatgacg	120
cagagcagct	cgagcgcgta	cttgcgtcga	tcccagaggg	ggccgacatc	acctacgtgt	180
gcgacgggtg	gtactccacg	gacggtgaag	tcgctgactt	gcccgcata	tgtgcttgtt	240
tgaggccgcg	cggggccaag	atactcggtg	acgactcgca	tggctgcggc	gttcttggcc	300
gcaatcccga	ctcggagcag	ccctacgggt	atggcggcgg	cggcgtcgtc	aagtacttcg	360
ggctggatta	tgcggagaac	aacatcatct	acgcccggca	gttgagcaag	gcgttcaatt	420
caccgcggcg	attcgtcggg	tgcgcacgtg	agaccgacga	gaaattcggc	attctgagct	480
tggccaagaa	ttcgaacacg	ctcgtgttca	cggggccgat	ttgtactgcc	ggcctatcga	540
gtgcgaagac	aaccctcgac	ctcaacgcgc	cggaggggga	ccttcagcgc	aagcggcttc	600
tggaggcgac	cctcagattt	tgtgaggggc	tcaaggcgct	cgggtgcccc	cacacttata	660
atgggttccc	c					671

<210> 32

<211> 546

<212> DNA

<213> Alexandrium minutum

<400> 32

tgcagcgttg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcgtgg	actcggctct	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcattc	300
acgagcacgt	gaagagcaac	acgcgcgcgc	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcat	cgacttcaac	aaagactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcgcgc	atcatggagc	480
tccacgggcg	gaagggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 33

<211> 546

<212> DNA

<213> Alexandrium minutum

<400> 33

tgcagcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcgtgg	actcggctct	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcattc	300
acgagcacgt	gaagagcaac	acgcgcgcgc	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcgcgc	atcatggagc	480
tcctcgggcg	gaagggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 34

<211> 546

<212> DNA

<213> Alexandrium minutum

<400> 34

tgcagcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcgtgg	actcggctct	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcattc	300
acgagcacgt	gaagagcaac	acgcgcgcgc	ggaaggcgct	cgccgagcac	ccgctcacga	360
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acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcgcgc	atcatggagc	480
ccctcgggcg	gaagggggtg	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	cggtcgtgg	actcggtttt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
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acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcgcac	atcatggagc	480
tcctcggggc	gaagggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 36
 <211> 546
 <212> DNA
 <213> *Alexandrium minutum*
 <400> 36

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acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcgtgg	actcggttct	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcgcac	atcatggagc	480
tcctcggggc	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	gttcgcgcgg	gccggcgggg	actcgcagga	120
gcaggaggtc	cacgtccaca	ggacgctgaa	cgtgggtggg	agcggggcgc	agcaccagac	180
gctcttcacg	gacctcgtgc	ggctcgtgga	ctcgggtctt	gcggggcggg	acttcgcgtc	240
gcagccggcg	ttcgtcgtgg	acacgggggtg	cgggcgacgg	cgcttgctca	ggcgcatcta	300
cgagcacgtg	aagagcaaca	cgccgcgcgcg	gaaggcgctc	gccgagcacc	cgctcacgat	360
ggccggcgctc	gacttcaaca	aggactctcg	gggtggcgacg	gagctcaacc	tgagcaggca	420
cgcggtcccc	cacctggtgc	tggtcggggg	cgtcggcaag	cccgcgcaca	tcattggagct	480
cctcggggcg	aagggggtgg	acccgagcag	gtccctccac	gtgcgctcct	tcctggacca	540
cgacc						545

<210> 38
 <211> 546
 <212> DNA
 <213> *Alexandrium minutum*
 <400> 38

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agcaggaggt	ccacgtccac	aggacgctga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcatg	cggtcgtgg	actcggttcct	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcgcac	atcatggagc	480

tcctcgggcg gaaggggggtg gacccgagca ggteccctcca cgtgcgctcc ttcctggacc 540
acgacc 546

<210> 39

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 39

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acagcatcat cttcgagaat cccgggtggg gggtcgccgg cgccggcggg gactcgcagg 120
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cgctcttcac ggacctcgtg cggctcgtgg actcgggtctt cgcggggcggg gacttcgcgt 240
cgcagccggc gttcgtcgtg gacacggggg gcgggcgacgg ccgcttgctc aggcgcatct 300
acgagcacgt gaagagcaac acgccgcgcg ggaaggcgct cgccgagcac ccgctcacga 360
tggtcggcgt cgacttcaac gaggactctc gggtggcgac ggagctcaac ctgagcaggc 420
acgcgggtccc gcacctgggtg ctgttcgggg acgtcggcaa gcccgccgac atcatggagc 480
tcctcgggcg gaaggggggtg gacccgagca ggteccctcca cgtgcgctcc ttcctggacc 540
acgacc 546

<210> 40

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 40

tgcagcgatg ctactcctac tacgtcccga cgtcctacgc cccactgctg gacaggtacc 60
acagcatcat cttcgagaat cccgggtggg gggtcgccgg cgccggcggg gactcgcagg 120
agcaggaggt ccacgtccac aggacgtga acgtgggtggg cagcggggcg cagcaccaga 180
cgctcttcac ggacctcgtg cggctcgtgg actcgggtctt cgcggggcggg gacttcgcgt 240
cgcagccggc gttcgtcgtg gacacggggg gcgggcgacgg ccgcttgctc aggcgcatct 300
acgagcacgt gaagagcaac acgccgcgcg ggaaggcgct cgccgagcac ccgctcacga 360
tggtcggcgt cgacttcaac aaggactctc gggtggcgac ggagctcaac ctgagcaggc 420
acgcgggtccc gcacctgggtg ctgttcgggg acgtcggcaa gcccgccgac atcatggagc 480
tcctcgggcg gaaggggggtg gacccgagca ggteccctcca cgtgcgctcc ttcctggacc 540
acgacc 546

<210> 41

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 41

tgcagcgatg ctactcctac tacgtcccga cgtcctacgc cccactgctg gacaggtacc 60
acagcatcat cttcgagaat cccgggtggg gggtcgccgg cgccggcggg gactcgcagg 120
agcaggaggt ccacgtccac aggacgtga acgtgggtggg cagcggggcg cagcaccaga 180
cgctcttcac ggacctcgtg cggctcgtgg actcgggtctt cgcggggcggg gacttcgcgt 240
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tggtcggcgt cgacttcaac aaggactctc gggtggcgac ggagctcaac ctgagcaggc 420
acgcgggtccc gcacctgggtg ctgttcgggg acgtcggcaa gcccgccgac atcatggagc 480
tcctcgggcg gaaggggggtg gacccgagca ggteccctcca cgtgcgctcc ttcctagacc 540
acgacc 546

<210> 42

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 42

tgcagcgatg ctactcctac tacgtcccga cgtcctacgc cccactgctg gacaggtacc 60
acagcatcat cttcgagaat cccgggtggg gggtcgccgg cgccggcggg gactcgcagg 120
agcaggaggt ccacgtccac aggacgtga acgtgggtggg cagcggggcg cagcgccaga 180
cgctcttcac ggacctcgtg cggctcgtgg actcgggtctt cgcggggcggg gacttcgcgt 240
cgcagccggc gttcgtcgtg gacacggggg gcgggcgacgg ccgcttgctc aggcgcatct 300

acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcgac	ctgagcaggc	420
acgcgggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccggccgc	atcatggagc	480
tcctcggggcg	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	cgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgtga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcgtgg	actcgggtctt	cgccggccgg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
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tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcgggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccggccgc	atcatggagc	480
tcctcggggcg	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	cgccggggaca	gactccttcg	120
acgtggagga	gcatgttgac	agaatcttga	atgtcgttgg	cagtgggtgcg	caacaccgga	180
ccctctttta	ggatctgatg	cgacacatca	gtgccgtgtt	caagggcgag	gcatttccct	240
cgcagccaaa	ttttgttgtg	gacactgggt	gtggcgacgg	gagcctgctc	atacagctct	300
acgagcacat	caaggagcac	acgcccggg	ggaaagtgtc	cgacgagttc	cctctgacga	360
tggtcggcgt	ggacctcaac	gaggagccgc	gagtgacgac	ggccgtgaat	ctgagcaagc	420
agggcggtccc	gcacgtggtc	atctccggcg	acgtgggcaa	gcccggcgag	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
accgcatect	cttcragaat	cccgggtggg	gggttcgccg	cgccggcccg	gactcgcagg	120
arcaggaggt	ccacgtccac	cggacgtga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgtctcttcac	ggatctcgtg	cggctgattg	actcgggtctt	cgccggccgg	gacttcgcgg	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggccac	ggagctcaac	ctgagcaggc	420
acgcgggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccggccgc	atcatggagc	480
tcctcggggcg	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
accgcatect	cttcgagaat	cccgggtggg	gggttcgccg	cgccggcccg	gactcgcagg	120

agcaggaggt	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggatctcgtg	cggctgattg	actcgggtctt	cgcgggcggg	gacttcgcgg	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
atgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cggcgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggccac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctgggtg	ctgttcgggg	acgtcggcaa	gcccgcgcac	atcatggagc	480
tcctcggggc	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
accgcatcct	cttcgagaat	cccggctggg	gggttcgcgg	cgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggatctcgtg	cggctgattg	actcgggtctt	cgcgggcggg	gacttcgcgg	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cggcgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggccac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctgggtg	ctgttcgggg	acgtcggcaa	gcccgcgcac	atcatggagc	480
tcctcggggc	gaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctgagacc	540
acgacc						546

<210> 48

<211> 546

<212> DNA

<213> *Alexandrium catenella*

<400> 48

tgcagcgatg	ctactcctac	tacgtcccga	cctcctacgc	cccactgctg	gacaggtacc	60
accgcatcct	cttcgagaat	cccggctggg	gggttcgcgg	cgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggatctcgtg	cggctgattg	actcgggtctt	cgcgggcggg	gacttcgcgg	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
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tggtcggcgt	cgacttcaac	aaggactctc	gggtggccac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctgggtg	ctgttcgggg	acgtcggcaa	gcccgcgcac	atcatggagc	480
tcctcggggc	gaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 49

<211> 546

<212> DNA

<213> *Alexandrium tamarense*

<400> 49

tgcagcgatg	ctactcctac	tacgtcccga	cgctcctacgc	cccgtgctg	gacaggtacc	60
acagcatcct	cttcgataat	cccggctggg	gggttcgcgg	tgccggccgg	gactcgcagg	120
agcaggagat	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcgggtctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gtggcgactg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcat	agacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctgggtg	ctgttcgggg	acgtcggcaa	gcccgcgcac	atcatggaga	480
tcctcggggc	gaaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctgagacc	540
acgacc						546

<210> 50

<211> 546

<212> DNA

<213> *Alexandrium tamarense*

<400> 50

tgcagcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccgtgctg	gacaggtacc	60
acagcatcct	cttcgataat	cccggctggg	ggttcgccgg	tgccggccgg	gactcgcagg	120
agcaggagat	ccacgtccac	cggacgctga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	agacctcgtg	cggctcattg	actcggctct	cgcggggcgg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gtggcgactg	ccgcttgctc	aggcgcacat	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcat	agacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcgggtccc	gcacctgggt	ctgttcgggg	acgtcggcaa	gcccgcgcac	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	tgctcgtagc	acctctgatg	gcccagatct	60
cgcgcatcct	gtttgatgat	gcggactggg	ggttcgcgga	cgcggggaca	gactccttcg	120
acgtggagga	gcatgttgac	agaatcttga	atgttggttg	cagtgggtgc	caacaccgga	180
ccctctttta	ggatctgatg	cgacacatca	gtgccgtgtt	caagggcgag	gcatttgcct	240
tgcagccaaa	tttcgttggtg	gacactggct	gtggcgacgg	gggcctgctc	atgcatactc	300
atgaacatat	caaacagcac	acgccccggg	ggaaaatgct	cgatgagttc	cctctgacaa	360
tggtcggcgt	tgacctcaat	gaggagccgc	gagtgacaac	agccgtgaat	ctgagcaagc	420
agggcggtccc	gcacgtggtc	atctccggcg	acgtgggttag	gcccgcggag	ataattgccg	480
cgctgaagaa	gaagaagggtg	gacccgtcga	ggacgcttca	cgtccgctcc	ttcctggacc	540
acgacc						546

<210> 52

<211> 546

<212> DNA

<213> *Alexandrium tamarense*

<400> 52

tgcagcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcatcct	cttcgagaat	cccggctggg	ggttcgctgg	tgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcggctct	cgcggggcgg	gacttcgcac	240
cgcagccggc	gttcacgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcacat	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcgggtccc	gcacctgggt	ctcttcgggg	acgtcggcga	gcccgcgcac	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	tgctcgtagc	accactgatg	gcccagatct	60
caccgatcct	gtttgatgat	gcgggctggg	ggttcactga	cgcggggaca	gactcctttg	120
acgtggagga	gcatgttgac	agaattttga	atgttggttg	cagtgggtgc	caacaccgga	180
ccctatttta	ggatctgatg	cgacacatca	gtgccgtgtt	caagggcgag	gcatttgcct	240
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agggcggtccc	gcacgtggtc	atctccggcg	acgtgggttaa	gcccgcggag	ataatggccg	480
cgctgaagaa	gaagaagggtg	gacccgtcga	ggacgcttca	tgtccgctcc	ttcctagacc	540
acgacc						546

<210> 54

<211> 546

<212> DNA

<213> *Alexandrium tamarense*

<400> 54

tgcagcgatg	ctactcctac	tacgtcccga	cgtectacgc	cccactgctg	gacaggtacc	60
acagcaccct	cttcgagaat	cccggctggg	ggttcgctgg	tgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcgggtctt	cgcgggcggg	gacttcgcat	240
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tggtcggcgt	cgacttcaac	aaggactctc	ggatggcggc	ggagctcaac	ctgagcaggc	420
acgcgggtccc	gcacctgggtg	ctcttcgggg	acgtcggcaa	gcccggcgac	atcatggaga	480
ccctcggggcg	gaatgggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 55

<211> 546

<212> DNA

<213> *Alexandrium tamarense*

<400> 55

tgcagcgatg	ctactcctac	tacgtcccga	cgtectacgc	cccactgctg	gacaggtacc	60
acagcaccct	cttcgagaat	cccggctggg	ggttcgctgg	tgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtgggtgg	cagcggggcg	cagcaccaga	180
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tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcgggtccc	gcacctgggtg	ctcttcgggg	acgtcggcaa	gcccggcgac	atcatggaga	480
ccctcggggcg	gaatgggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 56

<211> 546

<212> DNA

<213> *Alexandrium tamarense*

<400> 56

tgcagcgatg	ctactcctac	tacgtcccga	cgtectacgc	cccactgctg	gacaggtacc	60
acagcaccct	cttcgagaat	cccggctggg	ggttcgctgg	tgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcgggtctt	cgcgggcggg	gacttcgcat	240
cgcagccggc	gttcacgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
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tggtcggcgt	cgacttcaac	aaggactctc	gggtggcggc	ggagctcaac	ctgagcaggc	420
acgcgggtccc	gcacctgggtg	ctcttcgggg	acgtcggcaa	gcccggcgac	atcatggaga	480
ccctcggggcg	gaatgggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 57

<211> 549

<212> DNA

<213> *Alexandrium fundyense*

<400> 57

tgcagcgatg	ctactcctac	tacgtcccac	tgtegtacgc	accgctgatg	gcccagatct	60
cgccgatcct	gtttgatgat	gcgggctggg	ggttcactga	cgcggggaca	gactccttcg	120
acgacgtgga	ggagcatggt	gacagaatct	tgaatgttgt	tggcagtggg	gcgcaacacc	180
ggaccctctt	taaggatatg	atgcgacaca	tcagtaccgt	gttcaagggc	gaggcatttg	240
ccttgacagc	aagtttcgct	gtggacactg	gctgtggcga	cgggagcctg	ctcatacata	300
tctatgaaca	tatcaaacag	cacacacccc	gggggaaagt	gcttgatcag	ttccctctga	360
cgatggtcgg	cgttgacctc	aatgaggatc	cgcgagtgcg	aacagctgtg	aatctgagca	420
agcagggcgt	cccgcacgtg	gtcatctctg	gcgatgtggg	taagcctgcg	gagatacttg	480
ccgcgctgaa	gaagaagaag	gtggacgcgt	cgaggacgct	tcattgtccg	tccttcctgg	540

accacgacc

549

<210> 58

<211> 487

<212> DNA

<213> *Alexandrium fundyense*

<400> 58

tgcagcgatg	ctactcctac	tacgtccac	tgctgtacgc	accgctgatg	gcccagatct	60
cgccgatacct	gtttgatgat	gcgggctggg	ggttcactga	cgcggggaca	gactccttcg	120
acgacgtgga	ggagcatgtt	gacagaatct	tgaatgttgt	tggcagtggg	gcgcaacacc	180
ggaccctctt	taaggatatg	atgcgacaca	tcagtaccgt	gttcaagggc	gaggcatttg	240
ccttgacgac	aagtttcgtt	gtggacactg	gctgtggcga	cgggagcctg	ctcatacata	300
tctatgaaca	tatcaaacag	cacacacccc	gggggaaagt	gcttgatcag	ttccctctga	360
cgatggtcgg	cgttgacctc	aatgaggatc	cgcgagtgc	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	tacgtccga	cgctcctacgc	cccactgctg	gacaggtacc	60
acagcatacct	cttcgagaat	cccggctggg	ggttcgccgg	tgccagccgg	gactcgacgg	120
agcaggagat	ccacgtccac	cggacgtga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcattg	actcggtctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
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acggcggtccc	gcacctgggtg	ctgttcgggg	acgtcgggcaa	gccggccgac	atcatggagc	480
tcctcgagacg	gaggggggtg	gacccgagca	ggtcctccca	cgtagcgtcc	ttcctagacc	540
acgacc						546

<210> 60

<211> 545

<212> DNA

<213> *Alexandrium fundyense*

<400> 60

gcagcgctgc	tactcctact	acgtcccgac	gtcctacgcc	ccaatgctgg	acaggtacca	60
cagtatacctc	ttcgagaatc	ccggctgggg	gttcgcgggt	gccggccggg	actcgacagga	120
gcaggagatc	cacgtccacc	ggacgttgaa	cgtgggtggg	agcggggcgc	agcaccagac	180
gctctttcac	gacctcgtgc	ggctcattga	ctcggtcttc	gcggggcggg	acttcgcgtc	240
gcagccggcg	ttcgtcgtgg	acacgggggtg	cggcgacggc	cgcttgctca	ggcgcatcta	300
cgagcacgtg	aagagcaaca	cgccgcgcgg	gaaggcgctc	gccgagcacc	cgctcacgat	360
ggtcggcgctc	gacttcaaca	aggactctcg	ggtagggcag	gagctcaacc	tgagcaggca	420
cgcggtcccg	cacctgggtc	tggtcggggg	cgtagggcaag	ccggccgaca	tcattggagct	480
cctcgagacgg	aggggggtgg	acccgagcag	gtccctccac	gtgcgctcct	tcctagacca	540
cgacc						545

<210> 61

<211> 546

<212> DNA

<213> *Alexandrium fundyense*

<400> 61

tgcagcgatg	ctactcctac	tacgtccga	cgctcctacgc	cccactgctg	gacaggtacc	60
acagcatacct	cttcgagaat	cccggctggg	ggttcgccgg	tgccggccgg	gactcgacgg	120
agcaggagat	ccacgtccac	cggacgtga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcattg	actcggtctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcgggcg	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggg	420

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

<210> 62

<211> 546

<212> DNA

<213> *Alexandrium fundyense*

<400> 62

tgcagcgatg	ctactcctac	tacgtcccca	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcctcct	cttcgagaat	cccggctggg	ggttcgccgg	tgccggccgg	gactcgcagg	120
agcaagagat	ccacgtccac	cggacgtga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcggctctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcgccgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcggc	ggaaggcgct	cgccgagtac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gccggccgac	atcatggaga	480
tcctcggggc	gaacgggggtg	gatccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 63

<211> 546

<212> DNA

<213> *Alexandrium fundyense*

<400> 63

tgcagcgctg	ctactcctac	tacgtcccca	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcctcct	cttcgagaat	cccggctggg	ggttcgccgg	tgccggccgg	gactcgcagg	120
agcaggagat	ccacgtccac	cggacgtga	acgtgggtgg	cagcggggcg	cagcaccaga	180
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tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gccggccgac	atcatggaga	480
tcctcggggc	gaacgggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 64

<211> 546

<212> DNA

<213> *Alexandrium fundyense*

<400> 64

tgcagcgatg	ctactcctac	tacgtcccca	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcctcct	cttcgagaat	ctcggctggg	ggttcgccgg	tgccggctcg	gactcgcagg	120
agcaggagat	ccacgtccac	cggacgtga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcggctctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcgccgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcggc	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttctggg	acgtcggcaa	gcccgccgac	atcatggaga	480
tcctcggggc	gaacgggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 65

<211> 545

<212> DNA

<213> *Alexandrium fundyense*

<400> 65

gcagcgatgc	tactcctact	acgtcccgac	gtcctacgcc	ccactgctgg	acaggtacca	60
cagcctcctc	ttcgagaatc	ccggctgggg	gttcgccggg	gccggccggg	actcgcagga	120
gcaggagatc	cacgtccacc	ggacgtgaa	cgtgggtggc	agcggggcgc	agcaccagac	180
gctcttcacg	gacctcgtgc	ggctcattga	ctcgggtcttc	gcgggcgggg	acttcgcgtc	240

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

<210> 66

<211> 546

<212> DNA

<213> *Alexandrium fundyense*

<400> 66

tgcagcgatg	ctacttctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcatcct	cttcgagaat	cccggctggg	ggttcgcggg	tgccggccgg	gactcgcagg	120
agcaggagat	ccacgtccac	cggacgctga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcgggtctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgctcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcattc	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggaccctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctgggtg	ctgttcggag	acgtcggcaa	gcccgcggac	atcatggaga	480
tcctcggacg	gagcgggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 67

<211> 545

<212> DNA

<213> *Alexandrium fundyense*

<400> 67

tgcagcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcatcct	cttcgagaat	cccggctggg	ggttcgcggg	tgccggccgg	gactcgcagg	120
agcaggagat	ccacgtccac	cggacgctga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcgggtctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgctcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcattc	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgat	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctgggtg	ctgttcgggg	acgtcggcaa	gcccgcggac	atcatggagc	480
tcctcggacg	gaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttccagacca	540
cgacc						545

<210> 68

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 68

tgcagcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcatcct	cttcgagaat	cccggctggg	ggttcgcggg	tgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcgggtctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcacatcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcattc	300
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tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctgggtg	ctcttcgggg	acgtcggcaa	gcccgcggac	atcatggaga	480
ccctcggggc	gaatgggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 69

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 69

tgcagcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggcacc	60
------------	------------	------------	------------	------------	------------	----

acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgcgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcgtgg	actcgggtctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcacat	300
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tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcgggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcggac	atcatggagc	480
tcctcggggc	gaaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 70

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 70

tgacgcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcgtgg	actcgggtctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcacat	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

tgacgcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	gcgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcgtgg	actcgggtctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcacat	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtgcgacg	gagctcaacc	tgagcaggca	420
cgcgggtccc	caacctggtg	tggtcggggg	cgtcgggcaa	cccgcggaca	tcattggagct	480
cctcggggcg	aaggggggtg	acccgagcag	gtccctccac	gtgcgctcct	tcctggacca	540
cgacc						545

<210> 72

<211> 545

<212> DNA

<213> *Alexandrium minutum*

<400> 72

tgacgcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcatcat	cttcgagaat	cccgggtggg	agttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcgtgg	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
acgcgggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcggac	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	cgtectacgc	cccactgctg	gacaggtacc	60
acagcatcct	cttcgagaat	cccggctggg	ggttcgccgg	tgccggccgg	gactcgcagg	120
agcaggagat	ccacgtccac	cggacgctga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcggctct	cgcgggcggg	gacttcgcgt	240
cgcagccggt	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaat	acgccgcgcg	ggaaggcgct	cgcctagcac	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	aagaaggagg	tcaccgtcgt	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagcgcgtg	ctctcgtcga	tcccggagg	ggccgacatc	acctacgtgt	180
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tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	cggttgcggc	gttcttggcc	300
gcaaccccga	ctcggagcaa	cccttcggat	atggcggcgg	cggcgtcgtc	aagtacttcg	360
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tggccaagaa	ctcgaacatg	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcgaagac	gacctcgcac	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

cgagcctggc	gggcgagagc	ttgttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
agacggcagc	caggctctgc	aagaaggagg	tcaccgtcgt	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagcgcgtg	ctctcgtcga	tcccggagg	ggccgacatc	acctacgtgt	180
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tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	cggttgcggc	gttcttggcc	300
gcaaccccga	ctcggagcaa	cccttcggat	atggcggcgg	cggcgtcgtc	aagtacttcg	360
ggctggacta	cgcgagaaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	420
cgcccggcgg	attcgtgggc	tgcgacgcgc	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	cgagcgcgtg	ctctcgtcga	tcccggagg	ggccgacatc	acctacgtgt	180

gcgacggcgt	ctactccacg	gacggagagc	tgcgcgactt	gcccgccata	tgtgcttggt	240
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gcaaccccga	ctcggagcaa	cccttcggat	atggcgccgg	cgccgtcgtc	aagtacttcg	360
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cgcccggcgg	attcgtgggc	tgcgcacgcg	agaccgacga	gaagttcgrc	attctgaact	480
tggccaagaa	ctcgaacacg	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcaagac	gaccctcgac	ctcractttg	ccgaggggga	ccgtcagcgc	aagcggttc	600
ttgagggcga	cctggaattt	tgcgaggggc	tcaaggcgct	cggtgcccc	crcacctacc	660
acgggttccc						670

<210> 78

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 78

cgagcctggc	gggagagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
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cggagcagct	cgagygcgtg	ctctcgtcga	tcccggagg	ggccgacatc	acctacgtgt	180
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tgaggccgcg	cggggccaa	atactcgtgg	acgactcgca	cggttgccgc	gttcttgccc	300
gcaaccccga	ctcggagcaa	cccttcggat	atggcgccgg	cgccgtcgtc	aagtacttcg	360
ggctggacta	cgcgagaa	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	420
cgcccggcgg	attcgtgggc	tgcgcacgcg	agaccgacga	gaagttcgcc	attctgaact	480
tggccaagaa	ctcgaacacg	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcaagac	gaccctcgac	ctcractttg	ccgaggggga	ccgtcagcgc	aagcggttc	600
ttgagggcga	cctggaattt	tgcgaggggc	tcaaggcgct	cggtgcccc	crcacctacc	660
acgggttccc						670

<210> 79

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 79

cgagcctggc	gggagagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
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cggagcagct	cgagygcgtg	ctctcgtcga	tcccggagg	ggccgacatc	acctacgtgt	180
gcgacggcgt	ctactccacg	gacggagagc	tgcgcgactt	gcccgccata	tgtgcttggt	240
tgaggccgcg	cggggccaa	atactcgtgg	acgactcgca	cggttgccgc	gttcttgccc	300
gcaaccccga	ctcggagcaa	cccttcggat	atggcgccgg	cgccgtcgtc	aagtacttcg	360
ggctggacta	cgcgagaa	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	420
cgcccggcgg	attcgtgggc	tgcgcacgcg	agaccgacga	gaagttcgcc	attctgaact	480
tggccaagaa	ctcgaacacg	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcaagac	gaccctcgac	ctcaactttg	ccgaggggga	ccgtcagcgc	aagcggttc	600
ttgagggcga	cctggaattt	tgcgaggggc	tcaaggcgct	cggtgcccc	cacacctacc	660
acgggttccc						670

<210> 80

<211> 627

<212> DNA

<213> Alexandrium minutum

<400> 80

cgccacgac	tgcgtgcaga	cggcagccag	gctctgcaag	aaggagtgca	ccgtcgtgcg	60
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cgacatcacc	tacgtgtgcg	acggcgtcta	ctccacggac	ggagagctcg	ccgacttgcc	180
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cgctcgtcaag	tacttcgggc	tggactacgc	ggagaacaac	atcatctacg	ccgggcagct	360
gagcaaggcg	ttcaattcgc	ccggcggatt	cgtgggctgc	gcacgcgaga	ccgacgagaa	420
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tactgcgggc	ctgtcgggtg	cgaagacgac	cctcgacctc	aactttgccg	agggggaccg	540
tcagcgcaag	cggcttcttg	aggcgacctt	ggaattttgc	gaggggctca	aggcgctcgg	600

gtgccccac acctaccacg ggttccc

627

<210> 81

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 81

cgagcctggc	gggagagagc	gggttcctcc	tcctggacat	caacgcccac	gactgcgtgc	60
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cggagcagct	cgagcgcgtg	ctctcgtcga	tcccgggaag	ggccgacatc	acctacgtgt	180
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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	gggagagagc	gggttcctcc	tcctggacat	caacgcccac	gactgcgtgc	60
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cggagcagct	cgagcgcgtg	ctctcgtcga	tcccgggaag	ggccgacatc	acctacgtgt	180
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tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	cgggtgcggc	gttcttgccc	300
gcaaccccga	ctcggagcaa	cccttcggat	atggcgggcg	cggcgctcgc	aagtactcgg	360
gctggactac	gcgagagaaca	acatcatcta	cgccgggcag	ctgagcaagg	cgttcaattc	420
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tgccaagacg	accctcgacc	tcaactttgc	cgagggggac	cgtcagcgca	agcggcttct	600
tgaggcgacc	ctggaatttt	gcgaggggct	caaggcgctc	gggtgcccc	acacctacca	660
cggttccc						669

<210> 83

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 83

agcctttgtg	ggcagagaca	ggttcccccg	cctgtgcata	aacgcctacg	attgcgcgca	60
gacggccgcc	aggctctgca	agaaggcg	caccgtggtg	cgcttgaagc	acaacgacac	120
ggagcagctc	gagcacatgc	tctcgtcgat	cctgcagggg	ccgacatcac	ctacgtgtgc	180
gacggcgtgt	actccacgga	cggagagctc	gccgacttgc	ccgccatatg	tgttttgtgt	240
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cgaccccgac	tcggagcaac	ccctcgggta	tggtggcg	ggcgccgctc	agtatttcgg	360
gctgggctac	gcgagagaaca	acatcagcta	cgccgggcag	ctgagcaagg	cgttcaattc	420
gcccggcgga	atcgtcggtt	gtgcgcgcga	gaccgacgag	aatttcggcg	ctctgaactt	480
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tgccaagacg	accctcgacc	tcaacggcgt	cgagggggac	ttttcagcgc	aagcggctgc	600
tggcgactac	cctcgaattc	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
acgggttccc						670

<210> 84

<211> 671

<212> DNA

<213> Alexandrium minutum

<400> 84

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cggagcagct	cgagcacatg	ctctcgtcga	tcctgcaggg	gccgacatca	cctacgtgtg	180
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tgaggccgcg	tggggccaat	atactcgtag	acgactcgca	tggtgctggc	gttcttggcc	300
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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

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acggagcagc	tcgagcacat	gctctcgtcg	atcctgcagg	ggccgacatc	acctacgtgt	180
gcgacggcgt	gtactccacg	gacggagagc	tcgcccactt	gcccgccata	tgtgttttgt	240
gtgaggccgc	gtggggccaa	tatactcgta	gacgactcgc	atggctgcgg	cgctcttggc	300
cgcgactccg	actcggagca	accctcggg	tatggtggcg	gcggcgccgt	cgagtatttc	360
gggctgggct	acgaggagaa	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

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

tcgcccggcg	gaatcgtcgg	ttgtgcgcgc	gagaccgacg	agaatttcgg	cgctctgaac	480
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agtgcgaaga	cgaccttcga	cctcaacgcc	gtcgaagggg	acttttcagc	gcaagcggtc	600
gctggcgact	accctcgaat	tctgcgaggg	gctcaaggcg	ctcgggtgcc	cccacaccta	660
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<210> 88

<211> 671

<212> DNA

<213> *Alexandrium minutum*

<400> 88

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cggagctgct	cgagcgcgtg	ctctcgtcga	tcccggaggg	ggccgacatc	acctacgcgt	180
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tgaggcccg	cggggccaag	atactcgtgg	acgactcgca	tggctgcggc	gttcttgggc	300
gcgaccccg	ctcggagcaa	cccctcgggt	atgggtggcg	cggcgcgcgtc	gagtatttcg	360
ggctgggcta	cgcgagagaa	aacatcagct	acgcggggca	gctgagcaag	gcgttcaatt	420
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ttggcgacta	ccctcgaatt	ctgcgagggg	ctcaaggcgc	taggggtgcc	ccacacctac	660
cacgggttcc	c					671

<210> 89

<211> 714

<212> DNA

<213> *Alexandrium minutum*

<400> 89

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tgcgcctgaa	gcacaacgac	acggagcagc	tcgagcgcgt	gctctcgtcg	atcccggagg	180
gggcccacat	cacctacgtg	tgcgacggcg	tctactccac	ggacggagag	ctcgcgcgact	240
tgcccgccat	atgtgctcgt	ttggggccgc	gcggggccga	gatactcgtg	gacgactcgc	300
acggttgccg	cgttcttggc	cgcaaccccc	actcggagca	acccttcgga	tatggcgggc	360
gcggcgctcg	ctagtacttc	gggctggact	acgcggagaa	caacatcatc	tacgccgggc	420
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accgtcagcg	caagcggtt	cttgagggcg	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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tgcgcctgaa	gcacaacgac	acggagcagc	tcgagcgcgt	gctctcgtcg	atcccggagg	180
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accgtcagcg	caagcggtt	cttgagggcg	ccctggaatt	ttgcgagggg	ctcaaggcgc	660
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<210> 91

<211> 714

<212> DNA

<213> *Alexandrium minutum*

<400> 91

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accgtcagcg	caagcggcct	cttgaggcga	ccttgaattt	ttgcgagggg	ctcaaggcgc	660
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<210> 92

<211> 713

<212> DNA

<213> *Alexandrium minutum*

<400> 92

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ccgtcagcgc	aagcggcttc	ttgaggcgac	ccttgaattt	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	aagcggcttc	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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cggaaacagc	cgagcacatg	ctctcgtcaa	tcccgcaggg	ggccgacatc	acctacgtgt	180

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tggccaagaa	ctcgaacaca	ctcgtgctca	cagggccgat	ctgtactgcc	agcctgtcga	540
gtgcaagac	gaccttcgac	ctcaacgccg	ccgaggggga	ccttcagcgc	aagcggcttc	600
tggcggtac	cctcgaattc	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
acgagttccc						670

<210> 95

<211> 670

<212> DNA

<213> Alexandrium tamarense

<400> 95

cgagcctcgt	gggcgagagc	gggttcctcg	tcctcgacat	aaacacccac	gactgcgtgc	60
agacggccgc	caggctctgc	aagaaggcg	ccaccgtggt	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagcacatg	ctctcgtcga	tcccgcagg	ggccgacatc	acctacgtgt	180
gcgacggcgt	gtactccacg	gacggagagc	tcgccgactt	gcccgccata	tgtgcttggt	240
tgaggcccg	cggggccaa	atactcgtag	acgactcgca	tggtgcggc	gttcttgcc	300
gcaacccga	ctcggagcaa	cccctcgggt	gtggtggtgg	cggcgtcgtc	gagtacttcg	360
ggctggatta	cgcgagaa	aacgacatct	acgccgggca	gctgagcaag	gcattcaatt	420
cgcccgccg	attcgtcggc	tgtgcgcgcg	agacagacga	gaagtgcggc	attctgagct	480
tggccaagaa	ctcgaacaca	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcaatgac	gaccttcgac	ctcaacgccg	ccgaggggga	ccttcagcgc	aagcggcttc	600
tggcgccgac	cctcgaattc	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
acgggctccc						670

<210> 96

<211> 670

<212> DNA

<213> Alexandrium tamarense

<400> 96

cgagcctcgt	gggcgagagc	gggttcctcg	tcctcgacat	aaacacccac	gactgcgtgc	60
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cggagcagct	cgagcacatg	ctctcgtcga	tcccgcagg	ggccgacatc	acctacgtgt	180
gcgacggcgt	gtactccacg	gacggagagc	tcgccgactt	gcccgccata	tgtgcttggt	240
tgaggcccg	cggggccaa	atactcgtag	acgactcgca	tggtgcggc	gttcttgcc	300
gcaaccctga	ctcggagcaa	cccctcgggt	gtggtggtgg	cggcgtcgtc	gagtacttcg	360
ggctggatta	cgcgagaa	aacgacatct	acgccgggca	gctgagcaag	gcgttcaatt	420
cgcccgccg	attcgtcggc	tgtgcgcgcg	agacagacga	gaagtgcggc	attctgagct	480
tggccaagaa	ctcgaacaca	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcaatgac	gaccttcgac	ctcaacgccg	ccgaggggga	ccttcagcgc	aagcggcttc	600
tggcgccgac	cctcgaattc	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
acgggctccc						670

<210> 97

<211> 670

<212> DNA

<213> Alexandrium tamarense

<400> 97

ccagcctcgc	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	ggctgcgtgc	60
agacggccgc	caggctctgc	aagaatggcg	tcaccgtggt	gcgcctgaag	cacaacgaca	120
cggagcagct	ggagcgcag	ctctcctcga	tcccgcagg	ggccgacatc	acctacgtgt	180
gcgacggcgt	atactccaca	gacggagagc	tcgccgactt	gcccgccata	tgtgcttggt	240
tgaggcccg	cggggccaa	atactcgtgg	acgactcgca	tggtgcggc	gttcttgcc	300
gaaacccaga	ctcggagcaa	cccttcgggt	atggtggcgg	tggcgtcgtc	gagtacttcg	360
ggctggacta	cgcgagaa	aacatcatct	acgccgggca	gctgagcaag	gcgttcaact	420
tggccggcg	attcgtcggc	tgcgcgcgcg	agaccgacga	gaagttcggc	atcctgaact	480
tggccaagaa	ctcgaacaca	ctcgtgttca	cagggccgat	ctgtaccgcc	ggcctgtcga	540
gtgcaaagac	gaccttgac	ctcaacgccg	ccgaggggga	ccttcagcgc	aggcggctcc	600

tggcgggcgac cctcgagttc tgcgaggggc tcagggcgct cgggtgcccc cacacctacc 660
acggcttccc 670

<210> 98

<211> 713

<212> DNA

<213> *Alexandrium tamarense*

<400> 98

tgctcaacat	gggagtcac	cccagcctcg	cgggagagag	cgggttcctc	ctcctggaca	60
taaacgccc	cgactgcgtg	cagacggccg	ccaggctctg	caagaagggc	gtcaccgtgg	120
tgcgcctgaa	gcacaacgac	acggagcagc	tggagcgcat	gctctcctcg	atcccgcagg	180
gggcccacat	caccacgtg	tgcgacggcg	tgtactccac	agacggaggg	ctcgccgact	240
tgcccgccat	atgtgcttgt	ttgaggccgc	gcgggaccaa	gatactcgtg	gacgactcgc	300
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ctgtaccgcc	ggcctgtcga	gtgcaaagac	gaccctggac	ctcaacgccg	ccgaggggga	600
ccttcagcgc	agggcgctcc	tggcggcgac	cctcgagttc	tgcgaggggc	tcagggcgct	660
cgggtgcccc	cacacctacc	acggcttccc	catcgtcaac	atctactgga	ccc	713

<210> 99

<211> 713

<212> DNA

<213> *Alexandrium tamarense*

<400> 99

tgctcaacat	gggagtcac	cccagcctcg	cgggagggag	cgggttcctc	ctcctggaca	60
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gcgcctgaag	cacaacgaca	cggagcagct	ggagcgcatg	ctctcctcga	tcccgcaggg	180
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gcccgcata	tgtgcttgtt	tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	300
tggctgcggc	gttcttggcc	gaaacccaga	ctcggagcaa	cccttcgggt	atggtggtgg	360
tggcgtcgtc	gagtacttcg	ggctggacta	cgcggagaac	aacatcatct	acgccgggca	420
gctgagcaag	gcgttcaact	cgcccggcgg	attcgtcggc	tgcgcgcgcg	agaccgacga	480
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ccttcagcgc	agggcgctcc	tggcggcgac	cctcgagttc	tgcgaggggc	tcagggcgct	660
cgggtgcccc	cacacctacc	acggcttccc	catcgtcaac	atctactgga	ccc	713

<210> 100

<211> 713

<212> DNA

<213> *Alexandrium tamarense*

<400> 100

tgctcaacat	gggagtcac	cccagcctcg	cgggagggag	cgggttcctc	ctcctggaca	60
taaacgccc	cgactgcgtg	cagacggccg	ccaggctctg	caagaagggc	gtcaccgtgt	120
gcgcctgaag	cacaacgaca	cggagcagct	ggagcgcatg	ctctcctcga	tcccgcaggg	180
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gcccgcata	tgtgcttgtt	tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	300
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gctgagcaag	gcgttcaact	cgcccggcgg	attcgtcggc	tgcgcgcgcg	agaccgacga	480
gaagttcggc	atcctgaact	tggccaagaa	ctcgaacaca	ctcgtgttca	cagggccgat	540
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ccttcagcgc	agggcgctcc	tggcggcgac	cctcgagttc	tgcgaggggc	tcagggcgct	660
cgggtgcccc	cacacctacc	acggcttccc	catcgtcaac	atctactgga	ccc	713

<210> 101

<211> 714

<212> DNA

<213> *Alexandrium tamarense*

<400> 101

tgctcaacat	gggagtcac	cccagccccg	cgggagagag	cgggttcctc	ctcctggaca	60
taaagccca	cgactgctg	cagacggccg	ccaggctctg	caagaagggc	gtcaccgtgg	120
tgcgctgaa	gcacaacgac	acggagcagc	tggagcgcat	gctctcctcg	atccccgagg	180
gggcccacat	cacctacgtg	tgcgacggcg	tgtactccac	agacggagag	ctcggccgact	240
tgcccgccat	atgtgattgt	ttgaggccgc	gcggggccaa	gatactcgtg	gacgactcgc	300
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accttcagcg	caggcggctc	ctggcggcga	ccctcgagtt	ctgcgagggg	ctcagggcgc	660
tcgggtgccc	ccacacctac	cacggcttcc	ccatcgtaaa	catctactgg	accc	714

<210> 102

<211> 667

<212> DNA

<213> Alexandrium fundyense

<400> 102

cgagcctcgt	gggagagagc	gggttcctcc	tcctgtacat	aaacgcccac	gtctgcgtgc	60
agacggccgc	caggctctgc	aagaagggcg	ccaccgtggg	gcgcctgaag	cacaacgaca	120
cggaaacagcc	cgagcacatg	ctctcgctga	tcccgcaggg	ggccgacatc	acctacgtgt	180
gcgacgtact	ccacggacga	agagctcgcc	gacttgcccc	ccatatgtgc	ttgtttgagg	240
ccgcgcgggg	ccaagatact	cgtagacgac	tcgcatggct	gcggcgcttc	tggccgcaac	300
cccaactcgg	agcaaccctc	cgggtatggg	ggcgggcgcg	tcacgagata	cttcggggctg	360
gactacgcgg	agaacacccat	catatacgcc	gggcagctga	gcaaggcggt	caattcgccc	420
ggcggattcg	tcagctgtgc	gcgcgcgaga	ccgacgagaa	tttcggcggt	atgaacttgg	480
ccaagaactc	gaacacactc	gtgttcacag	ggccgatctg	tactgccggc	ctgtcgagtg	540
cgaagacgac	cttcgacctc	aacggccgcg	agggggacct	tcagcgcaag	cggcttctgg	600
cggctaccct	cgaattctgc	gaggggctca	aggcgctcgg	gtgccccac	acctaccacg	660
ggttccc						667

<210> 103

<211> 670

<212> DNA

<213> Alexandrium fundyense

<400> 103

cgagcctcgt	gggagagagc	gggttcctcc	tcctgtacat	aaacgcccac	gactgcgtgc	60
agacggccgc	caggctctgc	aagaagggcg	ccaccgtggg	gcgcctgaag	cacaacgaca	120
cggaaacagcc	cgagcacatg	ctctcgctga	tcccgcaggg	ggccgacatc	acctacgtgt	180
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gcaaccccaa	ctcggagcaa	ccccgcgggt	atgggtgggt	cggcgctcatg	gagtacttcg	360
ggctggacta	cgcgagagaa	aacatcatct	atgccgggca	gctgagcaag	gcgttcaatt	420
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tggccaagaa	ctcgaacaca	ctcgtgttca	cagggccgat	ctgtattgcc	ggcctgtcga	540
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acgggttccc						670

<210> 104

<211> 670

<212> DNA

<213> Alexandrium fundyense

<400> 104

cgagcctcgt	gggagagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
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cggagcagct	cgagcacatg	ctctcgctga	tcccgcaggg	ggccgacatc	acctacgtgt	180
gcgacggcgt	gtactccacg	gacggagagc	tcgccgactt	gcccggcata	tgtgcttggt	240
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ggctggacta	cgcgagagaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	420
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tggccaagaa	ctcaaacaca	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
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tggcgccgac	cctcgaattc	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
acgggttccc						670

<210> 105

<211> 667

<212> DNA

<213> Alexandrium fundyense

<400> 105

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cggaaacagcc	cgagcacata	ctctcgtcga	tcccgcagg	ggcgacatc	acctacatgt	180
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tgaggccgcg	tggggccaag	atactcgtag	acgactcgca	tggctgcggc	tttcttgccc	300
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cgaagacgac	cttcgacctc	aacgccgccg	agggggacct	tcagcgcaag	cggcttctgg	600
cggctaccct	cgaattctgc	gaggggctca	aggcgctcgg	gtgacccac	acctaccacg	660
ggttccc						667

<210> 106

<211> 670

<212> DNA

<213> Alexandrium fundyense

<400> 106

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cggagcagct	cgagcacata	ctctcgtcga	tcccgcagg	ggccgacatc	acctacgtgt	180
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gcaacccccga	ctcggagcaa	cccctcgggt	atgggtggcg	cggcgtcgtc	gagtacttcg	360
ggctggacta	cgcgagagaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	420
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tggcgccgac	cctcgaattc	tgcgaggggc	tcaaggcgct	cgggtgcccc	caacctacc	660
acgggttccc						670

<210> 107

<211> 668

<212> DNA

<213> Alexandrium fundyense

<400> 107

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cggaaacagcc	cgagcacatg	ctctcgtcga	tcccgcagg	ggcgacatca	cctacgtgtg	180
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tgcgaagacg	accttcgacc	tcaacgccgc	cgagggggac	ccttcagcgca	agcggttct	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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cgagtgcgaa	gacgaccttc	gacctcaacg	ccgccgaggg	ggaccttcag	cgcaagcggc	600
ttctggcggc	gacctcgaa	ttctgcgagg	ggttcaaggc	gctcgggtgc	ccccacacct	660
accacggggt	ccc					673

<210> 109

<211> 669

<212> DNA

<213> *Alexandrium fundyense*

<400> 109

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cggaacagcc	cgagcacatg	ctctcgctga	tcccgcaggg	ggccgacatc	acctacgtgt	180
gtgacggcgt	gtactccacg	gacgaagagc	tcgccgactt	gcccgcata	tgtgcttggt	240
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caaccccaac	tcggagcaac	ccctcgggta	tggtggcggc	ggcgtcatcg	agtacttcgg	360
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gcccggcgga	ttcgtcagct	gtgcgcgcga	gaccgacgag	aatttcggcg	ttctgaactt	480
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tgcgaagacg	accttcgacc	tcagcgccgc	cgagggggac	cttcagcgca	agcggcttct	600
ggcggctacc	ctcgaattct	gcgaggggct	caaggcgctc	gggtgcccc	acacctacca	660
cgggttccc						669

<210> 110

<211> 673

<212> DNA

<213> *Alexandrium fundyense*

<400> 110

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cggagcagct	cgagcacatg	ctctcgccga	tcctgcaggg	gggggcgaca	tcacctacat	180
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cgggctggac	tacgcgagga	acaacatcat	ctacgccggg	cagttgagca	aggcgttcaa	420
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cgagtgcgaa	gacgaccttc	gacctcaacg	ccgccgaggg	ggaccttcag	cgcaagcggc	600
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accacggggt	ccc					673

<210> 111

<211> 668

<212> DNA

<213> *Alexandrium fundyense*

<400> 111

cgagcctcgt	gggcgagagc	aggttcctcc	tcctgtacat	aaacgcccac	gactgcgtgc	60
agacagccgc	caggctctgc	aagaagggcg	ccaccgtggt	gcgcctgaag	cacaacgaca	120

cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	gccgacatca	cctacgtgtg	180
cgacggcgcg	tactccacgg	acagagagct	cgccgacttg	cccgccatat	gtgcttgttt	240
gaggccgcgc	ggggccaaga	tactcgtaga	cgactcgcac	ggctgcggcg	ttcttgggcg	300
caaccccgac	tcggagcaac	ccctcaagta	tgggtggcggc	gtcgtcgtcg	agtacttcgg	360
gctggactac	gcagagaaca	acatcatcta	cgccgggcag	ctgatcaagg	cgttcaattc	420
gcccggcgga	ttcgtcggct	gtgcgcgcga	gaccgacgag	aatttaggcg	ttctgagctt	480
ggccaagaac	tcgaacacac	tcgggttcac	agggccgac	tgtactgcc	gcctgtcgag	540
tgcgaagacg	accttcgacc	tcaacgcgc	caagggggac	cttcagcgca	agcggttct	600
ggcggtacc	ctcgaattct	gcgaggggtt	caggcgctcg	ggtgccccca	cacctaccat	660
gggttccc						668

<210> 112

<211> 668

<212> DNA

<213> *Alexandrium minutum*

<400> 112

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

<210> 113

<211> 670

<212> DNA

<213> *Alexandrium minutum*

<400> 113

cgagcctggc	gggagagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
agacggcagc	caggctctgc	aagaagggag	tcaccgtcgt	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagcgcgtg	ctctcgtcga	tcccggaggg	ggccgacatc	acctacgtgt	180
gcgacggcgt	ctactccacg	gacggagagc	tcgccgactt	gcccgcctta	tggtgttgtt	240
tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	cggttgcggc	gttcttgccc	300
gcaaccccga	ctcgagcaaa	cccttcggat	atggcgggcg	cggcgtcgtc	aagtacttcg	360
ggctggacta	cgcggagaac	aacatcatct	acgcccggca	gctgagcaag	gcgttcaatt	420
cgcgcggcgg	attcgtgggc	tgcgacgcgc	agaccgacga	gaagttcggc	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	cgggagagag	cgggctcctc	ctcctggaca	60
taaacgccc	cgactgcgtg	cagacggcgg	ccaggctctg	taagaaggga	gtcaccgtcg	120
tgcgcctgaa	gcacaacgac	acggagcagc	tcgagcgcgt	gctctcgtcg	atcccggagg	180
gggcccagac	cacctacgtg	tgcgacggcg	tctactccac	ggacggagag	ctcgcggact	240
tgcccgccat	atgtgcttgt	ttgaggccgc	gcgggggcaa	gatactcgtg	gacgactcgc	300
acggttgcgg	cgttcttggc	cgaacccccg	actcggagca	acccttcgga	tatggcgggc	360
gcgtcgtcaa	gtacttcggg	ctggactacg	cggagaacaa	catcatctac	gccgggcagc	420
tgagcaaggc	gttcaattcg	cccggcggat	tcgtgggctg	cgcacgcgag	accgacgaga	480
agttcggcat	tctgaacttg	gccaagaact	cgaacacgct	cgtgttcaca	gggcccgatc	540

gtactgccgg	cctgtcgagt	gcgaagacga	ccctcgacct	caactttgcc	gaggggggacc	600
gtcagcgtaa	gcggcttctt	gaggcgaccc	tggaattttg	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	cccctggaca	60
tcaacgcccc	cgactgcgtg	cagacggccg	ccaggctctg	caagaaggga	gtcaccgctg	120
tgcgccctgaa	gcacaacgac	acggagcagc	tcgagcgctg	gctctcgtcg	atccccggaag	180
gggcccacat	cacctacgtg	tgcgacggcg	tctaccccac	ggacggagag	ctcgccgact	240
tgcccgccat	atgtgcttgt	ttgaggccgc	gcggggccaa	gatactcgtg	gacgactcgc	300
acggttgcgg	cgttcttggc	cgcaacccc	actcggagca	acccttcgga	tatggcggcg	360
gcggcgctcg	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	cgggcgggag	cggggttcctc	ctcctggaca	60
taaacgcccc	cgactgcgtg	cagacggcag	ccaggctctg	caagaaggga	gtcaccgctg	120
tgcgccctgaa	gcacaacgac	acggagcagc	tcgagcgctg	gctctcgtcg	atccccgagg	180
gggcccacat	cacctacgtg	tgcgacggcg	tctactccac	ggacggagag	ctcgccgacc	240
tgcccgccat	atgtgcttgt	ttgaggccgc	gcggggccaa	gatactcgtg	gacgactcgc	300
acggttgcgg	cgttcttggc	cgcaacccc	actcggagca	acccttcgga	tatggcggcg	360
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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
gacggccgcc	aggctctgca	aacagggtgc	caccgtggtg	cgctgaggc	gcaacgacac	120
ggagcagctc	gagcacatgc	tctcgtcgac	cccgcagggg	ccgacatcac	ctacgtgtgc	180
gacggcggtg	actccacgga	cggagagctc	gccgacttgc	ccgccatatg	tgcttgtttg	240
aggccgcacg	gggccaatat	actcgtagac	gactcgcatg	gttgcgggcg	tcttggccgc	300
aaccccgaact	cggagcaacc	cctcgggtat	ggtagggcg	tcgtctagta	cttcgggctg	360
ggctacgcgg	agcgcaacat	catctacgcc	tggcagttga	gcaaggcgtt	caattcgccc	420
ggcggattcg	ccggctgtac	cggagaccga	cgataagttc	ggcgttctga	gcttggccaa	480
gactcgaac	acactcgtgt	gcacagggcc	gatctgtact	gccggcctgc	cgagtgcgaa	540
gacgaccttc	gacctcaacg	ccgcccaggg	ggaccttcag	cgcaagcggc	ttctggcggt	600
gacctcgga	ttctgcgagg	ggctcaaggc	gctcgggtgc	ccccacacct	accacgggct	660
ccc						663

<210> 118

<211> 671

<212> DNA

<213> Alexandrium fundyense

<400> 118

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cagacggccg	ccaggtcttg	caagaagggc	gccaccgtgg	tgccctgag	gcacaacgac	120
gcggagcagc	tcgagcacat	gctctcgtcg	atcccgcagg	ggcccgacat	cacctacgtg	180
tgcgacggcg	tgtactccac	ggacggagag	ctcgccgact	tgcccgccat	atgtgcttgt	240
ttgaggccgc	gcggggccaa	gatactcgta	gacgactcgc	atggctgcgg	cggtcttggt	300
cgcaaccccg	actcggagca	acccttcggg	tatgggtggc	gcggcgtcgt	cgagtacttc	360
gggctggact	acgcggagaa	caacatcatc	tacgccgggc	agctgagcaa	ggcgttcaat	420
tcgcccggcg	gattcgtcgg	ctgtgcgcgc	gagaccgacg	agaagtctcg	cattctgaac	480
ttggccaaga	actcaaacac	actcgcgttc	acagggccga	tctgtactgc	cggcctgtcg	540
agtgcgatga	cgacctcga	cctcaacgcc	gccgaggggg	accttcagcg	caagcggctt	600
ctggaggcgg	ccctcgaatt	ctgcgagggg	ctcaaggcgc	tcgggtgccc	ccacacctac	660
cacgggttcc	c					671

<210> 119

<211> 669

<212> DNA

<213> Alexandrium fundyense

<400> 119

cgagcctcgt	gggagagagc	gggttctctc	tcctgtacat	aaacgcccgc	gactgcgcgc	60
agacggccgc	caggtctctg	aagaaggggtg	ccaccgtggg	gcgcctgaag	cacaacgaca	120
cgctacagcc	cgagcgcatg	ctctcgtcga	tcccgcaggg	gccgacatca	cctacgtgtg	180
cgacggcgtg	tactccacgg	acgaagagct	cgccgacttg	cccgccatat	gtgcttggtt	240
gaggccgcgc	ggggccaaga	tactcgtaga	cgactcgcac	ggctgcggcg	ttcttgggcg	300
caaccccaac	tcggagcaac	ccctcgggta	tgggtggcgg	ggcgtcatcg	agtacttcgg	360
gctggactac	gcggagaacg	acatcatcta	cgccgggcag	ctgagcaagg	cggttcaattc	420
gcccggcgga	ttcgtcagtt	gtgcgcgcga	gaccgacgct	aatttcggcg	ttctgaactt	480
ggccaagaac	tcgaacacac	tcgtgttcac	agggccgac	tgtactgccc	gcctgtcgag	540
tgcaagacg	accttcgacc	tcaacgcgcg	cgagggggac	cttcagcgca	agcggcttct	600
ggcggctacc	ctcgaattct	gcgaggggct	caaggcgctc	gggtgcccc	acacctacca	660
cgggttccc						669

<210> 120

<211> 669

<212> DNA

<213> Alexandrium fundyense

<400> 120

cgagcctcgt	gggagagagc	aggttctctc	tcctgtacat	caacgcccac	gactgcgtgc	60
agacagccgc	caggtctctg	aagaagggcg	ccaccgtggg	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
gcgacggcgc	gtactccaca	gacagagagc	tcgcccactt	gcccgccata	tgtgcttggt	240
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gcaaccccg	ctcggagcaa	cccctcaagt	atgggtggcg	cgccgtcgtc	gagtacttcg	360
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tggccaagaa	ctcgaacaca	ctcgggttca	cagggccgat	ctgtactgcc	ggcctgtgga	540
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tggcggctac	cctcgaattc	cgcgaggggc	tcaggcgctc	gggtgcccc	acacctacca	660
cgggttccc						669

<210> 121

<211> 668

<212> DNA

<213> Alexandrium fundyense

<400> 121

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agacggccgc	caggtctctg	aagaagggcg	ccaccgtggg	gcgcctgaag	cacaacgaca	120
cggaaacagc	cgagcacatg	ctctcgtcga	tcccgcaggg	gccgacatca	cctacgtgtg	180
cgacggcgtg	tactccacgg	acgaagagct	cgccggcttg	cccgccatat	gtgcttggtt	240
gaggccgcgc	ggggccaaga	tactcgtaga	cgactcgcac	ggctgcggcg	ttcttgggcg	300

caaccccaac	tccgagcaac	ccctcgggta	tgggtggcggc	ggcgtcatcg	agtacttcgg	360
gctggactac	gcggagaaca	acatcatcta	cgccgggcag	ctgagcaagg	cggtcaattc	420
gcccggcgga	ttcgtcagct	gtgcgcgcga	gaccgacgag	aatttcggcg	ttctgaactt	480
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tgcgaagacg	accttcgacc	tcaacgccgc	cgagggggac	cttcagcgca	agcggcttct	600
ggcggcgacc	ctcgaattct	gcgaggggct	caaggcgctc	gggtgcccc	cacctaccac	660
gggttccc						668

<210> 122

<211> 1428

<212> DNA

<213> Alexandrium fundyense

<400> 122

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tgccgcagct	tctgagcacc	cctgtagcac	cggacagcgc	tggatcttgt	gagagcgctcg	180
cgggggacag	gcacggggcc	tccggacgca	acgagctcga	ggaggcttcc	gccaaagtcga	240
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ggcccttgct	cctggaattt	gttgcgagct	tctgtcagcc	cctgcagcgg	cagcccatga	360
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tccccggggc	gggattcagg	cgctcgcgcg	gctcctccgg	ctagcggcgc	ccaccagcgc	540
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gcacgcggtc	ccgcacctgg	tgtgttccgg	ggacgtcggc	aagccggccg	acatcatgga	1380
gatactcggg	cggaaacggg	tggacccgag	caggtccctc	cacgtgcg		1428

<210> 123

<211> 925

<212> DNA

<213> Alexandrium fundyense

<400> 123

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tgccgcagct	tctgagcacc	cctgtagcac	cggacagcgc	tggatcttgt	gagagcgctcg	180
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ggcgcactgc	ttgcggattt	ggcgggagca	ccagccacc	tggagaaggg	cggcttgcaa	660
gcggttgggc	ctcctgctcg	acggggccgt	cctcgtcccc	ctgttgacct	cgatcacata	720
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cgacttcagc	aaggccaatg	ccgcggcaag	ggcggccctc	gggggcatct	tcggcgagtt	840
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cctgcagcgt	agctactcct	actac				925

<210> 124

<400> 124
000

<210> 125
<211> 1450
<212> DNA

<213> *Alexandrium fundyense*

<400> 125

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tgccgcagct	tctgagcacc	cttgtagcac	cggacagcgc	tggatcttgt	gagagcgctcg	180
cgggggacag	ccacggggcc	tccggacgca	acgagctcga	ggaggcttcc	gccaaagtcca	240
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ggacaatggc	catcctcggg	tacttggacc	tggaccctga	gaccgatgtg	tttgccgtgg	480
tccccggggc	ggggattcag	gcgctcactg	cgctcctccg	gccagcggcg	cccaccagcg	540
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cgtcgcagcc	ggcgcttcgc	gtggacacgg	ggtgcggcga	cggccgcttg	ctcaggcgca	1200
tctacgagca	cgtgaagagc	aacacgccgc	gcgggaaggc	gctcgccgag	caccgcgtca	1260
tgatggtcgg	cgtcgacttc	aacaaggact	ctcgggtggc	gacggagctc	aacctgagca	1320
ggcacgcggt	cccgcacctg	gtgctgttcg	gggacgtcgg	caagcccgcc	gacatcatgg	1380
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accacgacca						1450

<210> 126
<211> 1449
<212> DNA

<213> *Alexandrium fundyense*

<400> 126

accgtagcca	ttttggctca	agagttggat	cccaagctgc	tcttccgcag	ccaggcagcc	60
ggcacacccg	ctcccgccga	tcggtccgcc	tctgtcccg	ttcctcccaa	gccaaagcgca	120
tgccgcagct	tctgagcacc	cttgtagcac	cggacagcgc	tggatcttgt	gagagcgctcg	180
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acatccacgg	cctcgacctc	ggcaccgatg	ccttcatgct	ggtgcacggg	tggacttgcg	300
ggcccttgct	cctggagttt	gttgcgaaact	tcctgcagcc	cttgcagcag	cagcccatga	360
ccgccgagca	gctcgccgcg	gagacaaacg	cgggggaagg	gcccgtggcg	atcactctgc	420
ggacaatggc	catcctcggg	tacttggacc	tggaccctga	gaccgatgtg	tataccgtgg	480
tccccggggc	ggggattgag	gcgctcgccg	cgctcctccg	gccagcggcg	cccaccggcg	540
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cggcgactg	cttgcgatt	tgggcgagc	accggcccac	ctggagaagg	gcggcttgca	660
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cgtcgcagcc	cgcgcttcgc	gtggacacgg	ggtgcggcga	cggccgcttg	ctcaggcgca	1200
tctacgagca	cgtgaagagc	aacccgccgc	gcgggaaggc	gctcgccgag	caccgcgtca	1260
cgatggtcgg	cgtcgacttc	aacaaggact	ctcgggtggc	gacggagctc	aacctgagca	1320

ggcacgcagt	cccgcacctg	gtgctgttcg	gggacgtcgg	caagcccgcc	gacatcatgg	1380
agatcctcgg	gcggaagggg	gtggacccga	gcagggtccct	ccacgtgcgc	tccttcctag	1440
accacgacc						1449

<210> 127

<211> 1449

<212> DNA

<213> *Alexandrium fundyense*

<400> 127

accgtagcca	ttttggetca	agagttggat	cccaagctgc	tcttccgcag	ccaggcggcc	60
ggcgaccccg	ctcccgcga	tcggtccgcc	tctgtctccg	tctctcccaa	gccaaagcgca	120
tgccgcagct	tctgagcacc	cttgtagcac	cggacagcgc	tggatcttgt	gagagcgtcg	180
cgggggacag	gcacggggcc	tccggacgca	acgagctcga	ggaggcttcc	gccaaagtcca	240
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ggcccttgct	cctggagttt	gttgcgaact	tcctgcagcc	cttgcagcgg	cagcccatga	360
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accacagcat	cctctttgag	aatcccggct	gggggttcgc	cggtgccggc	cgggactcgc	1020
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ggcacgcagt	cccgcacctg	gtgctgttcg	gggacgtcgg	caagcccgcc	gacatcatgg	1380
agatcctcgg	gcggaagggg	gtggacccga	gcagggtccct	ccacgtgcgc	tccttcctgg	1440
accacgacc						1449

<210> 128

<211> 882

<212> DNA

<213> *Alexandrium fundyense*

<400> 128

ttccgcagcc	aggcggccgg	cgcacccgct	cccgcggatc	ggtccgcctc	tgctcccgtt	60
cttccaagcc	aagcgcagtc	cgcagcttct	gagcaccctt	gtagcaccgg	acagcgctgg	120
atcttgtgag	agcgtcgcgg	gggacaggca	cggggcctcc	ggacgcaacg	agctcgagga	180
ggcttccgcc	aagtccaaca	tccacggcct	cgacctcggc	accgatgcct	tcagtctggc	240
gcacgggtgg	acttgccggc	ccttgctcct	ggagtttggt	gcgagcttcc	tacagccctt	300
gcagcggcag	cccatgaccg	ccgagcagct	cgccgcggag	acaaacgcgg	gggaagggcc	360
cgtggcgatc	actctgcgga	caatggccat	cctcgggtac	ttggacctgg	accctgagac	420
cgatgtgtat	gccgtgggtc	ccgggcccgg	gattcaggcg	ctcgccgcgc	tcctccggcc	480
agcggcgccc	accagcgcgg	ccttgccaag	catctaccag	cacgcccagc	cgccgttcag	540
ggtgccctca	tccgagggcg	cgcactgctt	gcggatttgg	gcggagcacc	ggcccacctg	600
gagaagggcg	gcttgcaagc	ggctggccct	cctgctcgac	ggggccgtcc	tcgtcccgtc	660
gttgacctcg	atcacatact	ttgcgagggtg	ggacgaggag	gggctggatt	ccggcaaggga	720
gggcgccttg	gaccgcctcg	acttcagcaa	ggccaatgcc	gcggcaaggg	cggccctcgg	780
gggcactctc	ggcgagttgg	gcgtgggcac	agtggacggc	gagggcaccg	tgaccttgac	840
cgcggagggg	tcgttcgccc	tgacgcgtcg	ctactcctac	ta		882

<210> 129

<211> 815

<212> DNA

<213> *Alexandrium fundyense*

<400> 129

ccaagcgcacat	gccgcagcctt	ctgagcacccc	ttgtagcacc	ggacagcgcct	ggatccttgctg	60
agagcgtcgc	gggggacagg	cacggggcct	ccggacgcaa	cgagctcgag	gaggcttccg	120
ccaagtgcga	catccacggc	ctcgacctcg	gcaccgatgc	cttcattgctg	gcgcacgggt	180
ggacttgccg	gcccttgctc	ctggagtttg	ttgcgagcct	cctgcagccc	ttgcagcggc	240
agcccatgac	cgccgagcag	ctcgccgcgg	agacaaacgc	ggggggaggg	cccgtggcga	300
tcactctgcg	gacaatggcc	atcctcggtt	acttggaact	ggaccctgag	accgatgtgt	360
atgccgtggt	ccccggggcg	gggattgagg	cgctcgccgc	gctcctccgg	ccagcggcgc	420
ccaccagcgc	ggccttgcca	agcatctacc	agcacgccc	gccgcccgtt	aggggtgccct	480
catccgaggg	ggcgactgc	ttgcggattt	gggcggagca	ccgggtccacc	tggagaaggg	540
cggcttgcaa	gcggctggcc	ctcctgctcg	acggggccgt	cctcgccccc	ttgttgacct	600
cgatcacata	ctttgcgagg	tgggacgagg	aggggctgga	ttccggcaag	gagggcgccct	660
tggaccgcct	cgacttcagc	aaggccaatg	ccgcggcaag	ggcggccctc	gggggcatct	720
tcggcgagtt	aggcgtgggc	acagtggacg	gcgagggcac	cgtgaccttg	accgcggagg	780
gctcgttcgc	cctgcagcgt	cgctactcct	actac			815

<210> 130

<211> 480

<212> DNA

<213> Alexandrium fundyense

<400> 130

caatggccat	cctcggttac	ttggacctgg	accctgagac	cgatgtgtat	accgtggtcc	60
ccgggcccgg	gattgaggcg	ctcgccgcgc	tcctccggcc	agcggcgccc	accagcgcgg	120
ccttgcaaa	catctaccag	cacgcccagc	cgccgttcag	ggtgccctca	tccgaggcgg	180
cgcactgctt	gcggatttgg	gcggagcacc	ggcccacctg	gagaagggcg	gcttgcaagc	240
ggctggccct	cctgctcgac	ggggccgtcc	togtcccgt	gttgacctcg	atcacatact	300
ttgcgggggtg	ggacgaggag	gggctggatt	ccggcaagga	gggcgccttg	gaccgcctcg	360
acttcagcaa	ggccaatgcc	gcggcaaggg	cgccctccgg	gggcatcttc	ggcgagttgg	420
gcgtggggcac	agtggacggc	gagggcaccg	tgaccttgac	cgcgaggagg	tcgttcaccc	480

<210> 131

<211> 451

<212> DNA

<213> Alexandrium fundyense

<400> 131

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ctcctccggc	cagcggcgcc	caccagcgcg	gccttgcgaa	gcatctacca	gcacgcccag	120
ccgcccgttca	gggtgccctc	atccgaggcg	gcgcactgct	tgccgatttg	ggcgaggcac	180
cggcccacct	ggagaacggc	ggcttgcaag	cggctggccc	tcctgctcga	cggggccgtc	240
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tccggcaagg	agggcgccct	ggaccgcctc	gacttcagca	aggccaatgc	cgcggcaagg	360
gcggccctcg	ggggcgctct	cggcgagttg	ggcgtgggca	cagtggacgg	cgagggcacc	420
gtgaccttga	ccgcggaggg	ctcgttcgcc	c			451

<210> 132

<211> 397

<212> DNA

<213> Alexandrium fundyense

<400> 132

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gcccagccgc	cgttcagggg	gcctcatccc	gaggcggcgc	actgcttgcg	gatttgggcg	120
gagcaccggc	ccacctggag	aacggcggct	tgcaagcggc	tggccctcct	gctcgacggg	180
gccgtcctcg	tcccgttggt	gacctcgatc	acatactttg	cgaggtggga	cgaggagggg	240
ctggattccg	gcaaggaggg	cgccttgagc	cgcctcgact	tcaagcaagg	caatgccgcg	300
gcaagggcgg	ccctcggggg	catcttcggc	gagttggggc	tgggcacagt	ggacggcgag	360
ggcaccgtga	ccttgaccgc	ggagggctcg	ttcgccc			397

<210> 133

<211> 234

<212> DNA

<213> Alexandrium fundyense

<400> 133

ccctcctgct	cgacggggcc	gtcctcgtcc	cgttgttgac	ctcgatcaca	tactttgcga	60
ggtgggacga	ggaggggctg	gattccggca	aggagggcgc	cttggaccgc	ctcgacttca	120
gcaaggccaa	tgccgcggca	agggcggccc	tcgggggcat	cttcggcgag	ttgggcgtgg	180
gcacagtgga	cggcgagggc	accgtgacct	tgaccgcgga	gggctcgttc	gccc	234

<210> 134

<211> 254

<212> DNA

<213> *Alexandrium fundyense*

<400> 134

tcctgctcga	cggggccgctc	ctcgctcccg	tggtgacctc	gatcacatac	tttgcgaggt	60
gggacgagga	ggggctggat	tccggcaagg	agggcgccct	ggaccgcctc	gacttcagca	120
aggccaatgc	cgcagcaagg	gcccgcctcg	ggggcatctt	cggcgagttg	ggcgtgggca	180
cagtggacgg	cgagggcacc	gtgaccttga	ccgcggaggg	ctcgttcgcc	ctgcagcgctc	240
gctactccta	ctac					254

<210> 135

<211> 561

<212> DNA

<213> *Alexandrium fundyense*

<400> 135

caccgtgacc	ttgaccgcgg	agggctcggt	cgccctgcag	cgctcgctact	cctactacat	60
cccagcgtcc	tacgccccac	tgctggacag	gtaccacagc	atcctcttcg	agaatcccgg	120
ctgggggttc	gccggtgccg	gcccgggactc	gcaggagcag	gagatccacg	cccaccggac	180
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cattgactcg	gtcttcgcgg	gtggggactt	cgcgtcgag	ccggcgttcg	tcgtggacac	300
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gcgcgggaag	gcgctcgccg	agcaccgct	cacgatggtc	ggcgctcgact	tcaacaagga	420
ctctcgggtg	gcgacggagc	tcaacctgag	caggcacgcg	gttcgcgacc	tggtgctggt	480
cgggggcgtc	ggcaagcccg	ccgacatcat	ggagatcctc	gggcggaacg	gggtggaccc	540
gagcaggtcc	ctccacgtgc	g				561

<210> 136

<211> 553

<212> DNA

<213> *Alexandrium fundyense*

<400> 136

ccttgaccgc	ggagggctcg	ttcgccctgc	agcgctcgta	ctcctactac	atcccgcagct	60
cctacgcccc	actgctggac	aggtaccaca	gcacccctct	cgagaatccc	ggctgggggt	120
tcgcccgtgc	cggccgggac	tcgcaggagc	aggagatcca	cgtccaccgg	acgtgaacg	180
tggtgggcag	cggggcgagc	caccagacgc	tcttcacgga	cctcgtgcgg	ctcattgact	240
cggctcttcg	gggcggggac	ttcgcgctgc	agccggcggt	cgctcgtggac	acgggggtgcg	300
gcgacggccg	cttgctcagg	cgcatctacg	agcacgtgaa	gagcaacacg	ccgcgcggga	360
aggcgctcgc	cgagcaccgc	ctcacgatgg	tcggcgctcg	cttcaacaag	gactctcggg	420
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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	taogtcccc	cggcccgcga	gatggaccgc	gacagcgcg	180
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cgagggcgctc	cctgaacgat	tgcgctctgc	tccacttcga	cctcgtgcag	tgccctctcc	420
ggcagtagat	ggtgtcgccg	gcggccttcg	ccttgggcct	ggccatggcc	ggcctcctgc	480

cggggagcta	cgagggcgctc	cagacccacc	cggcgcgggg	gcggtactgc	cgcgtgatga	540
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<210> 138

<211> 2570

<212> DNA

<213> Alexandrium fundyense

<400> 138

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cccccgggcc	ggctcccgcg	ccatgcccc	cggactacga	gcaccacgag	gctcttgtcc	1260
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<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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<400> 143

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<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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gctggactac	gcggagaaca	acatcatcta	tgcggggcag	ctgagcaagg	cgttcaattc	960
gcccggcgga	ttcgtcggct	gtgcgcgcga	gaccgacgag	aagttcgga	ttctgaactt	1020
ggccaagaac	tcgaacacac	tcgtgttcac	agggccgatc	tgtactgccg	gcctgtcgag	1080
tgcaagacg	accctcgacc	tcaacgcgc	cgagggggac	cttcagcgca	agcggcttct	1140
ggcgccgacc	ctcgaattct	gcgaggggct	caaggcgctt	gggtgcccc	acacctacca	1200
cgggttccc						1209

<210> 146

<211> 1207

<212> DNA

<213> *Alexandrium fundyense*

<400> 146

catggacctc	ctggactccc	tcaacttcac	cgacttcgca	ggtcagctgg	acgccgcgct	60
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ccccgtgccc	gtctccgtcg	ggctgctctt	cgaggcgctcc	acgcccagga	agctggccgc	120
gcacctccac	cgcgagatgc	agcggtggtg	cggccaggcg	gacggggggc	cgcgccctcg	180
ccccgcaccg	gcccgcgcg	ccgcgcgcgc	gcccgcgtcg	gccaggggagg	aggccgcgga	240
ggctccgctg	gcctcctttg	actcagtgtg	cgccaagctc	gaggggtgct	ccgcgtggt	300
cgacggctgc	tggcgcatcg	acgtggcgaa	ctgcagctac	ctcggcttcc	agtggcgggg	360
cgagatcgcc	gatggcggtg	accgggacgt	gcgcacttgg	ggcgctccacc	ccccgtggac	420
caggctcgtc	tcgtccccga	agctgtacga	cgacgtcgag	gcgcgtctgt	gcgagctgac	480
cggcatcttg	gagtgcgttc	tgtacccgag	cgttaccatg	ctcaacatgg	gagtcacccc	540
gagcctcgtg	ggcgagagcg	ggttcctcct	cctgacataa	acgcccacga	ctgcgtgcag	600
acggccgcca	ggctctgcaa	gaaggcgcc	accgtggtgc	gcctgaggca	caacgacgcg	660
gagcagctcg	agcacatgct	ctcgtcgac	ccgcaggggg	ccgacatcac	ctacgtgtgc	720
gacggcggtg	actccacgga	cggagagctc	gccgacttgc	ccgccatatg	tgcttgtctg	780
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aaccccgaact	cggagcaacc	cttcgggtat	ggtggcgggc	gcgtcgctga	gtacttcggg	900
ctgggactag	cggagaacaa	catcatctac	gccgggcagc	tgagcaaggc	gttcaattcg	960
ccggcgcatg	tcgtcggtg	tgcgcgcgag	accgacgaga	agttcggtat	tctgaacttg	1020
gccaagaact	cgaacacact	cgtgttcaca	gggcccgatc	gtactgccgg	cctgtcgagt	1080
gcgatgacga	ccctcgacct	caacgcgcgc	gaggggacct	tcagcgcaag	cggtctctgg	1140
tggcgaccct	cgaattctgt	gaggggctca	aggcgctcgg	gtgcccccc	acctaccacg	1200
ggttccc						1207

<210> 147

<211> 873

<212> DNA

<213> Alexandrium fundyense

<400> 147

ggacgagatc	gccgatggcg	tggaccggga	cgtgcgcact	tggggcgctc	accccccggtg	60
gaccaggctc	gtctcgtctc	cgaagctgta	cgacgacgtc	gaggcgcgct	gttgcgagct	120
gaccggcatc	tggaaagtgc	ttctgtaccc	gagcggttacc	atgctcaaca	tgggagtcac	180
cccgagcctc	gtgggcgaga	gcgggttcc	cctcctggac	ataaacgccc	acgactgcgt	240
gcagacggcc	gccaggctct	gcaagaagg	cgccaccgtg	gtgcgcctga	ggcacaacga	300
cgcgagagc	ctcgagcaca	tgctctcgtc	gatcccgcag	gggcccacat	cacctacgtg	360
tgcgacggcg	tgtactccac	ggacggagag	ctcgcgcact	agcccaccat	atgtgcttgt	420
ctgaggccgc	gtggggccaa	gatacccgtg	gacgactcgc	atggctgcgg	cggttcttgg	480
cgcaaccccg	actcggagca	acccttcggg	tatggtggcg	gcggcgctgt	cgagtacttc	540
gggctggact	acgcggagaa	caacatcatc	tacgcccggc	agctgagcaa	ggcggttcaat	600
tcgcccggcg	gattcgtcgg	ctgtgcgcgc	gagaccgacg	agaagtctcg	cattctgaac	660
ttggccaaga	actcgaacac	actcgtgttc	acagggccga	tctgtactgc	cagcctgtcg	720
agtgcgatga	cgaccctcga	cctcaacgcc	gccgaggggg	accttcagcg	caagcggtct	780
ctggcgcgga	ccctcgaatt	ctgtgagggg	ctcaaggcgc	tcgggtgccc	cacacctacc	840
acgggttccc	catcgtcaac	atctactgga	ccc			873

<210> 148

<211> 597

<212> DNA

<213> Alexandrium fundyense

<400> 148

acgagatcgc	cgatggcggtg	gaccgggacg	tgcgcacttg	gggcgctccac	cccccggtga	60
ccaggctcgt	ctcgtctccg	aagctgtacg	acgacgtcga	ggcgcgctgt	tgcgagctga	120
ccggcatctg	gaagtgcgtt	ctgtaccoga	gcgttaccat	gctcaacatg	ggagtcaccc	180
cgagcctcgt	gggagagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	240
agacggccgc	caggctctgc	aagaaggggc	ccaccgtggt	gcgcctgagg	cacaacgacg	300
cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	360
gcgacggcgt	gtactccacg	gacggagagc	tcgcccactt	gcccgcata	tgtgcttgtc	420
tgaggccgcg	cggggccaag	atactcgtag	acgactcgca	tggctgcggc	gttcttggcc	480
gcaaccccga	ctcggagcaa	cccttcgggt	atggtggcgg	cggcgtcgtc	gagtacttgc	540
rgctggacta	cgcgagaaac	aacatcatct	acgccgggca	gctgagcaag	gcgttca	597

<210> 149

<211> 723

<212> DNA

<213> Alexandrium fundyense

<400> 149

acgagatcgc	cgatggcgtg	gaccgggacg	tgcgcacttg	gggcgtccac	ccccgtgga	60
ccaggctcgt	ctcgtctccg	aagctgtacg	acgacgtcga	ggcgcgctgt	tgcgagctga	120
ccggcatctg	gaagtgcgtt	ctgtacccga	gcgttaccat	gctcaacatg	ggagtcattc	180
cgagcctcgt	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	240
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cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	360
gcgacggcgt	gtactccacg	gacggagagc	tgcgcgactt	gcccgccata	tgtgcttgtc	420
tgaggcccg	cggggccaag	atactcgtag	acgactcgca	tggtgcggc	gttcttgcc	480
gcaaccccga	ctcggagcaa	cccttcgggt	atggtggcgg	cggcgtcgtc	gagtacttcg	540
ggctggacta	cgcggagaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	600
cggccggcgg	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

acgagatcgc	cgatggcgtg	gaccgggacg	tgcgcacttg	gggcgtccac	ccccgtgga	60
ccaggctcgt	ctcgtctccg	aagctgtacg	acgacgtcgg	ggcgcgctgt	tgcgagctga	120
ccggcatctg	gaagtgcgtt	ctgtacccga	gcgttaccat	gctcaacatg	ggagtcattc	180
cgagcctcgt	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	240
agacggccgc	caggctctgc	aagaaggggc	ccaccgtggt	gcgcctgagg	cacaacgacg	300
cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	360
gcgacggcgt	gtattccacg	gacggagagc	tgcgcgactt	gcccgccata	tgtgcttgtc	420
tgaggcccg	cggggccaag	atactcgtag	acgactcgca	tggtgcggc	gttcttgcc	480
gcaacccctg	actcggagca	acccttcggg	tatggtagcg	gcggcgtcgt	cgagtacttc	540
gggctggact	acgcggagaa	caacatcatc	tacgccgggc	agccgagcaa	ggcgttcaat	600
tgcgccggcg	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

acgagatcgt	cgatggcgtg	gaccgggacg	tgcgcacttg	gggcgtccac	ccccgtgga	60
ccaggctcgt	ctcgtctccg	aagctgtacg	acgacgtcga	ggcgcgctgt	tgcgagctga	120
ccggcatctg	gaagtgcgtt	ctgtacccga	gcgttaccat	gctcaacatg	ggagtcattc	180
cgagcctcgt	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	240
agacggccgc	caggctctgc	aagaaggggc	ccaccgtggt	gcgcctgagg	cacaacgacg	300
cggagcagct	cgagcacatg	ctctcgtcgg	tcccgcaggg	ggccgacatc	acctacgtgt	360
gcgacggcgt	gtactccacg	gacggagagc	tgcgcgactt	gcccgccata	tgtgcttgtc	420
tgaggcccg	cggggccaag	atactcgtag	acgactcgca	tggtgcggc	gttcttgcc	480
gcaaccccga	ctcggagcaa	cccttcgggt	atggtggcgg	cggcgtcgtc	gagtacttcg	540
ggctggacta	cgcggagaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	600
cggccggcgg	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

acgagatcgc	cgatggcgtg	gaccgggacg	tgcgcacttg	gggcgtccac	ccccgtgac	60
caggctcgtc	tcgtctccga	agctgtacga	cgacgtcgag	gcgcgctgtt	gcgagctgac	120

cggcatctgg	aagtgcgttc	tgtacccgag	cgttaccatg	ctcaacatgg	gagtcatccc	180
gagcctcgtg	ggcgagagcg	ggttcctcct	cctggacata	aacgcccacg	actgcgtgca	240
gacggccgcc	aggctctgca	ggaagggcgc	caccgtgggtg	cgcttgaggc	acaacgacgc	300
ggagcagctc	gagcacatgc	tctcgtcgat	cccgagggg	gcccacatca	cctacgtgag	360
cgacggcgtg	tactccacgg	acggagagct	cgccgacttg	cccgccatat	gtgcttgctt	420
gaggccgcgc	ggggccaaga	tactcgtaga	cgactcgcac	ggctgcggcg	tccttgggccg	480
caaccccgac	tcggagcaac	ccttcgggta	tgggtggcggc	ggcgtcgtcg	agtacttcgg	540
gctggactac	gcggagaaca	acatcatcta	cgccgggcag	ctgagcaagg	cgttcaattc	600
gcccggcgga	ttcgtcggct	gtgcgcgcga	gaccgacgag	aagttcggca	ttctgaactt	660
ggccaagaac	tcgaacacac	tctgtgtcac	agggccgatc	tgtactgccg	gcctgtcgag	720
tgcgatgacg	accctcgacc	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

acgagatcgc	cgatggcgtg	gacctggacg	tgcgcacttg	gggcgtccac	cccccggtgga	60
ccaggctcgt	ctcgtctccg	aagctgtacg	acgacgtcga	ggcgcgctgt	tgcgagctga	120
ccggcatctg	gaagtgcgtt	ctgtaccoga	gcgttaccat	gctcaacatg	ggagtcaccc	180
cgagcctcgt	ggcgagagcg	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	240
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cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	360
gcgacggcgt	gtactccacg	gacggagagc	tgcgcgactt	gcccgccata	tgtgcttgct	420
tgaggccgcg	cggggccaaag	atactcgtag	acgactcgca	tggctgcggc	gttcttgggc	480
gcaaccccg	ctcggagcaa	cccttcgggt	atggtggcgg	cggcgctcgt	gagtacttcg	540
ggctggacta	cgcgagaaac	aacatcatct	acgcccggca	gctgagcaag	gcgttcaatt	600
cgcccggcgg	attcgtcggc	tgtgcgcgcg	agaccgacga	gaagttcggc	attctgaact	660
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gtgcgatgac	gaccctcgac	ctcaacgccg	ccgaggggga	ccttcagcgc	aagcggtctc	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	tcgagggcgcg	60
ctgttgcgag	ctgaccggca	tctggaagtg	cgttctgtac	ccgagcggtta	ccatgctcaa	120
catgggagtc	atcccagacc	tcgtgggcga	gagcgggttc	ctcctcctag	acataaacgc	180
ccacgactgc	gtacagacgg	ccgccaaggct	ctgcaagaag	agcgccctccg	tgtgctgcct	240
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cgtcgagtac	tacgggctgg	actacgcgga	gaacaacatc	atctacgccg	ggcagctgaa	540
caaggcggtc	aattcgcccc	gcggattcgt	cggctgtgcg	cgcgagaccg	acgagaagtt	600
cggcattctg	aacttggtca	agaactcgaa	cacacttggtg	ttcacagggc	cgatctgtac	660
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gcgcaagcgg	cttctggcgg	cgacctcgga	attctgtgag	gggctcaagg	cgctcgggtg	780
ccccacacc	taccacgggt	tccccatcgt	caacatctac	tggaccc		827

<210> 155

<211> 670

<212> DNA

<213> Alexandrium fundyense

<400> 155

ccccccgtgg	accaggctcg	tctcgtctcc	gaagctgtgc	gacgacgtcg	aggcgcgctg	60
------------	------------	------------	------------	------------	------------	----

ttgcgagctg	accggcatct	ggaagtgcgt	tctgtacccg	agcgttacca	tgetcaacat	120
gggagtcac	ccgagcctcg	tgggcgagag	cgggttcctc	ctcctgggca	taaacgcccc	180
cgactgcgtg	cagacggccg	ccaggctctg	caagaagggc	gccaccgtgg	tgcgcctgag	240
gcacaacgac	gcggagcagc	tcgagcacat	gctctcgtcg	atcccgcagg	gggcccacat	300
cacctacgtg	tgcgacgggtg	tactccacgg	acggagagct	cgccgacttg	cccgccatat	360
gtgcttgtct	gaggccgcgc	ggggccaagg	tactcgtaga	cgactcgcac	ggctgcggcg	420
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agtacttcgg	gctggactac	gcggagaaca	acatcatcta	cgccgggcag	ctgagcaagg	540
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ttctgagctt	ggccaagaac	tcgaacacac	tcgtgttcac	agggccgatc	tgtactgccg	660
gcctgtcgag						670

<210> 156

<211> 533

<212> DNA

<213> *Alexandrium fundyense*

<400> 156

tcgagggcgt	ctgttgcgag	ctgaccggca	tctggaagtg	cgttctgtac	ccgagcggtta	60
ccatgctcaa	catgggagtc	atcccagacc	tcgtgggcga	gagcgggttc	ctcctcctgg	120
acataaatgc	ccacgactgt	gtgcagacgg	ccgccaggct	ctgcaagaag	ggcggccaccg	180
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cgcattggctg	cggcgttctt	ggccgcaacc	ccgactcgga	gcaacccttc	gggtatggtg	420
gcggcgggcgt	cgtcgagtac	ttcgggctgg	actacgcgga	gaacaacatc	atctacgccg	480
ggcagctgag	caaggcggttc	aattcgcccc	gcggattcgt	cggctgtgcy	cgc	533

<210> 157

<211> 1414

<212> DNA

<213> *Alexandrium fundyense*

<400> 157

tgetcaacat	gggagtcac	ccgagcctcg	tgggcgagag	cgggttcctc	ctcctggaca	60
tcaacgcccc	cgactgtgtg	cagacggccg	ccaggctctg	caagaagggc	gccaccgtgg	120
tgcgcctgaa	gcacaacgac	acggagcagc	tcgagcacat	gctctcgtcg	atcccgcagg	180
gggcccacat	cacctacgtg	tgcgacggcg	tgtactccac	ggacggagag	ctcgtgact	240
tgcccgccat	atgtgcttgt	ttgaggccac	gcggggccaa	gatactcgta	gacgactcgc	300
atgggtgcgg	cgttcttggc	cgcaaccccc	actcggagca	acccttcggg	tatggtggcg	360
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agaagttcgg	cattctgaac	ttggccaaga	actcgaacac	actcgtgttc	acagggccga	540
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gcgtcgtcac	gacccccatg	tggcaccoca	tcgccccgaa	gggccacgag	atgctgcgct	840
tccagttcac	gtcgtccac	gacgagggcg	ccgtgcgcca	catcctcgtg	atcctcgagg	900
acctgatcaa	gcgtacccc	ccctccgcgc	tgcgcgcgcg	catctgatcg	gcccggcgag	960
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ggtagcgctt	gtccgtgtct	gccatcttag	ctggtcacta	ttcgcatcaa	cactcgcaag	1380
gtacgcgtct	gctaaaaaaaa	aaaaaaaaaa	aaaaa			1414

<210> 158

<211> 1315

<212> DNA

<213> *Alexandrium fundyense*

<400> 158

tgctcaacat	gggagtcac	ccgagcctcg	tgggcgagag	gggttcctc	tcctggaca	60
taaagcccca	cgactgctg	cagacggccg	ccaggctctg	caagaagggc	gccaccgtgg	120
tgcgcctgag	gcacaacgac	gcggagcagc	tcgagcacat	gctctcgtcg	atccccgagg	180
gggcccacat	cacctacgtg	tgcgacggcg	tgtactccac	ggacggagag	ctcgcgact	240
tgcccgccat	atgtgcttgt	ctgaggccgc	gcggggccaa	gatactcgta	gacgactcgc	300
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gcggcgctgt	cgagtacttc	gggctggact	acgcggagaa	caacatcatc	tacgccgggc	420
agctgagcaa	ggcgttcaat	tcgcccggcg	gattcgtcgg	ctgtgcgcgc	gagaccgacg	480
agaagttcga	cattctgaac	ttggccaaga	actcgaacac	actcgtgttc	acagggccga	540
tctgtactgc	cggcctgtcg	agtgcgatga	cgaccctcga	cctcaacgcc	gccgaggggg	600
accttcagcg	caagcggcct	ctggcgggcg	cccccgaa	ctgtgagggg	ctcaagggcg	660
tcgggtgccc	ccacacctac	cacgggttcc	ccatcgtcaa	catctactgg	accccggtcg	720
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ccaagggcca	ggcaggtttt	ggctgcccgc	atcttgatcc	tgctgtgttg	tcgtagcgtg	1140
caagcagcaa	gggccaggcg	gagtctgtgc	ttgtacacca	agggccaggc	aggttttggc	1200
tgcgcgcgtt	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
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gcgcctgaag	cacaacgacg	cggagcagct	cgagcacatg	ctctcgtcga	tccccgaggg	180
ggccgacatc	acctacgtgt	gcgacggcgt	gtactccacg	gacggagagc	tcgcccagctt	240
gccccgccata	tgtgcttgtt	tgaggccgcg	cgggggccaa	atactcgtag	acgactcgca	300
tggttgccgc	gttcttggcc	gcaacccccg	ctcggagcaa	cccttcgggt	atggtggcgg	360
cggcgtcgtc	gagtacttcg	ggctggacta	cgcggagaac	aacatcatct	acgccgggca	420
gctgagcaag	gcgttcaatt	cgcccggcgg	attcgtcggc	tgtgcgcgcg	agaccgacga	480
gaagttcggc	attctgaact	tggccaagaa	ctcaaacaca	ctcgtgttca	cagggccgat	540
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ccttcagcgc	aagcggttc	tggcggcgac	cctcgaattc	tgcgaggggc	tcaaggcgct	660
cggttgcccc	cacacctacc	acgggttccc	catcgtcaac	atctactgga	ccccggtcga	720
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tgtagcgctt	gtccatgtct	gccatcttag	ctggtcacta	tttgcacaa	cactcgcaag	1380
gtacgcgtct	gctacgcaca	ggtgacaatt	gacattgtgg	atcgagccac	ggaagggaga	1440
aaaaaaaaaa	aaa					1453

<210> 160

<211> 469

<212> DNA

<213> *Alexandrium fundyense*

<400> 160

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aaacgcgcac	gactgcgtgc	agacggccgc	caggctctgc	aagaagggcg	ccaccgtggt	120
gcgcctgagg	cacaacgcag	cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	180
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gcccgcata	tgtgcttgtt	tgaggccgcg	cggggccaag	atactcgtag	acgactcgca	300
tggctgcggc	gttcttgccc	gcaaccccg	ctcggagcaa	cccttcgggt	atgggtggcg	360
cggcgtcgtc	gagtacttcg	ggctggacta	cgcggagaac	aacatcatct	gcgccgggca	420
gctgagcaag	gcgttcaatt	cgcccggcgg	attcgtcggc	tgtgcgcgc		469

<210> 161

<211> 457

<212> DNA

<213> *Alexandrium fundyense*

<400> 161

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ctgtgtgcag	acggcccgca	ggctctgcaa	gaagggcgcc	accgtggtgc	gcctgaagca	120
caacgacacg	gagcagctcg	agcacatgct	ctcgtcgatc	ccgcaggggg	ccgacatcac	180
ctacgtgtgc	gacggcgtgt	actctacgga	cggagagctc	gccgacttgc	ccgccatatg	240
tgcttgtttg	aggccgcgcg	gggccaagat	actcgtagac	gactcacatg	gctgcggcgt	300
tcttgccgcg	aaccccgact	cggagcaacc	cttcgggtat	ggtggcggcg	gcgtcgtcga	360
gtacttcggg	ctggactacg	cggagaacaa	catcatctac	gccgggcagc	tgagcaaggc	420
gttcaattcg	cccggcggat	tcgtcggcgt	tgccgcgc			457

<210> 162

<211> 424

<212> DNA

<213> *Alexandrium fundyense*

<400> 162

cctcctcctg	gacataaacg	cccacgactg	cgtgcagacg	gccgccaggc	tctgcaagaa	60
ggggccacc	gtgtgcgcgc	tgaagcacia	cgacgcggag	cagctcgagc	acatgctctc	120
gtcgatcccg	cagggggccg	acatcaccta	cgtgtgcgac	gacgtgtact	ccacggacgg	180
agagctcgcc	gacttgcccg	ccatatgtgc	ttgtttgagg	ccgcgcgggg	ccaagatact	240
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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

taaacgccc	cgactgcgtg	cagacggcgg	ccaggctctg	caagaagggc	gccaccgtgg	60
tgccgctgag	gcacaacgac	gcggagcagc	tcgagcacat	gctctcgtcg	atcccgcagg	120
gggcccacat	cacctacgtg	tgcgacggcg	tgtactccac	ggacggagag	ctcggccgact	180
tgcccgccat	atgtgcttgt	ctgaggccgc	gcggggccaa	gatactcgta	gacgactcgc	240
atggctgcgg	cgttcttgcc	cgcaaccccc	actcggagca	acccttcggg	tatgggtggcg	300
gcggcgctcg	cgagtacttc	gggctggact	acgcggagaa	caacatcatc	tacgccgggc	360
agctgagcaa	ggcgttcaat	tcgcccggcg	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	gtcgatcccg	cagggggccg	60
acatcaccta	cgtgtgcgac	ggcgtgtact	ccacggacgg	agagctcgcc	gacttgcccg	120
ccatatgtgc	ttgtttgagg	ccgcgcgggg	ccaagatact	cgtagacgac	tcgcatggct	180
gcggcgcttc	tgcccgcaac	cccgactcgg	agcaaccctt	cgggtatggg	ggcggcggcg	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

cgatccccga	gggggcccga	atcacctacg	tgtgcgacgg	cgtgtactcc	acggacggag	60
agctcgccga	cttgcccggc	atatgtgctt	gtttgaggcc	gcgcggggcc	aagatactcg	120
tagacgactc	gcatggctgc	ggcggttctg	gccgcaaccc	cgactcggag	caacccttcg	180
ggtatgggtg	cgggcgcgtc	gtcgagtact	tcgggctgga	ctacgcggag	aacaacatca	240
tctacgccgg	gcagctgagc	aaggcgttca	attcgcccgg	cggattcgtc	ggctgtgcgc	300
gc						302

<210> 166

<211> 1286

<212> DNA

<213> *Alexandrium fundyense*

<400> 166

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ggccactgcg	ccgccatctg	tgccggcgcc	ccgaccgggg	gcacctcatg	tcctgtggagc	120
atgcgacgat	cgcggaacgc	gccccgaacg	ggatcgacct	ggcgacaaat	gccttcatgc	180
tcgtccacgg	ctggacggcg	gcgcccctgc	tcctggagct	cgtggccaac	ttcagcgcg	240
ccctggaggg	gcgggcccag	accgcggggg	agctggccgc	ggagacgggc	gccgaggagg	300
ggcccctggc	gatectctc	cgcgccctga	gcgtccctgg	ctacgtgcgc	ttcgacgccc	360
agagcagggc	gtactccctg	gtcccggggc	cggagctgga	cgagctcagg	accgtgctcc	420
accctgcgtc	ggaggtcgcg	aggggcctgc	aggagctgta	cagcgaggtc	gccccccct	480
tccagctgcc	ctcgaggagc	gcggcgcggt	gcctggccct	ctgggaggag	cagtggccct	540
cctggagcca	gtgcaggagc	agggccctgg	gcgtccctgt	ggacggcgct	gtgctggcgc	600
cgctgcttgt	gtccgtgacg	tactcctcga	ggtgggacga	ggaggggccag	gagcacggca	660
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acgcaccgct	gatggcccag	atctcgccga	tcctgtttga	tgatgcgggc	tgggggttca	900
ctgacgcggg	gacagactcc	ttcgacgacg	tggaggagca	tggttgacaga	atcttgaatg	960
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tgacaacagc	tgtgaatctg	agcaagcagg	gcgtcccga	cgtggtcatc	tctggcgatg	1260
tgggtaagcc	tgcgagagata	cttgcc				1286

<210> 167

<211> 1282

<212> DNA

<213> *Alexandrium fundyense*

<400> 167

accgtagcca	ttttggetca	aggcctgtgc	gcgccagcca	aactcggatc	attcctggcc	60
actgcgccgc	catccgtgcc	ggcgccccga	ccgggggcac	ctcatgtccg	tggagcatgc	120
gacgatcgcg	gacgcggtcc	cgaacgggat	cgacctggcg	acaaatgcct	tcatgtcctg	180
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ggagggggcg	gccagaccg	cgggggagct	ggccgcggag	acgggcgccc	aggagggggc	300
cctggcgatc	ctctcccgcg	cctgcagcgt	cctgggctac	gtgcgcttcg	acgccagag	360
cagggcgctac	tccttggtcc	cggggcccga	gctggacgag	ctcaggaccg	tgctccaccc	420
tgctgcggag	gtcgcgaggg	gcctgcagga	gctgtacagc	gaggtcgccc	cccccttcca	480
gctgccctcg	gaggacgcgg	cgcggtgcct	ggccctctgg	gaggagcagc	ggccctcctg	540
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ggacatcttc	gagcagttgg	gcgtcgccac	tatgaacgcg	aagggcgtga	tcatgatgtc	780
gtcaaagggg	gccatggtgt	tgcagcgatg	ctactcctac	tacgtcccac	tgctgtacgc	840

accgctgatg	gcccagatct	cgccgatacct	gtttgatgat	gcgggctggg	ggttcactga	900
cgcggggaca	gactccttcg	acgacgtgga	ggagcatgtt	gacagaatct	tgaatgttgt	960
tggcagtggt	gcgcaacacc	ggaccctcct	taaggatatg	atgcgacaca	tcagtaccgt	1020
gttcaagggc	gaggcatttg	ccttgacgac	aagtttcgtt	gtggacactg	gctgtggcga	1080
cgggagcctg	ctcatacata	tctatgaaca	tatcaaacag	cacacacccc	gggggaaagt	1140
gcttgatcag	ttccctctga	cgatggtcgg	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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gtgccggcgc	cccgaaccgg	ggcacctcat	gtccgtggag	catgcgacga	tcgcggacgc	120
gggtcccggac	gggatcgacc	tggtgacaaa	tgccttcacg	ctcgtccacg	gctggacggc	180
ggcgccccctg	ctcctggagc	tcgtggccaa	cttcagcgcg	cccctggagg	ggcgggccca	240
gaccgcgggg	gagctggccg	cggagacggg	cgccgaggag	gggccccctg	cgatcctcct	300
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cgcgggcgcg	tgcctggccc	tctgggagga	gcagcgcccc	tcctggagcc	agtgcaggag	540
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gagcaagcag	ggcgtccccg	acgtggctcat	ctctggcgat	gtgggtaagc	ctgcggagat	1260
acttgcc						1267

<210> 169

<211> 1267

<212> DNA

<213> Alexandrium fundyense

<400> 169

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gtgccggcgc	cccgaaccgg	ggcacctcat	gtccgtggag	catgcgacga	tcgcggacgc	120
gggtcccgaac	gggatcgacc	tggcgacaaa	tgccttcacg	ctcgtccacg	gctggacggc	180
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cgcgggcgcg	tgcctggccc	tctgggagga	gcagcgcccc	tcctggagcc	agtgcaggag	540
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gagcaagcag	ggcgccccgc	acgtgggtcat	ctctggcgat	gtgggtaagc	ctgcggagat	1260
acttgcc						1267

<210> 170

<211> 1267

<212> DNA

<213> *Alexandrium fundyense*

<400> 170

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ggtcccgaac	gggatcgacc	tggcgacaaa	tgccttcgat	ctcgtccacg	gctggacggc	180
ggcgcccctg	ctcctggagc	ttgtggccaa	cttcagcgcg	ccccctggag	ggcgggccca	240
gaccgcgggg	gagctggccg	cggagacggg	cgccgaggag	gggcccctgg	cgatcctcct	300
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ggcggttgacg	cgatgctact	cctactacgt	cccactgtcg	tacgcaccgc	tgatggccca	840
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tctgacgatg	gtcggcggtt	acctcaatga	ggatccgcga	gtgacaacag	ctgtgaatct	1200
gagcaagcag	ggcgccccgc	acgtgggtcat	ctctggcgat	gtgggtaagc	ctgcggagat	1260
acttgcc						1267

<210> 171

<211> 1267

<212> DNA

<213> *Alexandrium fundyense*

<400> 171

accgtagcca	ttttggctca	agccaaactc	ggatcattcc	tggccactgc	gccgtcatcc	60
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<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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catggagcgc	ttcgacttca	gcaagatggt	gccggcgag	cgggccgcgc	tcggggacat	180
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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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cctctttaag	gatatgatgc	gacacatcag	taccgtgttc	aaggggcgagg	catttgccctt	120
gcagccaatt	ttcgttggtg	acactggctg	tggcgacggg	agcctgctca	tacatatcta	180
tgaacatatc	aaacagcaca	caccccgggg	gaaagtgtct	gatcagttcc	ctctgacgat	240
ggtcggcggtt	gacctcaatg	aggatccgcg	agtgacaaca	gctgtgaatc	taagc	295

<210> 188

<211> 315

<212> DNA

<213> Alexandrium fundyense

<400> 188

gaatcttgaa	tgttggtggc	agtgggtgcgc	aacaccggac	cctctttaag	gatatgatgc	60
gacacatcag	taccgtgttc	aaggggcgagg	catttgccctt	gcagccaagt	ttcgttggtg	120
acactggctg	tggcgacggg	agcctgctca	tacatatcta	tgaacatatc	aaacagcaca	180
caccccgggg	gaaagtgtct	gatcagttcc	ctctgacgat	ggtcggcggtt	gacctcaatg	240
aggatccgcg	ggtgacaaca	gctgtgaatc	tgagcaagca	gggcgtcccc	cacgtggtca	300
tctctggcga	tgtgg					315

<210> 189

<211> 293

<212> DNA

<213> Alexandrium fundyense

<400> 189

tgggtgcgcaa	caccggaccc	tctttaagga	tatgatgcga	cacatcagta	ccgtgttcaa	60
ggggcgaggca	tttgcccttg	agccaagttt	cggttggtgg	actggctgtg	gcgacggggag	120
cctgtctcata	catatctatg	aacatatcaa	acagcacaca	ccccggggga	aagtgtctga	180
tcagttccct	ctgacgatgg	tcggcggttg	cctcaatgag	gatccgcgag	tgacaacagc	240
tgtgaatctg	agcaagcagg	gcgtcccgcga	cgtggtcatc	tctggcgatg	tgg	293

<210> 190

<211> 293

<212> DNA

<213> *Alexandrium fundyense*

<400> 190

tggtgcgcaa	caccggaccc	tctttaagga	tatgatgcga	cacatcagta	ccgtgttcaa	60
gggagaggca	tttgcttgc	agccaagttt	cggtgtggac	actggctgtg	gcgacgggag	120
cctgctcata	catatctatg	aacatatcaa	acagcacaca	ccccggggga	aagtgttga	180
tcagttccct	ctgacgatgg	tcggcggtga	cctcaatgag	gatccgcgag	tgacaacggc	240
tgtggatctg	agcaagcagg	gcgtcccgcg	cggtggtcatc	tctggcgatg	tgg	293

<210> 191

<211> 282

<212> DNA

<213> *Alexandrium fundyense*

<400> 191

accggaccct	ctttaaggat	atgatgcgac	acatcagtac	cggtgtcaag	ggcgaggcat	60
ttgccttgca	gccaagtttc	gttgtggaca	ctagctgtgg	cgacggggagc	ctgctcatac	120
atatctatga	acatatcaaa	cagcacacac	ccccggggga	agtgttctga	cagttccctc	180
tgacgatggg	cgacgttgac	ctcaatgagg	atccgcgagt	gacaacagct	gtgaatctga	240
gcaagcaggg	cgccccgcac	gtgggtcatct	ctggcgatgt	gg		282

<210> 192

<211> 961

<212> DNA

<213> *Alexandrium fundyense*

<400> 192

gagtgagtac	gtcaatgcgc	acttctctgg	ggccccgacc	gacagcacgc	tggacttcca	60
ctcctccgcc	ggagcgcagt	tcttccgctt	ggtggaggggc	ttccgccccg	aggacaccga	120
caacggcggc	acaggagtgg	tcctgcctta	cgacatcagg	agggctctgc	ccaggagggc	180
ggctgcgggc	gcgccccga	gcaggccgac	gcccaggagc	aagggtccct	cgctgcagct	240
ggtccaggac	gtcatgacca	gcctcggcta	cccccccaac	ctcaatgacc	tcaccaaggg	300
cttcttcgac	tacggcatgg	actccctgga	gctcgtccgc	atccggaaca	agctgagcct	360
cgccctgcag	acggagctcc	ccgcgacgct	gctcctcgac	ttccccaccg	tgacgacact	420
cggtggagcg	ctggaccagg	accgggcccc	cgagtccgat	gaggaggagg	aggtacggga	480
ggaggccaag	gccacggcca	gagccccggc	caaggccaag	gccctggcca	agggcgggca	540
ggcgaccag	cgcttcgggc	cctcggagat	catcagcgtg	cagaagcgct	gcctcaacgt	600
ctacgcccag	cccattctacc	agaagcggtt	cacggacatg	gccaagaagt	gcttccccga	660
catgctcaag	tacatcctcg	ccatagagtc	catcctggtc	gaggtcgagg	ggccgggtct	720
gcaggagttc	cagctgatcc	aagatctcga	gtacaagtgc	gtccagagag	gccgcgagaa	780
tttgatgtac	tacatgtcaa	gctattggct	ggccccacca	gagatacgcg	atcagagcca	840
gcagttactc	ctcctcacgc	tgacagaccg	tgctggggcc	ataaccactt	gtaggctggc	900
gctccgcggg	cacctcgaat	ctgcggagcc	acatacgaga	gtctcagtgc	gaaaaaaaaa	960
a						961

<210> 193

<211> 975

<212> DNA

<213> *Alexandrium fundyense*

<400> 193

agtgagtacg	tcaatgcgca	cttctctggg	gccccgaccg	acagcacgct	ggacttccac	60
tcctccgccg	gagcgcagtt	cgctccgctt	gtggaggggct	tcgccccgca	ggacaccgac	120
aacggcgggc	caggagtggg	catcgcttac	gacatcagga	gggtctctgc	caggaggaggc	180
gctgcggggc	cgcccccgag	caggccgccc	ccgaggacga	aggtcccttc	gctgcagctg	240
gtccaggacg	tcattgaccg	catcggttac	ccccccaacc	tcaatgacct	caccaagggc	300
ttcttcgact	acggcatgga	ctccctggag	ctcgtccgca	tcgggaacaa	gctgagcctc	360
gccctgcaga	cggagctccc	cgcgacgctg	ctcctcgact	tcgccaccgt	gcacgacctc	420
gtggagcggc	tggaccagga	ccggggcccc	gagtcggatg	aggaggaggga	gggtgcgggag	480
gaggccaagg	ccacggccag	agccccggcc	aaggccaagg	ccctggccaa	gggcggcgag	540
gcgacccagc	gcttcggggc	ctcggagatc	atcagcgtgc	agaagcgctg	cctcaacgtc	600

tacgcccagc	ccatctacca	gaagcgggttc	acggacatgg	ccaagaagtg	cttccccggac	660
atgctcaagt	acatcctcgc	catagagtcc	atcctgggtcg	aggtcgaggg	gccgggtcctg	720
caggagttcc	agctgatcca	agatctcgag	tacaagtcgg	tccagagagg	ccgcgagaat	780
ttgatgtact	acatgtcaag	ctattggctg	gccacccag	agatacgca	tcagagccag	840
cagttactcc	tcctcacgct	gcaggaccag	tgctggggca	ataaccactt	gtaggctggc	900
gctccgcggg	cacctcgaat	ctgaggagcc	acatacgaga	gtcccagtgc	gaaaaaaca	960
caaaaaaaaa	aaaaa					975

<210> 194

<211> 966

<212> DNA

<213> Alexandrium fundyense

<400> 194

agtgagtacg	tcaatgcgca	cttctctggg	gcccggaccg	acagcacgct	ggacttccac	60
tcctccgccc	gagcgagtt	cgtccgcttg	gtggagggct	tccgccccga	ggacaccgac	120
aacggcgcca	caggagtggg	catcgccctac	gacatcagga	gggctctgcc	cagggaggcg	180
gctgcggggc	cgccccgag	caggccgccc	ccgaggacga	aggtcccttc	gctgcagctg	240
gtccaggacg	tcattgaccag	catcggtctac	ccccccaacc	tcaatgacct	caccaagggc	300
ttcttcgact	acggcatgga	ctccctggag	ctcgtccgca	tctggaacaa	gctgagcctc	360
gccctgcaga	cggagctccc	cgcgacgctg	ctcctcgact	tccccaccgt	gcacgacctc	420
gtggagcggc	tggaaccagga	ccggggcccc	gagtcggatg	aggaggagga	gggtgcgggag	480
gaggccaagg	ccacggccag	agccccggcc	aaggccaagg	ccctggccaa	gggcggcgag	540
gcgaccacgc	gcttcggggc	ctcgagagtc	atcagcgtgc	agaagcgtg	cctcaacgtc	600
tacgcccagc	ccatctacca	gaagcgggttc	acggacatgg	ccaagaagtg	cttccccggac	660
atgctcaagt	acatcctcgc	catagagtcc	atcctgggtcg	aggtcgaggg	gccgggtcctg	720
caggagttcc	agctgatcca	agatctcgag	tacaagtcgg	tccagagagg	ccgcgagaat	780
ttgatgtact	acatgtcaag	ctattggctg	gccacccag	agatacgca	tcagagccag	840
cagttactcc	tcctcacgct	gcagaccagt	gctggggcaa	taaccacttg	taggctggcg	900
ctccgcgggc	acctcgaatc	tgaggagcca	catacgagag	tctcagtgcg	aaaaaaaaa	960
aaaaaa						966

<210> 195

<211> 350

<212> DNA

<213> Alexandrium fundyense

<400> 195

gcggttcacg	gacatggcca	agaagtgctt	cccggacatg	ctcaagtaca	tcctcgccat	60
agagtccatc	ctggctgagg	tcgagggggc	ggtcctgcag	gagttccagc	tgatccaaga	120
tctcgagtac	aagtcggtcc	agagaggccg	cgagaatttg	atgtactaca	tgtcaagcta	180
ttggctggcc	caccagaga	tacgcgatca	gagccagcag	ttactcctcc	tcacgctgca	240
ggaccagtgc	tggggcaata	accacttgta	ggctggcgct	ccgcggggcac	ctcgaatctg	300
cggagccaca	tacgagagtc	tcagtgcgaa	aaaaaaaaa	aaaaaaaaa		350

<210> 196

<211> 358

<212> DNA

<213> Alexandrium fundyense

<400> 196

gcggttcacg	gacatggcca	agaagtgctt	cccggacatg	ctcaagtaca	tcctcgccat	60
agagtccatc	ctggctgagg	tcgagggggc	ggtcctgcag	gagttccagc	tgatccaaga	120
tctcgagtac	aagtcggtcc	agagaggccg	cgagaatttg	atgtactaca	tgtcaagcta	180
ttggctggcc	caccagaga	tacgcgatca	gagccagcag	ttactcctcc	tcacgctgca	240
ggaccagtgc	tggggcaata	accacttgta	ggctggcgct	ccgcggggcac	ctcgaatctg	300
cggagccaca	tacgagagtc	ccagtgcgaa	aaaaaaaaa	aaaaaaaaa	aaaaaaa	358

<210> 197

<211> 344

<212> DNA

<213> Alexandrium fundyense

<400> 197

gcggttcacg	gacatggcca	agaagtgctt	cccggacatg	ctcaagtaca	tcctcgccat	60
------------	------------	------------	------------	------------	------------	----

agagtccatc ctggctcgagg tcgagggggcc 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
 gttagtaggag 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
 ctccttcctr 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 ccggcagtac agat 24

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

<210> 212
 <211> 25
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 212
 ggctcgatg 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
 ttgatacctgc cagtagtcac atgcttg

27

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

24

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

<220>
 <223> Primer sequence
 <400> 222
 cctcagtgc attgtagtgc 20

<210> 223
 <211> 22
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 223
 gtgcaaaggc aatcaaatgt cc 22

<210> 224
 <211> 769
 <212> DNA
 <213> *Alexandrium tamarense*
 <400> 224
 gcggttccct cctcctgtac ataaacgccc acgactgcgt gcagacggcc gccaggctct 60
 gcaagaaggc cgccaccgtg gtgcgcctga agcacaacga cacggaacag cccgagcaca 120
 tgctctcgtc gatcccgagc ggggcccaga tcacctacgt gtgcgacggc gtgtactcca 180
 cggacgaaga gctcggcgac ttgcccgcga tatgtgcttg ttgaggccg cgcggggcca 240
 agatactcgt agacgactcg catggctgcg gcgttcttgg ccgcaacccc aactcggagc 300
 aaccctcggc gtatgggtggc ggcggcgctc tcgagtactt cgggctggac tacgcgga 360
 acaacatcat ctacgcccggc cagctgagca aggcgttcaa ttgcccggc ggattcgtca 420
 gctgtgcgcg cgagaccgac aaaaatttcg gcgttctgaa cttggccaaa aactcgaaca 480
 cactcgtgtt cacaggccgc atctgtactg cgggcctgtc gactgcgaaa acaaccttcg 540
 acctcaacgc cgccgaggcg gaccttcaac gcaagcggct tctggcggct accctcgaaa 600
 ttctgcgagg ggctcaaggc gctcgggtgc cccacacct accacgagt ccccatcgctc 660
 aatacggggg gggaacacac aagctacgca agcgttctg ggtgagccat aggcgctccc 720
 gtggcccaca aatataacag gaaaccaccg ccacttctc tgctattca 769

<210> 225
 <211> 558
 <212> DNA
 <213> *Alexandrium catenella*
 <400> 225
 ttggtcgtgg tccaggaagg agcgacgtg gagggccttg gtaggggtcca ccccccctccg 60
 tccgaggacc tccatgatgt cggcgggctc gccgacgtcc ccgaacagca ccaggagagg 120
 gaccgcgtgc cggctcaggt tgagctccgt cgccacctcg agagtccttg ttgaagtcaa 180
 cgccgaccat ggtgagcgga tgctcgctcg agcgtccttc ccgcgcggcg tgttgctctt 240
 cacgtgctcg tagatgcgcc tgagcaaacg cccgtgcgcc caccaccagt tccacgacga 300
 acgcgggctg cgacgcgaag tccccgcccg cgaagaccga gtcaatcagc cgcacgaggc 360
 ccgggaagaa cgtttggtgc tgcaccccgc tgcccaccac gttcagcgtc cggtaggagc 420
 ggacctcctg ctcatgcgag tcccggccgg cgccggcgaa ccccgagccg ggattctcga 480
 agaggatagc ggtcaagggt gttgtccagc attggggcgt aggaggtcgg gacgtagtag 540
 gtagtagcacc gctgcaaa

<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 ctccactac gtcccagact cctacgcccc actgctggac 180
 aggtaccacc gcatcctctt cgagaatccc ggctgggggt tcgcccggcg cggccgggac 240
 tcgcaggagc aggaggtcca cgtccaccgg acgctgaacg tggtagggcag cggggcgagc 300
 caccagacgc tcttcacgga cctcgtgcgg ctcattgact cggctcttcg gggcggggac 360

ttcgcgtcgc	agccggcggt	cgctcgtggac	acgggggtgcg	gcgacggccg	cttgctcagg	420
cgcactctacg	agcactgtgaa	gagcaacacg	ccgcgcggga	aggcgctcgc	cgagcaccgc	480
ctcacgatgg	tcggcgtcga	cttcaacaag	gactctcggg	tgccgacgga	gctcaacctg	540
agcaggcagc	cggtcccgc	cctgggtgctg	ttcggagacg	tcggcaagcc	cgccgacatc	600
atggagatcc	tcggacggag	cggggtggac	ccgagcaggt	ccctccacgt	gcgctccttc	660
ctagaccacg	accaatcgaa	ttcccgcggc	cgccatggcg	gccgggagca	tcgagcgctg	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	tgccctcctac	tcgccgatgc	tgctgaacct	60
gaacactatc	ctccacgagg	acgccggctg	gggcttcgcc	gacgacgggc	tcgtgcgcgc	120
atgggnngcc	gaggtccacg	tgaaccgcac	gctgaacgtc	gtcggcagcg	gcctgcagca	180
ccaaaagtcc	ttccagcacc	tcgtgcagca	gatcagcgcc	atctttgagg	gcgaggactt	240
cacctcgcag	ccatcgttcg	tcgtgcagac	tgccagcggc	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	tggaaggaa	gggtgtcgac	cttgcaagg	tgctgcacgt	gcgctccttc	540
ctggaccacg	accca					555

<210> 228
 <211> 20
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 228
 cttgcccgcc atatgtgctt

20

<210> 229
 <211> 20
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 229
 gcccggcgta gatgatgttg

20

<210> 230
 <211> 579
 <212> DNA
 <213> *Alexandrium minutum*
 <400> 230

ttccagggtc	gcctcaagaa	gccgcttgcg	ctgacgggtcc	ccctcggcaa	agttgaggtc	60
gagggtcgtc	ttcgcactcg	acaggccggc	agtacagatc	ggccctgtga	acacgagcgt	120
gttcgagttc	ttggccaagt	tcagaatgcc	gaacttctcg	tcgggtctcg	gtgcgcagcc	180
cacgaatccg	ccgggcgaat	tgaacgcctt	gctcagctgc	ccggcgtaga	tgatgttggt	240
ctccgcgtag	tccagcccga	agtacttgac	gacgccggcg	ccgccatatc	cgaagggttg	300
ctccgagtcg	gggttgcggc	caagaacgcc	gcaaccgtgc	gagtcgtcca	cgagtatctt	360
ggccccgcgc	ggcctcaaac	aagcacatat	ggcgggcaag	tcggcgagct	ctccgtccgt	420
ggagtagacg	ccgtcgcaca	cgtaggtgat	gtcggccccc	tcggggatcg	acgagagcac	480
gcgctcgagc	tgctccgtgt	cggtgtgctt	caggcgcacg	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	ggggcaccgg	agcgccttga	gcccctcgca	aaattccagg	60
gtcgccctcaa	gaagccgctt	gcgctgacgg	tccccctcgg	caaagttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtacag	atcggccctg	tgaacacgag	cgtgttcgag	180
ttcttggcca	agttcagaat	gccgaacttc	tcgtcgggtc	cgctgcgca	gcccacgaat	240
ccgccgggcg	aattgaacgc	cttgctcagc	tgcccggcgt	agatgatgtt	gttctccgcg	300
tagtccagcc	cgaagtactt	gacgacgccc	ccgccgccat	atccgaagg	ttgctccgag	360
tcgggggttg	ggccaagaac	gccgcaaccg	tgcgagtcgt	ccacgagtat	cttggccccg	420
cgcggcctca	aacaagcaca	tatggcgggc	aagtcggcga	gctctccgtc	cgtggagtag	480
acgccgtcgc	acacgtaggt	gatgtcggcc	ccctccggga	tcgacgagag	cacgcgctcg	540
agctgctccg	tgctgttgtg	cttcaggcgc	acgacgggtga	ctcccttctt	gcagagsctg	600
gctgccgtct	gcacgcagtc	gtgggcgttt	atgtccagga	ggaggaaccc	gctctcgccc	660
gccaggctcg						670

<210> 232

<211> 632

<212> DNA

<213> *Alexandrium minutum*

<400> 232

gggaacccgt	ggtaggtgtg	ggggcaccgg	agcgccttga	gcccctcgca	aaattccagg	60
gtcgccctcaa	gaagccgctt	gcgctgacgg	tccccctcgg	caaagttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtacag	atcggccctg	tgaacacgag	cgtgttcgag	180
ttcttggcca	agttcagaat	gccgaacttc	tcgtcgggtc	cgctgcgca	gcccacgaat	240
ccgccgggcg	aattgaacgc	cttgctcagc	tgcccggcgt	agatgatgtt	gttctccgcg	300
tagtccagcc	cgaagtactt	gacgacgccc	ccgccgccat	atccgaagg	ttgctccgag	360
tcgggggttg	ggccaagaac	gccgcaaccg	tgcgagtcgt	ccacgagtat	cttggccccg	420
cgcggcctca	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	ggggcaccgg	agcgccttga	gcccctcgca	aaattccagg	60
gtcgccctcaa	gaagccgctt	gcgctgacgg	tccccctcgg	caaagttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtacag	atcggccctg	tgaacacgag	cgtgttcgag	180
ttcttggcca	agttcagaat	gccgaacttc	tcgtcgggtc	cgctgcgca	gcccacgaat	240
ccgccgggcg	aattgaacgc	cttgctcagc	tgcccggcgt	agatgatgtt	gttctccgcg	300
tagtccagcc	cgaagtactt	gacgacgccc	ccgccgccat	atccgaagg	ttgctccgag	360
tcgggggttg	ggccaagaac	gccgcaaccg	tgcgagtcgt	ccacgagtat	cttggccccg	420
cgcggcctca	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	ggggcaccgg	agcgccttga	gcccctcgca	aaattccagg	60
gtcgccctcaa	gaagccgctt	gcgctgacgg	tccccctcgg	caaagttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtagag	atcgcccttg	tgaacacgag	cgtgttcgag	180
ttcttgcca	agttcagaat	gccgaacttc	tcgtcgggtc	cgctgcgca	gcccacgaat	240
ccgccggggcg	aattgaacgc	cttgctcagc	tgcccggcgt	agatgatgtt	gttctccgcg	300
tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaaggg	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
gctgccgtct	gcacgcagtc	gtgggcgttt	atgtcc		636	

<210> 235

<211> 670

<212> DNA

<213> *Alexandrium minutum*

<400> 235

gggaacccgt	ggtaggtgtg	ggggcaccgg	agcgccttga	gcccctcgca	aaattccagg	60
gtcgccctcaa	gaagccgctt	gcgctgacgg	tccccctcgg	caaagttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtagag	atcgcccttg	tgaacacgag	cgtgttcgag	180
ttcttgcca	agttcagaat	gccgaacttc	tcgtcgggtc	cgctgcgca	gcccacgaat	240
ccgccggggcg	aattgaacgc	cttgctcagc	tgcccggcgt	agatgatgtt	gttctccgcg	300
tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaaggg	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
gctgccgtct	gcacgcagtc	gtgggcgttt	atgtccagga	ggaggaaccc	gctctcgccc	660
gccaggtcgc					670	

<210> 236

<211> 670

<212> DNA

<213> *Alexandrium minutum*

<400> 236

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

<210> 237

<211> 670

<212> DNA

<213> *Alexandrium minutum*

<400> 237

gggaacccgt	ggtaggtgtg	ggggcaccgg	agcgccttga	gcccctcgca	aaattcgagg	60
gtcgcmctcaa	gaagccgctt	gcgctgamgg	tccccctcgg	craarttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtagag	atcgcccttg	tgaacacgag	cgtgttcgag	180
ttcttgcca	agttcakaat	gccgaacttc	tcgtcgggtc	cgctgcgca	rcsacgaat	240
ccgccggggcg	aattgaacgc	cttgctcarg	tgcccggcgt	agatgatgtt	gttctccgcg	300

tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaaggg	ttgctccgag	360
tccgggttry	ggccaagaac	gccgcaaccg	tgmagatcgt	ccacgagtat	cttggccccg	420
cgccgcctca	aacaagcaca	tayggcgggc	aagtcggcga	gctctccgtc	cgtggagtag	480
acsccgtcgc	acacstaggt	gatgtcggcc	ccctcsggga	tcgacgagag	cacgcgctcr	540
agstgstccg	tgtygttggt	cttcaggcgc	acgrcgggtga	ckcccttctt	gcagagcctg	600
gcggcggtcy	gcacgcagtc	gtgggcgttt	atgtccagga	ggaggaascc	gctctcgccc	660
gccaggtctg						670

<210> 238

<211> 670

<212> DNA

<213> *Alexandrium minutum*

<400> 238

gggaacccgt	ggtaggtgtg	ggggcaccgc	agcgccttga	gccccctcgca	aaattcsagg	60
gtcgcmctca	gaagccgctt	gcgctgamgg	tccccctcgg	craarttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtagag	atcgcccttg	tgaacacgag	cgtgttcgag	180
ttcttggcca	agttcagaat	gccgaacttc	tcgtcgggtst	cgctgctgca	roccsacgaat	240
ccgccggggc	aattgaacgc	cttgcctcagc	tgccccggcgt	agatgatgtt	gttctccgag	300
tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaaggg	ttgctccgag	360
tccgggttry	ggccaagaac	gccgcaaccg	tgagagtcgt	ccacgagtat	cttggccccg	420
cgccgcctca	aacaagcaca	tatggcgggc	aagtcggcga	gctctccgtc	cgtggagtag	480
acgccgtcgc	acacgtaggt	gatgtcggcc	ccctcsggga	tcgacgagag	cacgcgctcr	540
agctgctccg	tgctgttggt	cttcaggcgc	acgacgggtga	ckcccttctt	gcagagcctg	600
gcggctgtct	gcacgcagtc	gtgggcgttt	atgtccagga	ggaggaascc	gctctcgccc	660
gccaggtctg						670

<210> 239

<211> 670

<212> DNA

<213> *Alexandrium minutum*

<400> 239

gggaacccgt	ggtaggtgtg	ggggcaccgc	agcgccttga	gccccctcgca	aaattccagg	60
gtcgccctca	gaagccgctt	gcgctgacgg	tccccctcgg	caaagttag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtagag	atcgcccttg	tgaacacgag	cgtgttcgag	180
ttcttggcca	agttcagaat	gccgaacttc	tcgtcgggtct	cgctgctgca	gcccacgaat	240
ccgccggggc	aattgaacgc	cttgcctcagc	tgccccggcgt	agatgatgtt	gttctccgag	300
tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaaggg	ttgctccgag	360
tccgggttgc	ggccaagaac	gccgcaaccg	tgcgagtcgt	ccacgagtat	cttggccccg	420
cgccgcctca	aacaagcaca	tatggcgggc	aagtcggcga	gctctccgtc	cgtggagtag	480
acgccgtcgc	acacgtaggt	gatgtcggcc	ccctcsggga	tcgacgagag	cacgcgctcg	540
agctgctccg	tgctgttggt	cttcaggcgc	acgacgggtga	ctcccttctt	gcagagcctg	600
gctgccgtct	gcacgcagtc	gtgggcgttt	atgtccagga	ggaggaaccc	gctctcgccc	660
gccaggtctg						670

<210> 240

<211> 670

<212> DNA

<213> *Alexandrium catenella*

<400> 240

gggaagccgt	ggtaggtgtg	ggggcaccgc	agcgccttga	gccccctcgca	gaactcgagg	60
gtcgccckcca	gragccgcyt	gcgctgaagg	tccccctcgg	cgccgttag	gtccaggggtc	120
gtcytygcr	tcgacaggcc	ggcggtacag	atcgcccttg	tgaacacgag	ygtgttcgag	180
ttcttsgcca	agttcaggat	gccgaacttc	tcgtcgggtct	cgccgctgca	gcccacgaat	240
ccgccggggc	agttgaacgc	cttgcctcagc	tgccccggcgt	agatgatgtt	gttctccgag	300
tagtccagcc	cgaagtactt	gacgacgccr	ccgccrccat	acccgagggg	ttgctccgag	360
tcwgggttkc	ggccaagaac	gccgcagccr	tgcgagtcgt	cyacgagtat	cttggccccg	420
cgccgcctca	aacaagcaca	katggcgggc	aagtcsgcga	gctctccgtc	ygtggagtag	480
acgccgtcgc	asacgtaggt	gatgtcggcc	ccctcsggga	tcgasgagag	caygcgctcg	540
agctgctccg	ygtcgttggt	cttcaggcgc	acsacgggtgr	cgcccttctt	gcagagcctg	600
gcggccgtct	gcacgcagtc	gtgggcgtkt	atgtccasga	ggaggaaccc	gctctcgccc	660
gcgaggtctg						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
 ttcttgcca agttcagaat gccgaacttc tcgtcgggtc cgcgcgcaca gccgacgaat 240
 ccgccgggag aattgaacgc cttgctcagc tgcccggcgt agatgatgtt gttctccgag 300
 tagtccagcc cgaagtactc gacgacgccg ccgccaccat acccgaaggg ttgctccgag 360
 tcgggggttg gcgaagaac gccgcagcca tgcgagtcgt ctacgagtat cttggccccg 420
 cgccggcctc aacaagcaca tatggcgggc aagtcggcga gctctccgtc cgtggagtag 480
 acgccgtcgc acacgtaggc gatgtcggcc ccctgcggga tcgacgagag catgtgctcg 540
 agctgctccg cgtcgttgtg cytcaggcgc accacgggtg 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
 gtchtegcac tcgacaggcc ggcagtagag atcgcccttg tgaacacgag tgtgttcgag 180
 ttcttgcca agttcagaat gccgaacttc tcgtcgggtc cgcgcgcaca gccgacgaat 240
 ccgccgggag aattgaacgc cttgctcagc tgcccggcgt agatgatgtt gttctccgag 300
 tagtccagcc cgaagtactc gacgacgccg ccgccaccat acccgaaggg ttgctccgag 360
 tcgggggttg gcgaagaac gccgcagcca tgcgagtcgt ctacgagtat cttggccccg 420
 cgccggcctc aacaagcaca tatggcgggc aagtcggcga gctctccgtc cgtggagtag 480
 acgccgtcgc acacgtaggc gatgtcggcc ccctgcggga tcgacgagag catgtgctcg 540
 agctgctccg cgtcgttgtg cytcaggcgc accacgggtg 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
 caaggcggtc aaytcgcccg 20

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

tcgcgctagt	cagtgtggat	gacgctgcat	acactgcggt	gaacagatgt	ccgctcaggc	60
aatcaaaatg	ccgaataata	gtgttcgctc	gtcaaaactaa	agatccactg	tcgattgaac	120
gcccgcctca	gtgatcgcg	gagaagagtc	tctgctgcag	tcgtccgagc	aggaagtatt	180
gagaggcgcc	gaccaccaat	actcaaggag	gtgcgcccga	tacgagatcg	ggggctgtaa	240
gcgggggtcc	gtcaaaaagt	ctacgcctat	gtttgtttta	ggaggatcct	gcaccccgcg	300
gcctcaaaac	caacaaatag	gggcggcaat	tggtcacttg	tttgtcccgg	ggtaccaccc	360
gtacctatgt	agggacctcg	cccccatgcy	agaaaaacaa	aagcattgcc	tgggtttttg	420
cgggggggtg	ttccccgggc	ccccaccggg	gggccccttt	tttcagaacc	ccggcggggc	480
cgttttcccc	cccctttttg	ggtttttttt	tttttcaaaa	accaatcatc	ccggaacctt	540
gtgggcgaga	gcgggttcct	cctcctgtac	ataaacgccc	acgactgcgt	gcagacgggc	600
gccaggctct	gcaagaaggg	cgccaccgtg	gtgcgcctga	agcacaacga	cacggaacag	660
cccagacaca	tgctctcgtc	gatcccgag	ggggccgaca	tcacctacgt	gtgcgacggc	720
gtgtactcca	cggacgaaga	gctcgccgac	ttgcccgcga	tatgtgcttg	tttgaggccg	780
cgcggggcca	agatactcgt	agacgactcg	catggctgcy	gcgttcttgg	ccgcaacccc	840
aactcggagc	aacccctcgg	gtatgggtgg	ggcggcgctc	tcgagtactt	cgggctggac	900
tacgcggaga	acaacatcat	ctacgcgggg	cagctgagca	aggcgttcaa	ttcgccgggc	960
ggattcgtca	gctgtgcgcy	cgagaccgac	aaaaatttcg	gcgttctgaa	cttggccaaa	1020
aactcgaaca	cactcgtgtt	cacagggccg	atctgtactg	ccggcctgtc	gagtgcgaaa	1080
acaaccttcg	acctcaacgc	cgccgagggg	gacettcaac	gcaagcggct	tctggcggct	1140
accctcgaaa	ttctgcgagg	ggctcaaggc	gctcgggtgc	ccccacacct	accacgagtg	1200
ccccatcgtc	aatacggggg	gggaacacac	aagctacgca	agcgttctg	ggtgagccat	1260
aggcgctccc	gtggcccaca	aatataacag	gaaaccaccg	cccacttctc	tgctattca	1319