

SEQUENCE LISTING

<110> NewSouth Innovations Pty Ltd
Universitetet i Oslo

<120> Detection of saxitoxin-producing dinoflagellates

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<170> PatentIn version 3.5

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<210> 4

<211> 1281

<212> PRT

<213> Alexandrium fundyense

<400> 4

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Leu Ala Ala Glu Thr Asn Ala Gly Glu Gly Pro Val Ala Ile Thr Leu
35          40          45
Arg Thr Met Ala Ile Leu Gly Tyr Leu Asp Leu Asp Pro Glu Thr Asp
50          55          60
Val Tyr Ala Val Val Pro Gly Pro Gly Ile Glu Ala Leu Ala Ala Leu
65          70          75          80
Leu Arg Pro Ala Ala Pro Thr Ser Ala Ala Leu Arg Ser Ile Tyr Gln
85          90          95
His Ala Gln Pro Pro Phe Arg Val Pro Ser Ser Glu Ala Ala His Cys
100         105         110
Leu Arg Ile Trp Ala Glu His Arg Pro Thr Trp Arg Arg Ala Ala Cys
115         120         125
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

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Ala Leu Gln Arg	Arg Tyr Ser Tyr Tyr Val Pro Thr Ser Tyr Ala Pro					
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Phe Ala Gly Ala	Gly Arg Asp Ser Gln Glu Gln Glu Ile His Val His					
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Arg Thr Leu Asn	Val Val Gly Ser Gly Ala Gln His Gln Thr Leu Phe					
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Thr Asp Leu Val	Arg Leu Ile Asp Ser Val Phe Ala Gly Asp Phe					
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Ala Ser Gln Pro	Ala Phe Val Val Asp Thr Gly Cys Gly Asp Gly Arg					
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Leu Leu Arg Arg	Ile Tyr Glu His Val Lys Ser Asn Thr Pro Arg Gly					
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Lys Asp Ser Arg	Val Ala Thr Glu Leu Asn Leu Ser Arg His Ala Val					
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Pro His Leu Val	Leu Phe Gly Asp Val Gly Lys Pro Ala Asp Ile Met					
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Glu Ile Leu Gly	Arg Lys Gly Val Asp Pro Ser Arg Ser Leu His Val					
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Arg Ser Phe Leu	Asp His Asp Arg Pro Tyr Val Pro Pro Ala Arg Glu					
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Asp Cys Ala His	Leu Asp Gly Glu Gly Lys Arg Ile Ala Pro Ser Glu					
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Met Phe Ala Ser	Leu Val Glu His Phe Gln Arg Trp Gly Gly Ala Leu					
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Gln Gly Ser Phe	Gly Leu Cys Met Leu Glu Val Met Met Leu Asp Val					
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Pro Thr Thr Arg	Ala Ser Leu Asn Asp Cys Val Ser Leu His Phe Asp					
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His Leu Val Arg	Arg Pro Tyr Gln Ile Arg Leu Ala Glu Val Gly Asp					
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Ala Thr Pro Glu	Val Leu Arg Arg Arg Leu Glu Thr Ser Pro Thr Thr					
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Cys Leu Ala Val	Glu Met Asp Gln Leu Val Val Ala Val Leu Tyr Thr					
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Gln Arg Val Asp	Ser Ala Asp Val Val Asp Gln Gln Lys Phe Met Gln					
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Val Ser Asp Trp	His Ser Pro Ser Gly Arg Ile Met Gln Leu Ile Ala					
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Ile Cys Ser Asp	Pro Ala Lys His Leu Gly Val Ala Ala Asp Leu					
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 Ile Ile Gly Leu His Thr Gly Asn Gly Ala Arg Val Val Arg Leu Val
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 His Gly Phe Arg Pro Glu Asp Val Gly Asn Arg Gly Asp Gly Val Leu
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 Ala Pro Gly Val Gly Pro Ala Ala Ala Pro Pro Pro Gly Pro Ala Pro
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 Ala Pro Cys Pro Thr Asp Tyr Glu His His Glu Ala Leu Val Leu Ala
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 Ala Gly Ser Ala Asp Val Arg Phe Val Asp Met Asp Leu Leu Asp Ser
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 Pro Val Ser Val Gly Leu Leu Phe Glu Ala Ser Thr Pro Arg Lys Leu
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Thr Gly Pro Ile Cys Thr	Gly Leu Ser Ser Ala	Met Thr Thr
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Leu Asp Leu Asn Ala Ala	Glu Gly Asp Leu Gln Arg	Lys Arg Leu
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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
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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
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<210> 5

<211> 504

<212> DNA

<213> Alexandrium catenella

<400> 5

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<210> 6

<211> 504

<212> DNA

<213> Alexandrium catenella

<400> 6

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acagggtgcg	gcgacggccg	cttgctcagg	cgcacatctacg	agcacgtgaa	gagcaacacg	300
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ttcggggacg	tcagcaagcc	cgccgacatc	atggagctcc	tcgggcggaa	tggggtggac	480
ccgagcaggt	ccctccacgt	gcgc				504

<210> 7

<211> 402

<212> DNA

<213> Alexandrium catenella

<400> 7

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ccaaattttg	ttgtggacac	tggctgtggc	gacgggagcc	tgctcataca	cgtctacgag	180
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<210> 8

<211> 505

<212> DNA

<213> *Alexandrium catenella*

<400> 8

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<210> 9

<211> 504

<212> DNA

<213> *Alexandrium catenella*

<400> 9

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<210> 10

<211> 504

<212> DNA

<213> *Alexandrium catenella*

<400> 10

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<210> 11

<211> 504

<212> DNA

<213> *Alexandrium catenella*

<400> 11

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<210> 12

<211> 448

<212> DNA

<213> *Alexandrium tamarense*

<400> 12

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<210> 13

<211> 504

<212> DNA

<213> *Alexandrium tamarense*

<400> 13

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<210> 14

<211> 504

<212> DNA

<213> *Alexandrium tamarense*

<400> 14

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<210> 15

<211> 505

<212> DNA

<213> *Alexandrium tamarense*

<400> 15

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cccagacgag tccctccacg tgcgc 505

<210> 16

<211> 505

<212> DNA

<213> *Alexandrium tamarense*

<400> 16

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gttcggggac gtcggcaagc ccgcccacat catggagctc ctcgggcgga atgggggtgga 480
cccagacgag tccctccacg tgcgc 505

<210> 17

<211> 442

<212> DNA

<213> *Alexandrium minutum*

<400> 17

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caaggactct cgggtggcga cggagctcaa cctgagcagg cacgcagtcc cgcaccaagg 420
gctgttcggg gacgtcggca ag 442

<210> 18

<211> 505

<212> DNA

<213> *Gymnodinium catenatum*

<400> 18

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<210> 19

<211> 504

<212> DNA

<213> *Gymnodinium catenatum*

<400> 19

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ggctgggggt tcgtcggcgc cgcccgaggac tcgcaggagc aggaattcca cgtccaccgg 120
acgctgaacg tgggtgggag 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 gcatcctctt cgagaatcct 60
 ggctgggggt tcgtcgggcg cgccaggac tcgcaggagc aggaaattca cgtccaccgg 120
 acgctgaatg tggtagggcag cggggcgag caccagacgc tcttactga cctcgtgagg 180
 cacatcgact ccctcttcac tggaggggac ttcatgtcgc agccggcggt cgtcgtggat 240
 acaggggtgtg gcgacggccg cttgctcagg cgcactacg agcacgtgaa gagcaacacg 300
 ccgcgcggga aggcctctgc cgaacacccg ctacagatgg ttggcgctga cttcaacaag 360
 gactcccgcg tggcgacgga gctcaacttg agcaacatg cagtcccaca cctagtgtgtg 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 gcatcctctt cgagaatcct 60
 ggctgggggt tcgtcgggcg cgccaggac tcgcaggagc aggaaattca cgtccaccgg 120
 acgctgaacg tggtagggcag cggggcgag caccagacgc tcttactga cctcgtgagg 180
 cacatcgact ccctcttcac gggaggggac ttcatgtcgc agccggcggt cgtcgtggat 240
 acaggggtgtg gcgacggccg cttgctcagg cgcactacg agcacgtgaa gagcaacacg 300
 ccgcgcggga aggcctctgc cgaacacccg ctacagatgg ttggcgctga cttcaacaag 360
 gactcccgcg tggcgacgga gctcaacttg agcaacatg cagtcccaca cctagtgtgtg 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 gcatcctctt cgagaatcct 60
 ggctgggggt tcgtcgggcg cgccaggac tcgcaggagc aggaaattca cgtccaccgg 120
 acgctgaacg tggtagggcag cggggcgag caccagacgc tcttactga cctcgtgagg 180
 cacatcgact ccctcttcac gggaggggac ttcatgtcgc agccggcggt cgtcgtggat 240
 acaggggtgtg gcgacggccg cttgctcagg cgcactacg agcacgtgaa gagcaacacg 300
 ccgcgcggga aggcctctgc cgaacacccg ctacagatgg ttggcgctga cttcaacaag 360
 gactcccgcg tggcgacgga gctcaacttg agcaacatg cagtcccaca cctagtgtgtg 420
 ttcggggatg taggcaaacc cggcgacatc atggagctcc tcaggcagaa tgggggtggac 480
 ccgagcaggg ccctccacgt gcgc 504

<210> 23
 <211> 447
 <212> DNA
 <213> *Gymnodinium catenatum*
 <400> 23
 cctgggtggg ggttcgtcgg cgccggccag gactcgcagg agcaggaaat ccacgtccac 60
 cggacgtgta acgtgggtgg cagcggggcg cagcaccaga cgctcttcac tgacctcgtg 120
 cggcacatcg actccctctt cacgggaggg gacttcatgt cgcagccggc gttcgtcgtg 180
 gatacagggg gtggcgacgg ccgcttgctc aggcgcactc acgagcacgt gaagagcaac 240
 acgccgcgcg ggaaggcgct cgccgaacac ccgctcacga tggttggcgt cgacttcaac 300
 aaggactccc gcgtggcgac ggagctcaac ttgagcaagc atgcagtccc acacctagtg 360
 ctgttcgggg atgttggaac gccgcgcgac atcatggagc tcctcaggca gaatgggggtg 420
 gaccgagca gggccctcca cgtgcgc 447

<210> 24

<211> 649

<212> DNA

<213> *Alexandrium catenella*

<400> 24

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

<210> 25

<211> 576

<212> DNA

<213> *Alexandrium catenella*

<400> 25

tggtgcgcct	gaagcacaac	gacacggaac	agcccagagca	catgctctcg	tcgatccccg	60
agggggccga	catcacctac	gtgtgcgacg	gcgtgtactc	cacggacgaa	gagctcgccg	120
acttgcccc	catatgtgct	tggttgaggc	cgcgcggggc	caagatactc	gtagacgact	180
cgcagtgctg	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	ctgccgccct	gtcgagtacg	aagacaacct	tcgacctcaa	cgccgcgcgag	480
ggggaccttc	agcgcaagcg	gcttctggcg	gctaccctcg	aattctgcga	ggggctcaag	540
gcgctcgggt	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	gaggccgcgc	ggggccaaga	240
tactcgtaga	cgactcgcat	ggctgcggcg	ttcttgggcg	caaccccaac	tcggagcaac	300
ccctcgggta	tggtggcggc	ggcgtcacg	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

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

tggccaagaa	ctcgaacaca	ctcgtgttca	cagggccgat	ctgtaccgcc	ggcctgtcga	540
gtgcaaagac	gaccttgac	ctcaacgccg	cagaggggga	ccttcagcgc	aggcggtcc	600
tggcggcgac	ccctcgagtt	ctgcgagggg	ctcaaggcgc	tcgggtgccc	cca	653

<210> 28

<211> 639

<212> DNA

<213> *Alexandrium tamarense*

<400> 28

ctggacataa	acgcccacga	ctgcgtgcag	acggccgccca	ggctctgcaa	gaagggtcaa	60
ccgtgggtgcg	cctgaagcac	aacgacacgg	agcagctgga	gcgcatgctc	tcctcgatcc	120
cgcagggggc	cgacatcacc	tacgtgtgcg	acggcgtgta	ctccacagac	ggagagctcg	180
ccgacttgcc	cgccatatgt	gcttgtttga	ggccgcgcgg	ggccaagata	ctcgtggacg	240
actcgcattg	ctgcggcggt	cttggccgaa	acccagactc	ggagcaaccc	ttcggttatg	300
gtggcggtgg	cgtcgtcgag	tacttcgggc	tggactacgc	ggagaacaac	atcatctacg	360
ccgggcagct	gagcaaggcg	ttcaactcgc	ccggcggtat	cgtcggctgc	gcgcgcgaga	420
ccgacgttta	agttcgcat	cctgaacttg	gccaagaact	cgaacacact	cgtgttcaca	480
gggcccgatct	gtaccgccgg	cctgtcgagt	gcaaagacga	ccctggacct	caacgccgcc	540
gagggggacc	ttcagcgag	gcggctcctg	gcggcgaccc	tcgagttctg	cgaggggctc	600
aggcgctcg	ggtgccccca	cacctaccac	ggcttcccc			639

<210> 29

<211> 671

<212> DNA

<213> *Alexandrium tamarense*

<400> 29

ccagcctcgc	ggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
agacggccgc	caggctctgc	aagaagggcg	tcaccgtggt	gcgcctgaag	cacaacgaca	120
cggagcagct	ggagcgcatg	ctctcctcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
gcgacggcgt	gtactccaca	gacggagagc	tcgcccactt	gcccgcata	tgtgcttgtt	240
tgaggccgcg	cggggccaa	atactcgtgg	acgactcgca	tggtcgcgcc	gttcttgccc	300
gaaacccaaa	ctcggagcaa	cccttcagggt	atggtggcgg	tggtcgtcgc	gagtacttcg	360
ggctggacta	cgcgagagac	aacatcatct	acgcccggga	gctgagcaag	gcgttcaact	420
cgcccggcgg	attcgtcgcc	tgccgcgcgc	agaccgacga	gaagtccggc	atcctgaact	480
tggccaagaa	ctagaacaca	ctcgtgttca	cagggccgat	ctgtaccgcc	ggcctgtcga	540
gtgcaaagac	gaccttgac	ctcaacgccg	cagaggggga	ccttcagcgc	aggcggtcc	600
tggcggcgac	ccctcgagtt	tgcgaggggg	tcagggcgct	cgggtgcccc	cacacctacc	660
acggcttccc	c					671

<210> 30

<211> 624

<212> DNA

<213> *Alexandrium minutum*

<400> 30

tcctcctgga	cataaacgcc	cacgactgcg	tgagagcgcc	agccaggctc	tgcaagaagg	60
gagtcaccgt	cgtgcgcctg	aagcacaacg	acacggagca	gctcgagcgc	gtgctctcgt	120
cgatcccggga	gggggcccgc	atcacctacg	tgtgcgacgg	cgtctactcc	acggacggag	180
agctcgccga	cttgcgccgc	atatgtgctt	gtttgagggc	gcgcggggcc	aagatactcg	240
tggacgactc	gcacggttgc	ggcgttcttg	gccgcaaccc	cgactcggag	caacccttcg	300
gatattggcg	cgcgggcgtc	gtcaagtact	tcgggctgga	ctacgcggag	aacaacatca	360
tctacgccgg	gcagctgagc	aaggcggttca	attcgcccg	cggattcgtg	ggctgcgcac	420
gcgagaccga	cgagaagtgc	ggcattctga	acttgcccaa	gaactcgaac	acgctcgtgt	480
tcacagggcc	gatctgtact	gccggcctgt	cgagtgcgaa	gacgacctc	gacctcaact	540
ttgccgaggg	ggaccgtcag	cgcaagcggc	ttcttgaggc	gacctggaa	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	tggctgcggtc	gttcttggcc	300
gcaatcccga	ctcggagcag	ccctacgggt	atggcgcgcg	cggcgtcgtc	aagtacttcg	360
ggctggatta	tgcggagaac	aacatcatct	acgcccggca	gttgagcaag	gcgttcaatt	420
caccgcggcg	attcgtcggt	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	gcgccgacgg	ccgcttgctc	aggcgcacat	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcat	cgacttcaac	aaagactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcggac	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	gcgccgacgg	ccgcttgctc	aggcgcacat	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcggac	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	gcgccgacgg	ccgcttgctc	aggcgcacat	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcggac	atcatggagc	480
ccctcgggcg	gaagggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
ccgacc						546

<210> 35

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 35

tgcagcgctg	ctactcctac	tacgtcccga	cgctcctacgc	cccactgctg	gacaggtacc	60
acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	gggcctcgtg	cggtcgtgg	actcgggtttt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcgggcgacgg	ccgcttgctc	aggcgcacat	300
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tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagctggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcggac	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	actcgggtctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcgggcgacgg	ccgcttgctc	aggcgcacat	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
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acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcggac	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	gttcgcgggc	gccggcgggg	actcgcagga	120
gcaggaggtc	cacgtccaca	ggacgctgaa	cgtgggtgggc	agcggggcgc	agcaccagac	180
gctcttcacg	gacctcgtgc	ggctcgtgga	ctcgggtcttc	gcggggcggg	acttcgcgtc	240
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ggccggcgtc	gacttcaaca	aggactctcg	gggtggcgacg	gagctcaacc	tgagcaggca	420
cgcggtcccc	cacctggtgc	tggttcggggg	cgtcggcaag	cccgcgcgaca	tcattggagct	480
cctcggggcg	aagggggtgg	acccgagcag	gtccctccac	gtgcgctcct	tcctggacca	540
cgacc						545

<210> 38

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 38

tgcagcgatg	ctactcctac	tacgtcccga	cgctcctacgc	cccactgctg	gacaggtacc	60
acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcatg	cggtcgtgg	actcgggtcct	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcgggcgacgg	ccgcttgctc	aggcgcacat	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcggac	atcatggagc	480

tcctcgggcg gaagggggtg gacccgagca ggteccctcca cgtgcgctcc ttcttgacc 540
acgacc 546

<210> 39

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 39

tgcagcgatg ctattcctac tacgtcccga cgtcctacgc cccactgctg gacaggtacc 60
acagcatcat cttcgagaat cccgggtggg gggtcgccgg cgccggcggg gactcgagg 120
agcaggaggt ccacgtccac aggacgtga acgtgggtgg cagcggggcg cagcaccaga 180
cgctcttcac ggacctcgtg cggctcgtgg actcgggtctt cgcggggcgg gacttcgcgt 240
cgcagccggc gttcgtcgtg gacacggggg gcgggcgacgg ccgcttgctc aggcgcattct 300
acgagcacgt gaagagcaac acgccgcggg ggaaggcgct cgccgagcac ccgctcacga 360
tggtcggcgt cgacttcaac gaggactctc gggtggcgac ggagctcaac ctgagcaggc 420
acgcgggtccc gcacctgggtg ctgttcgggg acgtcggcaa gcccgccgac atcatggagc 480
tcctcgggcg gaagggggtg gacccgagca ggteccctcca cgtgcgctcc ttcttgacc 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 gactcgagg 120
agcaggaggt ccacgtccac aggacgtga acgtgggtgg cagcggggcg cagcaccaga 180
cgctcttcac ggacctcgtg cggctcgtgg actcgggtctt cgcggggcgg gacttcgcgt 240
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acgcgggtccc gcacctgggtg ctgttcgggg acgtcggcaa gcccgccgac atcatggagc 480
tcctcgggcg gaagggggtg gacccgagca ggteccctcca cgtgcgctcc ttcttgacc 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 gactcgagg 120
agcaggaggt ccacgtccac aggacgtga acgtgggtgg cagcggggcg cagcaccaga 180
cgctcttcac ggacctcgtg cggctcgtgg actcgggtctt cgcggggcgg gacttcgcgt 240
cgcagccggc gttcgtcgtg gacacggggg gcgggcgacgg tcgcttgctc aggcgcattct 300
acgagcacgt gaagagcaac acgccgcggg ggaaggcgct cgccgagcac ccgctcacga 360
tggtcggcgt cgacttcaac aaggactctc gggtggcgac ggagctcaac ctgagcaggc 420
acgcgggtccc gcacctgggtg ctgttcgggg acgtcggcaa gcccgccgac atcatggagc 480
tcctcgggcg gaagggggtg gacccgagca ggteccctcca cgtgcgctcc ttcttagacc 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 gactcgagg 120
agcaggaggt ccacgtccac aggacgtga acgtgggtgg cagcggggcg cagcgccaga 180
cgctcttcac ggacctcgtg cggctcgtgg actcgggtctt cgcggggcgg gacttcgcgt 240
cgcagccggc gttcgtcgtg gacacggggg gcgggcgacgg ccgcttgctc aggcgcattct 300

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acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcggcg	atcatggagc	480
tcctcggggc	gaaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 43

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 43

tgcagcgatg	ctactcctac	tacgtcccga	cgctcctacgc	cccactgctg	gacaggtacc	60
acagcatcat	cttcgagaat	cccgggtggg	gggttcgctgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcgtgg	actcgggtctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgctcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcattc	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
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acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcggac	atcatggagc	480
tcctcggggc	gaaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 44

<211> 546

<212> DNA

<213> *Alexandrium catenella*

<400> 44

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

<210> 45

<211> 546

<212> DNA

<213> *Alexandrium catenella*

<400> 45

tgcagcgatg	ctactcctac	tacgtcccga	cctcctacgc	cccactgctg	gacaggtacc	60
accgcatacct	cttcragaat	cccgggtggg	gggttcgccc	cgccggcccg	gactcgcagg	120
arcaggaggt	ccacgtccac	cggacgctga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggatctcgtg	cggctgattg	actcgggtctt	cgcgggcggg	gacttcgcgg	240
cgcagccggc	gttcgctcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcattc	300
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tggtcggcgt	cgacttcaac	aaggactctc	gggtggccac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcggac	atcatggagc	480
tcctcggggc	gaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 46

<211> 546

<212> DNA

<213> *Alexandrium catenella*

<400> 46

tgcagcgatg	ctactcctac	tacgtcccga	cctcctacgc	cccactgctg	gacaggtacc	60
accgcatacct	cttcgagaat	cccgggtggg	gggttcgccc	cgccggcccg	gactcgcagg	120

agcaggaggt	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggatctcgtg	cggctgattg	actcggctct	cgcgggcggg	gacttcgcgg	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
atgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cggcgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggccac	ggagctcaac	ctgagcaggc	420
acgcggtecc	gcacctggtg	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	gacagggtacc	60
accgcatacct	cttcgagaat	cccggctggg	ggttcgccgg	cgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggatctcgtg	cggctgattg	actcggctct	cgcgggcggg	gacttcgcgg	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cggcgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggccac	ggagctcaac	ctgagcaggc	420
acgcggtecc	gcacctggtg	ctgttcgggg	acgtcggcaa	gcccgcgcac	atcatggagc	480
tcctcggggc	gaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 48

<211> 546

<212> DNA

<213> *Alexandrium catenella*

<400> 48

tgcagcgatg	ctactcctac	tacgtcccga	cctcctacgc	cccactgctg	gacagggtacc	60
accgcatacct	cttcgagaat	cccggctggg	ggttcgccgg	cgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggatctcgtg	cggctgattg	actcggctct	cgcgggcggg	gacttcgcgg	240
cgcagccggc	gttcgtcgtg	gacacagggt	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cggcgagcac	ccgctcacga	360
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acgcggtecc	gcacctggtg	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	cgtcctacgc	cccgtgctg	gacagggtacc	60
acagcatacct	cttcgataat	cccggctggg	ggttcgccgg	tgccggccgg	gactcgcagg	120
agcaggagat	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcggctct	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gtggcgactg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcat	agacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtecc	gcacctggtt	ctgttcgggg	acgtcggcaa	gcccgcgcac	atcatggaga	480
tcctcggggc	gaaggggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 50

<211> 546

<212> DNA

<213> *Alexandrium tamarense*

<400> 50
 tgcagcgatg ctactcctac tacgtcccga cgtcctacgc cccgctgctg gacaggtacc 60
 acagcctcct ctctcgataat cccggctggg ggttcgcccgg tgccggcccg gactcgcagg 120
 agcaggagat ccacgtccac cggacgctga acgtgggtggg cagcggggcg cagcaccaga 180
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 acgagcacgt gaagagcaac acgcccgcgcg ggaaggcgct cgcagagcac ccgctcacga 360
 tggtcggcat agacttcaac aaggactctc ggggtggcgac ggagctcaac ctgagcaggc 420
 acgcggtccc gcacctgggt ctgttcgggg acgtcggcaa gcccgcggac atcatggaga 480
 tctcggggcg gaaggggggtg gacccgagca ggtccctcca cgtgcgctcc ttcctagacc 540
 acgacc 546

<210> 51
 <211> 546
 <212> DNA
 <213> *Alexandrium tamarense*

<400> 51
 tgcagcgatg ctactcctac tacgtcccac tgcgtacgc acctctgatg gccagatct 60
 cgcgatacct gtttgatgat gcggactggg ggttcgcccga cgcggggaca gactccttcg 120
 acgtggagga gcatgttgac agaattctga atgttggttg cagtgggtgcg caacaccgga 180
 cctcttttaa ggatctgatg cgacacatca gtgccgtgtt caagggcgag gcatttgcct 240
 tgcagccaaa tttcgttggtg gacactgggt gtggcgacgg gggcctgctc atgcatact 300
 atgaacatat caaacagcac acgccccggg ggaagtgtc cgatgagttc cctctgacaa 360
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 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
 acagcctcct ctctcgagaat cccggctggg ggttcgctgg tgccggcccg gactcgcagg 120
 agcaggaggt ccacgtccac cggacgctga acgtgggtggg cagcggggcg cagcaccaga 180
 cgctcttcac ggacctcgtg cggctcattg actcgggtctt cgcggggcggg gacttcgcat 240
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 acgcggtccc gcacctgggt ctcttcgggg acgtcggcga gcccgcggac atcatggaga 480
 ccctcggggcg gaatgggggtg gacccgagca ggtccctcca cgtgcgctcc ttcctagacc 540
 acgacc 546

<210> 53
 <211> 546
 <212> DNA
 <213> *Alexandrium tamarense*

<400> 53
 tgcagcgatg ctactcctac tacgtcccac tgcgtacgc accactgatg gccagatct 60
 caccgatcct gtttgatgat gcgggctggg ggttcactga cgcggggaca gactcctttg 120
 acgtggagga gcatgttgac agaattttga atgttggttg cagtgggtgcg caacaccgga 180
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 atgaacacat caagcagcac acgccccggg ggaagtgtc cgatgagttc cctctaaccga 360
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 agggcggtccc gcacgtggtc atctccggcg acgtgggttaa gcccgcggag ataattggcg 480
 cgctgaagaa gaagaagggtg gacccgtcga ggacgcttca tgcctgctcc ttcctagacc 540
 acgacc 546

<210> 54

<211> 546

<212> DNA

<213> *Alexandrium tamarense*

<400> 54

tgcagcgatg	ctactcctac	tacgtcccga	cgtectacgc	cccactgctg	gacaggtacc	60
acagcatcct	cttcgagaat	cccggctggg	ggttcgctgg	tgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtgggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcgggtctt	cgcgggcggg	gacttcgcat	240
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acgcgggtccc	gcacctgggtg	ctcttcgggg	acgtcggcaa	gcccggcgac	atcatggaga	480
ccctcggggcg	gaatgggggtg	gacccgagca	ggtcctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 55

<211> 546

<212> DNA

<213> *Alexandrium tamarense*

<400> 55

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acagcatcct	cttcgagaat	cccggctggg	ggttcgctgg	tgccggccgg	gactcgcagg	120
agcaggaggt	ccacgtccac	cggacgctga	acgtgggtggg	cagcggggcg	cagcaccaga	180
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acgcgggtccc	gcacctgggtg	ctcttcgggg	acgtcggcaa	gcccggcgac	atcatggaga	480
ccctcggggcg	gaatgggggtg	gacccgagca	ggtcctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 56

<211> 546

<212> DNA

<213> *Alexandrium tamarense*

<400> 56

tgcagcgatg	ctactcctac	tacgtcccga	cgtectacgc	cccactgctg	gacaggtacc	60
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agcaggaggt	ccacgtccac	cggacgctga	acgtgggtggg	cagcggggcg	cagcaccaga	180
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tggtcggcgt	cgacttcaac	aaggactctc	gggtggcggc	ggagctcaac	ctgagcaggc	420
acgcgggtccc	gcacctgggtg	ctcttcgggg	acgtcggcaa	gcccggcgac	atcatggaga	480
ccctcggggcg	gaatgggggtg	gacccgagca	ggtcctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 57

<211> 549

<212> DNA

<213> *Alexandrium fundyense*

<400> 57

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cgccgatcct	gtttgatgat	gcgggctggg	ggttcactga	cgcggggaca	gactccttcg	120
acgacgtgga	ggagcatggt	gacagaatct	tgaatgttgt	tggcagtggg	gcgcaacacc	180
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agcagggcgt	cccgcacgtg	gtcatctctg	gcgatgtggg	taagcctgcg	gagatacttg	480
ccgcgctgaa	gaagaagaag	gtggacgcgt	cgaggacgct	tcatgtccgc	tccttcctgg	540

accacgacc

549

<210> 58

<211> 487

<212> DNA

<213> *Alexandrium fundyense*

<400> 58

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cgccgatacct	gtttgatgat	gcgggctggg	ggttcactga	cgcggggaca	gactccttcg	120
acgacgtgga	ggagcatggt	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	gactcgcagg	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
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcgggtccc	gcacctgggt	ctgttcgggg	acgtcggcaa	gccggccgac	atcatggagc	480
tcctcggacg	gaggggggtg	gacccgagca	ggtccctcca	cgtagcgtcc	ttcctagacc	540
acgacc						546

<210> 60

<211> 545

<212> DNA

<213> *Alexandrium fundyense*

<400> 60

gcagcgatg	tactcctact	acgtcccgac	gtcctacgcc	ccaatgctgg	acaggtacca	60
cagtatacct	ttcgagaatc	ccggctgggg	gttcgcgggt	gccggccggg	actcgcagga	120
gcaggagatc	cacgtccacc	ggacgtgaa	cgtgggtggg	agcggggccc	agcaccagac	180
gctcttcacg	gacctcgtgc	ggctcattga	ctcgggtctt	gcggggcggg	acttcgcgtc	240
gcagccggcg	ttcgtcgtgg	acacgggggtg	cggcgacggc	cgcttgctca	ggcgcatcta	300
cgagcacgtg	aagagcaaca	cgccgcgcgg	gaaggcgctc	gccgagcacc	cgctcacgat	360
ggtcggcgct	gacttcaaca	aggactctcg	gggtggcgacg	gagctcaacc	tgagcaggca	420
cgcggtcccg	cacctgggtg	tggtcggggg	cgtcggcaag	ccggccgaca	tcattggagct	480
cctcggacgg	aggggggtgg	acccgagcag	gtccctccac	gtgcgctcct	tcctagacca	540
cgacc						545

<210> 61

<211> 546

<212> DNA

<213> *Alexandrium fundyense*

<400> 61

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

acgcgggtccc	gcacctgggtg	ctgttcggggg	acgtcggcaa	gcccggccgac	atcatggaga	480
tcctcggggcg	gaacgggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 62

<211> 546

<212> DNA

<213> *Alexandrium fundyense*

<400> 62

tgcagcgatg	ctactcctac	tacgtcccgga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcctcct	cttcgagaat	cccggctggg	ggttcgccgg	tgccggccgg	gactcgcagg	120
agcaagagat	ccacgtccac	cggacgtgga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcgggtctt	cgcgggcccgg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcgccgacgg	ccgcttgctc	aggcgcattc	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagtag	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcgggtccc	gcacctgggtg	ctgttcggggg	acgtcggcaa	gccggccgac	atcatggaga	480
tcctcggggcg	gaacgggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 63

<211> 546

<212> DNA

<213> *Alexandrium fundyense*

<400> 63

tgcagcgctg	ctactcctac	tacgtcccgga	cgtcctacgc	cccactgctg	gacaggtacc	60
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agcaggagat	ccacgtccac	cggacgtgga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcgggtctt	cgcgggcccgg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcgccgacgg	ccgcttgctc	aggcgcattc	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgatcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcgggtccc	gcacctgggtg	ctgttcggggg	acgtcggcaa	gccggccgac	atcatggaga	480
tcctcggggcg	gaacgggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 64

<211> 546

<212> DNA

<213> *Alexandrium fundyense*

<400> 64

tgcagcgatg	ctactcctac	tacgtcccgga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcctcct	cttcgagaat	ctcggctggg	ggttcgccgg	tgccggctcg	gactcgcagg	120
agcaggagat	ccacgtccac	cggacgtgga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcgggtctt	cgcgggcccgg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcgccgacgg	ccgcttgctc	aggcgcattc	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	cgccgagcac	ccgctcacga	360
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcgggtccc	gcacctgggtg	ctgttctggg	acgtcggcaa	gcccgccgac	atcatggaga	480
tcctcggggcg	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	gcgggcccgg	acttcgcgtc	240

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

<210> 66

<211> 546

<212> DNA

<213> *Alexandrium fundyense*

<400> 66

tgcagcgatg	ctacttctac	tacgtcccga	cgtcctacgc	cccactgctg	gacaggtacc	60
acagcatcct	cttcgagaat	cccggctggg	ggttcgcggg	tgccggccgg	gactcgcagg	120
agcaggagat	ccacgtccac	cggacgctga	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcggctct	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgctcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	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	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcggctct	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgctcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	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	acgtggtggg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggctcattg	actcggctct	cgcgggcggg	gacttcgcat	240
cgcagccggc	gttcacgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcatct	300
acgagcacgt	gaagagcaac	acgccgcgcg	ggaaggcgct	caccgagcac	ccgctcacga	360
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
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acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgcgggtgg	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	gcccgccgac	atcatggagc	480
tcctcggggc	gaagggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctagacc	540
acgacc						546

<210> 70

<211> 546

<212> DNA

<213> *Alexandrium minutum*

<400> 70

tgcagcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacagggtacc	60
acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtgggtgg	cagcggggcg	cagcaccaga	180
cgctcttcac	ggacctcgtg	cggtcgtgg	actcgggtctt	cgcgggcggg	gacttcgcgt	240
cgcagccggc	gttcgtcgtg	gacacggggg	gcggcgacgg	ccgcttgctc	aggcgcacat	300
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acgcgggtccc	gcacctggtg	ccgttcgggg	acgtcggcaa	gcccgccgac	atcacggagc	480
tcctcggggc	gaagggggtg	gacccgagca	ggtccctcca	cgtgcgctcc	ttcctggacc	540
acgacc						546

<210> 71

<211> 545

<212> DNA

<213> *Alexandrium minutum*

<400> 71

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acagcatcat	cttcgagaat	cccgggtggg	ggttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	gcgtgggtgg	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	tggtcgggga	cgtcgggcaa	cccgccgaca	tcattggagct	480
cctcggggcg	aagggggtg	acccgagcag	gtccctccac	gtgcgctcct	tcctggacca	540
cgacc						545

<210> 72

<211> 545

<212> DNA

<213> *Alexandrium minutum*

<400> 72

tgcagcgatg	ctactcctac	tacgtcccga	cgtcctacgc	cccactgctg	gacagggtacc	60
acagcatcat	cttcgagaat	cccgggtggg	agttcgccgg	cgccggcggg	gactcgcagg	120
agcaggaggt	ccacgtccac	aggacgctga	acgtgggtgg	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	gcccgccgac	atcatggagc	480
tcctcggggc	gagggggtg	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
tggtcggcgt	cgacttcaac	aaggactctc	gggtggcgac	ggagctcaac	ctgagcaggc	420
acgcggtccc	gcacctgggtg	ctgttcgggg	acgtcggcaa	gcccgcgcac	atcatggaga	480
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	gggagagagc	gggttcctcc	tcctggacat	caacgcccac	gactgcgtgc	60
agacggccgc	caggctctgc	aagaaggagg	tcaccgtcgt	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagcgcgtg	ctctcgtcga	tcccggagg	ggccgacatc	acctacgtgt	180
gcgacggcgt	ctactccacg	gacggagagc	tcgccgactt	gcccgccata	tgtgcttggt	240
tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	cggttgcggc	gttcttgggc	300
gcaaccccga	ctcggagcaa	cccttcggat	atggcgccgg	cggcgctcgtc	aagtacttcg	360
ggctggacta	cgcgagagaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	420
cgcccggcag	attcgtgggc	tgcgcacgcg	agaccgacga	gaagttcggc	atcctgaact	480
tggccaagaa	ctcgaacatg	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcgaagac	gacctcgcac	ctcaactttg	cggaggggga	ccgtcagcgc	aagcggcttc	600
ttcaggcgac	cctcgaattt	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
acgggttccc						670

<210> 76

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 76

cgagcctggc	gggagagagc	ttgttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
agacggcagc	caggctctgc	aagaaggagg	tcaccgtcgt	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagcgcgtg	ctctcgtcga	tcccggagg	ggccgacatc	acctacgtgt	180
gcgacggcgt	ctactccacg	gacggagagc	tcgccgactt	gcccgccata	tgtgcttggt	240
tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	cggttgcggc	gttcttgggc	300
gcaaccccga	ctcggagcaa	cccttcggat	atggcgccgg	cggcgctcgtc	aagtacttcg	360
ggctggacta	cgcgagagaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	420
cgcccggcgg	attcgtgggc	tgcgcacgcg	agaccgacga	gaagttcggc	attctgaact	480
tggccaagaa	ctcgaacacg	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcgaagac	gacccgcgac	ctcaactttg	cggaggggga	ccgtcagcgc	aagcggcttc	600
ttgaggcgac	cctggaattt	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
acgggttccc						670

<210> 77

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 77

cgagcctggc	gggagagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
agacggcagc	caggctctgc	aagaaggagg	tcaccgtcgt	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagcgcgtg	ctctcgtcga	tcccggagg	ggccgacatc	acctacgtgt	180

gcgacggcgt	ctactccacg	gacggagagc	tgcgcgactt	gcccgccata	tgtgcttggt	240
tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	cggttgcggc	gttcttgccc	300
gcaaccccga	ctcggagcaa	cccttcggat	atggcggcgg	cggcgtcgtc	aagtacttcg	360
ggctggacta	cgcggagaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	420
cgcccggcgg	attcgtgggc	tgcgcacgcg	agaccgacga	gaagttcgrc	attctgaact	480
tggccaagaa	ctcgaacacg	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcaagac	gaccctcgac	ctcractttg	ccgaggggga	ccgtcagcgc	aagcggcttc	600
ttgagggcga	cctggaattt	tgcgaggggc	tcaaggcgct	cgggtgcccc	crcacctacc	660
acgggttccc						670

<210> 78

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 78

cgagcctggc	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
agacggcagc	caggctctgc	aagaaggagg	tcaccgtcgt	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagygcgtg	ctctcgtcga	tcccggaggg	ggccgacatc	acctacgtgt	180
gcgacggcgt	ctactccacg	grcggagagc	tgcgcgactt	gcccgccata	tgtgcttggt	240
tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	cggttgcggc	gttcttgccc	300
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tggccaagaa	ctcgaacacg	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcaagac	gaccctcgac	ctcractttg	ccgaggggga	ccgtcagcgc	aagcggcttc	600
ttgagggcga	cctggaattt	tgcgaggggc	tcaaggcgct	cgggtgcccc	crcacctacc	660
acgggttccc						670

<210> 79

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 79

cgagcctggc	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
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cggagcagct	cgagygcgtg	ctctcgtcga	tcccggaggg	ggccgacatc	acctacgtgt	180
gcgacggcgt	ctactccacg	grcggagagc	tgcgcgactt	gcccgccata	tgtgcttggt	240
tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	cggttgcggc	gttcttgccc	300
gcaaccccga	ctcggagcaa	cccttcggat	atggcggcgg	cggcgtcgtc	aagtacttcg	360
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cgcccggcgg	attcgtgggc	tgcgcacgcg	agaccgacga	gaagttcggc	attctgaact	480
tggccaagaa	ctcgaacacg	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcaagac	gaccctcgac	ctcaactttg	ccgaggggga	ccgtcagcgc	aagcggcttc	600
ttgagggcga	cctggaattt	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
acgggttccc						670

<210> 80

<211> 627

<212> DNA

<213> Alexandrium minutum

<400> 80

cgcccacgac	tgcgtgcaga	cggcagccag	gctctgcaag	aaggagtgca	ccgtcgtgcg	60
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cgacatcacc	tacgtgtgcg	acggcgtcta	ctccacggac	ggagagctcg	ccgacttgcc	180
cgccatatgt	gcttggttga	ggccgcgcgg	ggccaagata	ctcgtggacg	actcgcacgg	240
ttgcggcggt	cttgcccgca	accccgactc	ggagcaaccc	ttcggatatg	gcggcgccgg	300
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gagcaaggcg	ttcaattcgc	ccggcggatt	cgtgggctgc	gcacgcgaga	ccgacgagaa	420
gttcggcatt	ctgaacttgg	ccaagaactc	gaacacgctc	gtgttcacag	ggccgatctg	480
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

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cggagcagct	cgagcgcgtg	ctctcgtcga	tcccgggaag	ggccgacatc	acctacgtgt	180
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tgaggccg	cggggccaag	atactcgtgg	acgactcgca	cggttgccgc	gttcttgccc	300
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gtgcgaagac	gaccctcgac	ctcaactttg	ccgaggggga	ccgtcagcgc	aagcggcttc	600
ttcaggcgac	cctcgaattt	tgccgagggc	tcaaggcgct	cggttgcccc	cacacctacc	660
acgggttccc						670

<210> 82

<211> 669

<212> DNA

<213> Alexandrium minutum

<400> 82

cgagcctggc	gggagagagc	gggttcctcc	tcctggacat	caacgcccac	gactgcggtgc	60
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cggagcagct	cgagcgcgtg	ctctcgtcga	tcccgggaag	ggccgacatc	acctacgtgt	180
gagcggcgt	ctactccacg	gacggagagc	tcgcccactt	gcccgcata	tgtgcttgtt	240
tgaggccg	cggggccaag	atactcgtgg	acgactcgca	cggttgccgc	gttcttgccc	300
gcaaccccg	ctcggagcaa	cccttcggat	atggcgccgc	cgccgtcgtc	aagtacttcg	360
gctggactac	gcgagagaca	acatcatcta	cgccgggcag	ctgagcaagg	cggttcaattc	420
gcccggccgc	ttcgtgggct	gcccagcgca	gaccgacgag	aggttcggca	ttctgaactt	480
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tgccaagacg	accctcgacc	tcaactttgc	cgagggggac	cgtcagcgca	agcggcttct	600
tgaggcgacc	ctggaatttt	gaggggggct	caaggcgctc	gggtgcccc	acacctacca	660
cggttccc						669

<210> 83

<211> 670

<212> DNA

<213> Alexandrium minutum

<400> 83

agcctttgtg	ggcagagaca	ggttcccccg	cctgtgcata	aacgcctacg	attgcgcgca	60
gacggccg	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	tggtggccgc	ggcgccgctc	agtatttcgg	360
gctgggctac	gcgagagaca	acatcagcta	cgccgggcag	ctgagcaagg	cggttcaattc	420
gcccggccgc	atcgtcggtt	tgccgcgcca	gaccgacgag	aatttcggcg	ctctgaactt	480
ggccaagaac	tcgagcacac	tcgctctcac	agggccgatc	tgtactgtcg	gcctgtcgag	540
tgccaagacg	accctcgacc	tcaacggcgt	cgagggggac	ttttcagcgc	aagcggctgc	600
tgccgactac	cctcgaattc	tgccgagggc	tcaaggcgct	cggttgcccc	cacacctacc	660
acgggttccc						670

<210> 84

<211> 671

<212> DNA

<213> Alexandrium minutum

<400> 84

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agacggcagc	caggctctgc	aagaagggag	tcaccgtcgt	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagcacatg	ctctcgtcga	tcctgcaggg	gccgacatca	cctacgtgtg	180
cgacggcgtg	tactccacgg	acggagagct	cgccgacttg	cccgccatat	gtgttttgtg	240
tgaggccgcg	tggggccaat	atactcgtag	acgactcgca	tggctgcggc	gttcttgccc	300
gcgaccccg	ctcggagcaa	cccctcgggt	atgggtggcg	cgccgcgcgt	gagtatttcg	360
ggctgggcta	cgcgagaaac	aacatcagct	acgccgggca	gctgagcaag	gcgttcaatt	420
cgcccgccgg	aatcgtcggg	tgtgcgcgcg	agaccgacga	gaatttcggc	gctctgaact	480
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gtgcgaagac	gaccttcgac	ctcaacgccg	tcgaggggga	cttttcagcg	caagcggctg	600
ctggcgacta	ccctcgaatt	ctgcgagggg	ctcaaggcgc	tcgggtgccc	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	tcgccgactt	gcccgccata	tgtgttttgt	240
gtgaggccgc	gtggggccaa	tatactcgta	gacgactcgc	atggctgcgg	cgttcttgcc	300
cgcgactccg	actcggagca	acccctcggg	tatgggtggcg	gcggcgccgt	cgagtatttc	360
gggctgggct	acgcggagaa	caacatcagc	tacgccgggc	agctgagcaa	ggcgttcaat	420
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ttggccaaga	actcagacac	actcgcgctc	acagggccga	tctgtactgt	cggcctgtcg	540
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gctggcgact	accctcgaat	tctgcgaggg	gctcaaggcg	ctcgggtgcc	cccacacctc	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	tcgccgactt	gcccgccata	tgtgttttgt	240
gtgaggccgc	gtggggccaa	tatactcgta	gacgactcgc	atggctgcgg	cgttcttgcc	300
cgcgaccccg	actcggagca	acccctcggg	tatgggtggcg	gcggcgccgt	cgagtatttc	360
gggctgggct	acgcggagaa	caacatcagc	tacgccgggc	agctgagcaa	ggcgttcaat	420
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gctggcgact	accctcgaat	tctgcgaggg	gctcaaggcg	ctcgggtgcc	cccacacctc	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	tcgccgactt	gcccgccata	tgtgttttgt	240
gtgaggccgc	gtggggccaa	tatactcgta	gacgactcgc	atggctgcgg	cgttcttgcc	300
cgcgactccg	actcggagca	acccctcggg	tatgggtggcg	gcggcgccgt	cgagtatttc	360
gggctgggct	acgcggagaa	caacatcagc	tacgccgggc	agctgagcaa	ggcgttcaat	420

tcgccccggcg	gaatcgtegg	ttgtgcgcgc	gagaccgacg	agaatttcgg	cgctctgaac	480
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agtgcgaaga	cgaccttcga	cctcaacgcc	gtcgaagggg	acttttcagc	gcaagcggtc	600
gctggcgact	accctcgaat	tctgcgaggg	gctcaaggcg	ctcgggtgcc	cccacaccta	660
ccacgggttc	cc					672

<210> 88

<211> 671

<212> DNA

<213> *Alexandrium minutum*

<400> 88

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cggagctgct	cgagcgcgtg	ctctcgtcga	tcccggaggg	ggccgacatc	acctacgcgt	180
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tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	tggctgcggc	gttcttgggc	300
gcgaccccga	ctcggagcaa	cccctcgggt	atggtggcgg	cggcgccgtc	gagtatttcg	360
ggctgggcta	cgcgagaaac	aacatcagct	acgccgggca	gctgagcaag	gcgttcaatt	420
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ttggcgacta	ccctcgaatt	ctgcgagggg	ctcaaggcgc	taggggtgcc	ccacacctac	660
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<210> 89

<211> 714

<212> DNA

<213> *Alexandrium minutum*

<400> 89

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taaacgccc	cgactgcgtg	cagacggcag	ccaggctctg	caagaaggga	gtcacccgtcg	120
tgccgctgaa	gcacaacgac	acggagcagc	tcgagcgcgt	gctctcgtcg	atcccggagg	180
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acggttgccg	cgttcttgcc	cgcaaccccc	actcggagca	acccttcgga	tatggcgccg	360
gcggcgctcg	ctagtacttc	gggctggact	acgcggagaa	caacatcatc	tacgccgggc	420
agctgagcaa	ggcgttcaat	tcgcccggcg	gattcgtggg	ctgcgcacgc	gagaccgacg	480
agaagttcgg	cattctgaac	ttggccaaga	actcgaacac	gctcgtgttc	acagggccga	540
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accgtcagcg	caagcggcct	cttgaggcga	ccctggaatt	ttgcgagggg	ctcaaggcgc	660
tcgggtgccc	ccacacctac	cacgggttcc	ccatcgtcaa	catctactgg	accc	714

<210> 90

<211> 714

<212> DNA

<213> *Alexandrium minutum*

<400> 90

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taaacgccc	cgactgcgtg	cagacggcag	ccaggctctg	caagaaggga	gtcacccgtcg	120
tgccgctgaa	gcacaacgac	acggagcagc	tcgagcgcgt	gctctcgtcg	atcccggagg	180
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accgtcagcg	caagcggcct	cttgaggcga	ccctggaatt	ttgcgagggg	ctcaaggcgc	660
tcgggtgccc	ccacacctac	cacgggttcc	ccatcgtcaa	catctactgg	accc	714

<210> 91

<211> 714

<212> DNA

<213> *Alexandrium minutum*

<400> 91

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accgtcagcg	caagcggcct	cttgaggcga	ccctggaatt	ttgcgagggg	ctcaaggcgc	660
tcgggtgccc	ccacacctac	cacgggttcc	ccatcgtcaa	catctactgg	accc	714

<210> 92

<211> 713

<212> DNA

<213> *Alexandrium minutum*

<400> 92

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gcgcctgaag	cacaacgaca	cggagcagct	cgagcgcgtg	ctctcgtcga	tcccggaggg	180
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cggttgcggc	gttcttggcc	gcaacccccg	ctcggagcaa	cccttcggat	atggcgggcg	360
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ccgtcagcgc	aagcggcttc	ttgaggcgac	cctggaattt	tgcgaggggc	tcaaggcgct	660
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<210> 93

<211> 713

<212> DNA

<213> *Alexandrium minutum*

<400> 93

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cggcgtcgtc	aagtaacttc	ggctggacta	cgcggagaa	aacatcatct	acgccgggca	420
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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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cggaaacagcc	cgagcacatg	ctctcgtcaa	tcccgcaggg	ggccgacatc	acctacgtgt	180

gcgacggcgt	gtactccacg	gacgaagagc	tcgccgactt	gcccgccata	tgtgcttggt	240
tgaggcccg	cggggccaag	atactcgtag	acgactcgca	tggtcgcgcc	gttcttgccc	300
gcaaccccaa	ctcggagcaa	cccctcggtt	atggtggcgg	cggcgatc	gagtacttcg	360
ggctggacta	cgcggagaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaatt	420
cgcccgccg	attcgtcagc	tgtgcgcgcg	agaccgacga	gaatttcggc	gttctgcaact	480
tggccaagaa	ctcgaacaca	ctcgtgctca	cagggccgat	ctgtactgcc	agcctgtcga	540
gtgcaagac	gaccttcgac	ctcaacgccg	cggaggggga	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
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cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
gcgacggcgt	gtactccacg	gacggagagc	tcgccgactt	gcccgccata	tgtgcttggt	240
tgaggcccg	cggggccaag	atactcgtag	acgactcgca	tggtcgcgcc	gttcttgccc	300
gcaaccccca	ctcggagcaa	cccctcggtt	gtggtggtgg	cggcgatcgtc	gagtacttcg	360
ggctggatta	cgcggagaac	aacgacatct	acgccgggca	gctgagcaag	gcattcaatt	420
cgcccgccg	attcgtcggc	tgtgcgcgcg	agacagacga	gaagtgcggc	attctgagct	480
tggccaagaa	ctcgaacaca	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcaatgac	gaccttcgac	ctcaacgccg	cggaggggga	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	tcccgcaggg	ggccgacatc	acctacgtgt	180
gcgacggcgt	gtactccacg	gacggagagc	tcgccgactt	gcccgccata	tgtgcttggt	240
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cgcccgccg	attcgtcggc	tgtgcgcgcg	agacagacga	gaagtgcggc	attctgagct	480
tggccaagaa	ctcgaacaca	ctcgtgttca	cagggccgat	ctgtactgcc	ggcctgtcga	540
gtgcaatgac	gaccttcgac	ctcaacgccg	cggaggggga	ccttcagcgc	aagcggcttc	600
tggcgccgac	cctcgaattc	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
acgggctccc						670

<210> 97

<211> 670

<212> DNA

<213> Alexandrium tamarense

<400> 97

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cggagcagct	ggagcgcgat	ctctcctcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
gcgacggcgt	atactccaca	gacggagagc	tcgccgactt	gcccgccata	tgtgcttggt	240
tgaggcccg	cggggccaag	atactcgtag	acgactcgca	tggtcgcgcc	gttcttgccc	300
gaaacccaga	ctcggagcaa	cccttcgggt	atggtggcgg	tgccgctcgtc	gagtacttcg	360
ggctggacta	cgcggagaac	aacatcatct	acgccgggca	gctgagcaag	gcgttcaact	420
tggccggcg	attcgtcggc	tgcgcgcgcg	agaccgacga	gaagttcggc	atcctgaact	480
tggccaagaa	ctcgaacaca	ctcgtgttca	cagggccgat	ctgtaccgcc	ggcctgtcga	540
gtgcaaagac	gaccttgac	ctcaacgccg	cggaggggga	ccttcagcgc	aggcggctcc	600

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acggcttccc 670

<210> 98

<211> 713

<212> DNA

<213> *Alexandrium tamarense*

<400> 98

tgctcaacat	gggagtcac	cccagcctcg	cgggcgagag	cgggttcctc	ctcctggaca	60
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tgcgcctgaa	gcacaacgac	acggagcagc	tggagcgcac	gctctcctcg	atcccgcagg	180
gggcccacat	caccacagtg	tgcgacggcg	tgtactccac	agacggaggg	ctcggccgact	240
tgcccgccat	atgtgcttgt	ttgaggccgc	gcgggaccaa	gatactcgtg	gacgactcgc	300
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ccttcagcgc	aggcggctcc	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	cgggcgaggag	cgggttcctc	ctcctggaca	60
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gcgcctgaag	cacaacgaca	cggagcagct	ggagcgcacg	ctctcctcga	tcccgcaggg	180
ggccgacatc	acctacgtgt	gcgacggcgt	gtactccaca	gacggagagc	tcgccgactt	240
gcccgcata	tgtgcttgtt	tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	300
tggtgctggc	gttcttggcc	gaaacccaga	ctcggagcaa	cccttcgggt	atggtggtgg	360
tggtgctgc	gagtacttcg	ggctggacta	cgcggagaac	aacatcatct	acgccgggca	420
gctgagcaag	gcgttcaact	cgcccggcgg	attcgtcggc	tgcgcgcgcg	agaccgacga	480
gaagttcggc	atcctgaact	tggccaagaa	ctcgaacaca	ctcgtgttca	cagggccgat	540
ctgtaccgcc	ggcctgtcga	gtgcaaagac	gaccctggac	ctcaacgccg	ccgaggggga	600
ccttcagcgc	aggcggctcc	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	cgggcgaggag	cgggttcctc	ctcctggaca	60
taaagcccca	cgactgcgtg	cagacggccg	ccaggctctg	caagaagggc	gtcaccgtgt	120
gcgcctgaag	cacaacgaca	cggagcagct	ggagcgcacg	ctctcctcga	tcccgcaggg	180
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gcccgcata	tgtgcttgtt	tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	300
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tggtgctgc	gagtacttcg	ggctggacta	cgcggagaac	aacatcatct	acgccgggca	420
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ccttcagcgc	aggcggctcc	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	ccaggtctg	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

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agacggccgc	caggctctgc	aagaagggcg	ccaccgtggg	gcgcctgaag	cacaacgaca	120
cggaaacagcc	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
gcgacgtact	ccacggacga	agagctcgcc	gacttgcccc	ccatatgtgc	ttgtttgagg	240
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cgaagacgac	cttcgacctc	aacgcgcgcg	agggggacct	tcagcgcaag	cggcttctgg	600
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ggttccc						667

<210> 103

<211> 670

<212> DNA

<213> Alexandrium fundyense

<400> 103

cgagcctcgt	gggagagagc	gggttcctcc	tcctgtacat	aaacgcccac	gactgcgtgc	60
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cggaaacagcc	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
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acgggttccc						670

<210> 104

<211> 670

<212> DNA

<213> Alexandrium fundyense

<400> 104

cgagcctcgt	gggagagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
agacggccgc	caggctctgc	aagaagggcg	ccaccgtggg	gcgcctgaag	cacaacgacg	120
cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
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gcaaccccca	ctcggagcaa	cccttcgggt	atggtggcgg	cggcgctcgc	gagtacttcg	360

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tggcgccgac	cctcgaattc	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
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<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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cgaagacgac	cttcgacctc	aacgccgccg	agggggacct	tcagcgcaag	cggcttctgg	600
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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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<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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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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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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cggaaacagcc	cgagcacatg	ctctcgctga	tcccgcaggg	ggccgacatc	acctacgtgt	180
gtgacggcgt	gtactccacg	gacgaagagc	tcgccgactt	gcccgcata	tgtgcttgtt	240
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caaccccaac	tcggagcaac	ccctcgggta	tgggtggcggc	ggcgtcatcg	agtacttcgg	360
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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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ccgcaacccc	gactcggagc	aacccctcgg	gtatggtggc	ggcggcgggc	ccgagtactt	360
cgggctggac	tacgcgga	acaacatcat	ctacgccggg	cagttgagca	aggcgttcaa	420
ttcgcccggc	ggattcgtct	tttgtgcgcg	cgagaccgac	gcgaagtttg	gcttttctga	480
acttggccaa	gagctcgaac	ccactcgtgc	tcacagggcc	gatctgtcct	gccggcctgt	540
cgagtgcgaa	gacgaccttc	gacctcaacg	ccgccgaggg	ggaccttcag	cgcaagcggc	600
ttctggcggc	gacctcgaa	ttctgcgagg	ggttcaaggc	gctcgggtgc	ccccacacct	660
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	tgtactgcca	gcctgtcgag	540
tgcgaagacg	accttcgacc	tcaacgcgcg	caagggggac	cttcagcgca	agcggttctt	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
acggccgcga	ggctctgcaa	gaagggagtc	accgtcgtgc	gcctgaagca	caacgacacg	120
gagcagctcg	agcgcgtgct	ctcgtcgatc	ccggaagggg	ccgacatcac	ctacgtgtgc	180
gacggcgtct	actccacggg	cggagagctc	gccgacttgc	ccgccatatg	tgcttgtttg	240
aggccgcgcg	gggccaagat	actcgtggac	gactcgcacg	gttgcggcgt	tcttgccgcg	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	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	60
agacggcagc	caggctctgc	aagaagggag	tcaccgtcgt	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagcgcgtg	ctctcgtcga	tcccggaggg	ggccgacatc	acctacgtgt	180
gcgacggcgt	ctactccacg	gacggagagc	tcgccgactt	gcccgccta	tggtgttgtt	240
tgaggccgcg	cggggccaag	atactcgtgg	acgactcgca	cggttgcggc	gttcttgggc	300
gcaaccccga	ctcggagcaa	cccttcggat	atggcgggcg	cggcgtcgtc	aagtacttcg	360
ggctggacta	cgcggagaac	aacatcatct	acgcccggca	gctgagcaag	gcgttcaatt	420
cgcccggcgg	attcgtgggc	tgcgacgcgc	agaccgacga	gaagttcggc	attctgaact	480
tggccaagaa	ctcgaacacg	ctcgtgttca	cagggccgat	ctgtactacc	ggcctgtcga	540
gtgcgaagac	gaccctcgac	ctcaactttg	ccgaggggga	ccgtcagcgc	aagcggtctc	600
ttgaggcgac	cctggaattt	tgcgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	660
acgggttccc						670

<210> 114

<211> 711

<212> DNA

<213> Alexandrium minutum

<400> 114

tgctcaacat	gggagtcac	ccgagcctgg	cgggcgagag	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	gcggggccaa	gatactcgtg	gacgactcgc	300
acggttgcgg	cgttcttggc	cgcaaccccc	actcggagca	acccttcgga	tatggcgggc	360
gcgtcgtcaa	gtacttcggg	ctggactacg	cggagaacaa	catcatctac	gccgggcagc	420
tgagcaaggc	gttcaattcg	cccggcggat	tcgtgggctg	cgcacgcgag	accgacgaga	480
agttcggcat	tctgaacttg	gccaagaact	cgaacacgct	cgtgttcaca	gggcccgatct	540

gtactgccgg	cctgtcgagt	gcgaagacga	ccctcgacct	caactttgcc	gaggggggacc	600
gtcagcgtaa	gcggcttctt	gagggcgacc	tggaattttg	cgaggggctc	aaggcgctcg	660
ggtgccccca	cacctaccac	gggttcccc	tcgtcaacat	ctactggacc	c	711

<210> 115

<211> 714

<212> DNA

<213> *Alexandrium minutum*

<400> 115

tgctcaacat	gggagtcac	ccgagcctgg	cgggcgagag	cgggttcctc	cccctggaca	60
tcaacgcccc	cgactgcgtg	cagacggcgg	ccaggctctg	caagaaggga	gtcaccgctg	120
tgcgccctgaa	gcacaacgac	acggagcagc	tcgagcgctg	gctctcgtcg	atcccggag	180
gggcccagacat	cacctacgtg	tgcgacggcg	tctacccac	ggacggagag	ctcgccgact	240
tgcccgccat	atgtgcttgt	ttgaggccgc	gcgggggccaa	gatactcgtg	gacgactcgc	300
acgggttgccg	cgttcttggc	cgcaaccccg	actcggagca	acccttcgga	tatggcgggc	360
gcggcgctcgt	caagtacttc	gggctggact	acgcgagaa	caacatcatc	tacgccgggc	420
agctgagcaa	ggcgttcaat	tcgcccggcg	gattcgtggg	ctgcgcacgc	gagaccgacg	480
agaagttcgg	catcctgaac	ttggccaaga	actcgaacac	gctcgtgttc	acagggccga	540
tctgtactgc	cggcctgtcg	agtgcgaaga	cgaccctcga	cctcaacttt	gccgaggggg	600
accgtcagcg	caagcggtt	cttcaggcga	ccctcgaatt	ttgcgagggg	ctcaaggcgc	660
tcgggtgccc	ccacacctac	cacgggttcc	ccatcgtcaa	catctactgg	accc	714

<210> 116

<211> 714

<212> DNA

<213> *Alexandrium minutum*

<400> 116

tgctcaacat	gggagtcac	ccgagcctgg	cgggcgaggag	cgggttcctc	ctcctggaca	60
taaacgcccc	cgactgcgtg	cagacggcag	ccaggctctg	caagaaggga	gtcaccgctg	120
tgcgccctgaa	gcacaacgac	acggagcagc	tcgagcgctg	gctctcgtcg	atcccggagg	180
gggcccagacat	cacctacgtg	tgcgacggcg	tctactccac	ggacggagag	ctcgccgacc	240
tgcccgccat	atgtgcttgt	ttgaggccgc	gcgggggccaa	gatactcgtg	gacgactcgc	300
acgggttgccg	cgttcttggc	cgcaaccccg	actcggagca	acccttcgga	tatggcgggc	360
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agaagttcgg	cattctgaac	ttggccaaga	actcgaacac	gctcgtgttc	acagggccga	540
tctgtactgc	cggcctgtcg	agtgcgaaga	cgaccctcga	cctcaacttt	gccgaggggg	600
accgtcagcg	caagcggtt	cttgaggcga	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	caccgtgggtg	cgctgaggc	gcaacgacac	120
ggagcagctc	gagcacatgc	tctcgtcgac	cccgcagggg	ccgacatcac	ctacgtgtgc	180
gacggcgctg	actccacgga	cgagagctc	gccgacttgc	ccgccatatg	tgcttgtttg	240
agggccgacg	gggccaatat	actcgtagac	gactcgcacg	gttgcgggcg	tcttggccgc	300
aaccccgact	cggagcaacc	cctcgggtat	gggtggcgcg	tcgtctagta	cttcgggctg	360
ggctacgcgg	agcgcaacat	catctacgcc	tggcagttga	gcaaggcgtt	caattcgccc	420
ggcggattcg	cggctgtac	cggagaccga	cgataagttc	ggcgttctga	gcttggccaa	480
gcaactgaac	acactcgtgt	gcacagggcc	gatctgtact	gccggcctgc	cgagtgcgaa	540
gacgaccttc	gacctcaacg	ccgcccaggg	ggaccttcag	cgcaagcggc	ttctggcggt	600
gaccctcgga	ttctgcgagg	ggctcaaggc	gctcgggtgc	ccccacacct	accacgggct	660
ccc						663

<210> 118

<211> 671

<212> DNA

<213> Alexandrium fundyense

<400> 118

cgagcctttg	tgggcgagag	caggttcctc	ctcctggaca	taaacgccc	cgactgcgtg	60
cagacggccg	ccaggtcttg	caagaagggc	gccaccgtgg	tgcgctgag	gcacaacgac	120
gcggagcagc	tcgagcacat	gctctcgtcg	atcccgcagg	ggcccgacat	cacctacgtg	180
tgcgacggcg	tgtactccac	ggacggagag	ctcgccgact	tgcccgccat	atgtgcttgt	240
ttgaggccgc	gcggggccaa	gatactcgta	gacgactcgc	atggctgcgg	cggttcttggc	300
cgcaaccccg	actcggagca	acccttcggg	tatgggtggc	gcggcgtcgt	cgagtacttc	360
gggctggact	acgcggagaa	caacatcatc	tacgccgggc	agctgagcaa	ggcgttcaat	420
tcgcccggcg	gattcgtcgg	ctgtgcgcgc	gagaccgacg	agaagttcgg	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	gggcgagagc	gggttcctcc	tcctgtacat	aaacgcccgc	gactgcgcgc	60
agacggccgc	caggtctctg	aagaaggggtg	ccaccgtggg	gcgcctgaag	cacaacgaca	120
cgctacagcc	cgagcgcatg	ctctcgtcga	tcccgcaggg	gccgacatca	cctacgtgtg	180
cgacggcgtg	tactccacgg	acgaagagct	cgccgacttg	cccgccatat	gtgcttgttt	240
gaggccgcgc	ggggccaaga	tactcgtaga	cgactcgcac	ggctgcggcg	ttcttggccg	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	tgtactgccg	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	gggcgagagc	aggttcctcc	tcctgtacat	caacgcccac	gactgcgtgc	60
agacagccgc	caggtctctg	aagaagggcg	ccaccgtggg	gcgcctgaag	cacaacgaca	120
cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	180
gcgacggcgc	gtactccaca	gacagagagc	tcgccgactt	gcccgccata	tgtgcttgtt	240
tgaggccgcg	cggggccaag	atactcgtag	acgactcgca	tggctgcggc	gttcttggcc	300
gcaaccccg	ctcggagcaa	cccctcaagt	atgggtggcg	cggcgtcgtc	gagtacttcg	360
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tggcggctac	cctcgaattc	cgcgaggggc	tcaggcgctc	gggtgcccc	acacctacca	660
cgggttccc						669

<210> 121

<211> 668

<212> DNA

<213> Alexandrium fundyense

<400> 121

cgggcctcgt	gggcgagagc	gggttcctcc	tcctgtacat	aaacgcccac	gactgcgtgc	60
agacggccgc	caggtctctg	aagaagggcg	ccaccgtggg	gcgcctgaag	cacaacgaca	120
cggaaacagcc	cgagcacatg	ctctcgtcga	tcccgcaggg	gccgacatca	cctacgtgtg	180
cgacggcgtg	tactccacgg	acgaagagct	cgccggcttg	cccgccatat	gtgcttgttt	240
gaggccgcgc	ggggccaaga	tactcgtaga	cgactcgcac	ggctgcggcg	ttcttggccg	300

caaccccaac	tccgagcaac	ccctcgggta	tgggtggcggc	ggcgtcatcg	agtacttcgg	360
gctggactac	gcggagaaca	acatcatcta	cgccgggcag	ctgagcaagg	cgttcaattc	420
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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	gccaagtcca	240
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ccgcccagca	gctcgccgcg	gagacaaacg	caggggaagg	gcccgtggcg	atcactctgc	420
ggacaatggc	catcctcggg	tacttggacc	tggaccctga	gaccgatgtg	tatgccgtgg	480
tccccggggc	gggattcagg	cgctcgccgc	gctcctccgg	ctagcggcgc	ccaccagcgc	540
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ggcgcaactgc	ttgcggattt	ggcgggagca	ccagcccacc	tggagaaggg	cggtttgcaa	660
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gatggctggc	gtcgacttca	acaaggactc	tccgggtggcg	acggagctca	acctgagcag	1320
gcacgcggtc	ccgcacctgg	tgtgttccgg	ggacgtcggc	aagccggccg	acatcatgga	1380
gatactcggg	cggaaacgggg	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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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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ggcgaccccg	ctcccgcgtga	tcgggtccgcc	tctgtctcccg	ttcctcccaa	gccaaagcgca	120
tgccgcagct	tctgagcacc	cttgtagcac	cggacagcgc	tggatcttgt	gagagcgctcg	180
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tgggcgtggg	cacagtggac	ggcgagggca	ccgtgacctt	gaccgcggag	ggctcggttcg	900
ccctgcagcg	ttgtactacc	tactacgtcc	cgacgtccta	cgccccaatg	ctggacaggt	960
accacagcat	cctcttcgag	aatcccggct	gggggttcgc	cgggtgccggc	cgggactcgc	1020
aggagcagga	gatccacgtc	caccggacgc	tgaacgtggg	gggcagcggg	gcgcagcacc	1080
agacgtctt	cacggacctc	gtgcggctca	ttgactcggg	cttcgcgggc	ggggacttcg	1140
cgccgcagcg	ggcgttcgtc	gtggacacgg	ggtgcggcga	cggccgcttg	ctcaggcgca	1200
tctacgagca	cgtgaagagc	aacacgccgc	gcgggaaggc	gctcgccgag	caccgcgtca	1260
tgatggtcgg	cgtcgacttc	aacaaggact	ctcgggtggc	gacggagctc	aacctgagca	1320
ggcacgcggg	cccgcacctg	gtgctgttcg	gggacgtcgg	caagcccggc	gacatcatgg	1380
agatcctcgg	gcggaagggg	gtggacccca	gcaggtccct	ccgcgtgcgc	tccttctctg	1440
accacgacca						1450

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

<213> *Alexandrium fundyense*

<400> 126

accgtagcca	ttttggctca	agagttggat	cccaagctgc	tcttccgcag	ccaggcagcc	60
ggcacacccg	ctcccgccga	tcgggtccgcc	tctgtctcccg	ttcctcccaa	gccaaagcgca	120
tgccgcagct	tctgagcacc	cttgtagcac	cggacagcgc	tggatcttgt	gagagcgctcg	180
cgggggacag	gcacggggcc	tccggacgca	acgagctcga	ggaggcttcc	gccaaagtcca	240
acatccacgg	cctcgacctc	ggcaccgatg	ccttcatgct	ggtgcacggg	tggacttgcg	300
ggcccttgct	cctggagttt	gttgcggaact	tcctgcagcc	cttgcagcag	cagcccatga	360
ccgccgagca	gctcgccgcg	gagacaaacg	cgggggaagg	gcccgtggcg	atcactctgc	420
ggacaatggc	catcctcggg	tacttggacc	tggacctga	gaccgatgtg	tataccgtgg	480
tccccggggc	ggggattgag	gcgctcgccg	cgctcctccg	gccagcggcg	cccaccggcg	540
cggccttgca	aagcatctac	cagcacgccc	agccgcgctt	cagggtgccc	tcattccgagg	600
cggcgactg	cttgccgatt	tgggcccagc	accggcccac	ctggagaagg	gcggcttgca	660
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tgggcgtggg	cacagtggac	ggcgagggca	ccgtgacctt	gaccgcggag	ggctcggttcg	900
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accacagcat	cctctttgag	aatcccggct	gggggttcgc	cagtgccggc	cgggactcgc	1020
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tctacgagca	cgtgaagagc	aaccggccgc	gcgggaaggc	gctcgccgag	caccgcgtca	1260
cgatggtcgg	cgtcgacttc	aacaaggact	ctcgggtggc	gacggagctc	aacctgagca	1320

ggcagcgagt	cccgcacctg	gtgctgttcg	gggacgtcgg	caagcccggc	gacatcatgg	1380
agatcctcgg	gcggaagggg	gtggacccga	gcaggtccct	ccacgtgcgc	tccttcctag	1440
accacgacc						1449

<210> 127

<211> 1449

<212> DNA

<213> *Alexandrium fundyense*

<400> 127

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ggcgaccccg	ctcccgcgca	tcggtccgcc	tctgtctccg	ttcctcccaa	gccaaagcgca	120
tgccgcagct	tctgagcacc	cttgtagcac	cggacagcgc	tggatcttgt	gagagcgctg	180
cgggggacag	gcacggggcc	tccggacgca	acgagctcga	ggaggcttcc	gccaaagtcga	240
acatccacgg	cctcgacctc	ggcaccgatg	ccttcatggt	ggtgcacggg	tggacttgcg	300
ggcccttgct	cctggagttt	gttgcgaact	tcctgcagcc	cttgcagcgg	cagcccatga	360
ccgccgagca	gctcgcgcgc	gagacaaacg	cgggggaagg	gcccgtggcg	atcactctgc	420
ggacaatggc	catcctcggg	tgcttggacc	tggaccctga	gaccgatgtg	tataccgtga	480
tccccggggc	ggggattgag	gcgctcgccg	cgctcctccg	gccagcggcg	cccaccagcg	540
cggccttgca	aagcatctac	cagcacgccc	agccgcggtt	cagggtgccc	tcattccgagg	600
cggcgcaactg	cttgccgatt	tgggcggagc	accggcccac	ctggagaagg	gcggcttgca	660
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tcgacttcag	caaggccaat	gccgcggcaa	gggcggccct	cgggggcatt	ttcggcgagt	840
tgggcgtggg	cacagtggac	ggcgagggca	ccgtgtcctt	gaccgcggag	ggctcgttcg	900
ccctgcagcg	ttgctactcc	tactacgtcc	cgacgtccaa	cgccccattg	ctggacagggt	960
accacagcat	cctctttgag	aatcccggct	gggggttcgc	cggtgccggc	cgggactcgc	1020
aggagcagga	gatccacgtc	caccggacgc	tgaacgtggg	gggcggcggg	gcgcagcacc	1080
agacgtctct	cacggacctc	gtgcggctca	ttgacctcgg	cttcgcgggc	ggggactttg	1140
cgtcgcagcc	ggcgcttcgtc	gtggacacgg	ggtgcggcga	cggccgcttg	ctcaggcgca	1200
tctacgagca	cgtgaagagc	aacacgcgcg	gcgggaaggc	gctcgcgcag	caccgcgtca	1260
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agatcctcgg	gcggaagggg	gtggacccga	gcaggtccct	ccacgtgcgc	tccttcctgg	1440
accacgacc						1449

<210> 128

<211> 882

<212> DNA

<213> *Alexandrium fundyense*

<400> 128

ttccgcagcc	aggcgggcgg	cgcacccgct	cccgcggatc	ggtccgcctc	tgctcccgtt	60
cttccaagcc	aagcgcatgc	cgcagcttct	gagcaccctt	gtagcaccgg	acagcgctgg	120
atcttgtgag	agcgtcgcgg	gggacaggca	cggggcctcc	ggacgcaacg	agctcgagga	180
ggcttccgcc	aagtccaaca	tccacggcct	cgacctcggc	accgatgcct	tcattgctggc	240
gcacgggttg	acttgcgggc	ccttgctcct	ggagtttggt	gagagcttcc	tacagccctt	300
gcagcggcag	cccatgaccg	ccgagcagct	cgccgcggag	acaaacgcgg	gggaaggggc	360
cgtggcgatc	actctgcgga	caatggccat	cctcgggtac	ttggacctgg	accctgagac	420
cgatgtgtat	gccgtgggtc	cggggccggg	gattcaggcg	ctcgccgcgc	tcctccggcc	480
agcggcgccc	accagcgcgg	ccttgcgaa	catctaccag	cacgcccagc	cgcggttcag	540
ggtgcccctc	tccgaggcgg	cgcactgctt	gcggatttgg	gcggagcacc	ggcccacctg	600
gagaagggcg	gcttgcaagc	ggctggccct	cctgctcgac	ggggccgtcc	tcgtcccgtc	660
gttgacctcg	atcacatact	ttgcgagggtg	ggacgaggag	gggctggatt	ccggcaagga	720
gggcgccttg	gaccgcctcg	acttcagcaa	ggccaatgcc	gcggcaaggg	cggccctcgg	780
gggcatcttc	ggcgagttgg	gcgtgggcac	agtggacggc	gagggcaccg	tgaccttgac	840
cgcggaggggc	tcgttcgccc	tgcagcgctc	ctactcctac	ta		882

<210> 129

<211> 815

<212> DNA

<213> *Alexandrium fundyense*

<400> 129

ccaagcgc	cat	gccgcagc	ctgagc	cacc	ttgtagc	cacc	ggacagc	gct	ggatc	ctt	gtg	60	
agagc	gtc	gc	ggggac	agg	cacggg	gc	cct	ccg	ccggac	gcaa	cgagc	tcgag	120
ccaagt	cgaa	catccac	ggc	ctcgac	ctcg	gcacc	gatgc	cttc	atg	ctg	gcgcac	gggt	180
ggact	tcgg	gccctt	gtc	ctggag	tttg	ttgcg	agc	ctt	gcag	ccc	ttgcag	cggc	240
agccat	gac	cgccg	agc	ag	ctcgcc	gcg	agcaa	cgc	ggggg	agg	cccgt	ggcga	300
tcact	ctgc	gacaat	ggcc	atcct	cgggt	acttg	gac	ct	ggacc	ctgag	accgat	gtgt	360
atgcc	gtgt	ccccg	ggc	ggg	attg	agg	cgctc	gcgc	gctc	ctc	ccagc	ggcgc	420
ccacc	agcgc	ggcctt	gcga	agcat	ctacc	agcac	gcccc	g	ccgc	cgttc	aggg	tgccct	480
catcc	gaggc	ggcgc	actgc	ttgcg	gattt	gggcg	gagca	ccggt	ccacc	tgga	gaagg	gg	540
cggtt	gcaa	gcggc	tgcc	ctcct	gctcg	acggg	gcccgt	cctc	g	tc	gg	ttgacct	600
cgatc	acata	ctttg	cgagg	tgga	gcgagg	agggg	gctgga	ttccg	gcaa	g	agggg	cgccct	660
tgga	cgcct	cgactt	cagc	aagg	ccaatg	ccgcg	gcaag	ggcgg	ccctc	g	ggggg	catct	720
tcggc	gagtt	aggcgt	gggc	acagt	ggacg	gcgag	ggcac	cgtg	ac	cttg	accgc	ggagg	780
gctcg	ttcgc	cctgc	agcgt	cgta	ctcct	actac							815

<210> 130

<211> 480

<212> DNA

<213> Alexandrium fundyense

<400> 130

caatg	gccat	cctcg	gtac	ttgga	cctgg	accct	gagac	cgatg	gtgat	accgt	ggtcc	60
ccggg	ccggg	gattg	aggcg	ctcgcc	gcgc	tcctc	ccggc	agcgg	gcgcc	accag	cgcgg	120
ccttg	caaa	catct	accag	cacgccc	agc	cgccg	ttcag	ggtgc	ccctca	tccgag	cgcgg	180
cgcact	gctt	gcggat	tttg	gcggag	cacc	ggccc	acctg	gaga	agggcg	gcttg	caagc	240
ggctg	ggccct	cctgct	cgac	ggggc	cgctc	tcgtc	cccgct	gttg	acctcg	atcac	atact	300
ttgcg	gggtg	ggacg	aggag	gggct	ggatt	ccggc	aaagg	gggcg	ccttg	gaccg	cctcg	360
acttc	agcaa	ggcca	atgcc	gcggc	aaagg	cgccc	ctcgg	gggca	tcttc	ggcga	gttg	420
gcgtg	ggcac	agtgg	acggc	gaggg	caccg	tgac	ccttg	cgcg	gagggc	tcgtt	cacc	480

<210> 131

<211> 451

<212> DNA

<213> Alexandrium fundyense

<400> 131

gaccct	gaga	ccgat	gtgta	tgccg	tggtc	cccg	ggccgg	ggatt	gaggc	gttcg	ccgcg	60
ctcct	ccggc	cagcg	ggcgc	caccag	cgcg	gcctt	gcgaa	gcatc	tacca	gcacg	cccag	120
ccgcc	gttca	gggtg	ccctc	atccg	aggcg	gcgca	ctgct	tgcg	gatttg	ggcgg	agcac	180
cgcccc	acct	ggaga	acggc	ggctt	gcaag	cggtt	ggccc	tcctg	ctcga	cgggg	ccgtc	240
ctcgt	cccg	tggtg	acctc	gatca	catat	tttgc	gaggt	gggac	gagga	ggggg	ctggat	300
tcggg	caagg	agggc	gcctt	ggacc	gcctc	gactt	cagca	aggcc	aatgc	cgcgg	caagg	360
gcggc	ccctc	ggggc	gtctt	cggcg	agttg	ggcgt	gggca	cagt	ggacg	cgagg	ggcacc	420
gtgac	cttga	ccgcg	gaggg	ctcgt	ttcgcc	c						451

<210> 132

<211> 397

<212> DNA

<213> Alexandrium fundyense

<400> 132

gccgc	gctcc	tcggg	ccagc	ggcgccc	acc	agcgc	ggcct	tgca	aagcat	ctacc	agcac	60
gcccag	ccgc	cgttc	agggt	gccc	tcac	gaggc	ggcgc	actg	ccttg	gattt	ggggc	120
gagcac	ccggc	ccacct	ggag	aacgg	cgggt	tgca	aagcgc	tg	ccctc	ctc	gctcg	180
gccgt	cctcg	tcgc	gttgt	gacct	cgatc	acata	ctttg	cgag	gtggga	cgagg	agggg	240
ctggat	tcgc	gcaagg	aggg	cgcct	tgga	cgctc	cgact	tcag	caaggc	caatg	ccgcg	300
gcaagg	ggcgg	ccctc	ggggg	catct	tcggc	gagtt	ggggc	tg	ggc	cacagt	ggacg	360
ggcac	cgtga	ccttg	accgc	ggagg	gctcg	ttcgccc						397

<210> 133

<211> 234

<212> DNA

<213> Alexandrium fundyense

<400> 133

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

<210> 134

<211> 254

<212> DNA

<213> *Alexandrium fundyense*

<400> 134

tcctgctega	cggggccgct	ctcgctcccg	tggtgacctc	gatcacatac	tttgcgaggt	60
gggacgagga	ggggctggat	tccggcaagg	agggcgccct	ggaccgcctc	gacttcagca	120
aggccaatgc	cgcagcaagg	gcggccctcg	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	gccggtgccc	gccgggactc	gcaggagcag	gagatccacg	tccaccggac	180
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gggggtgcggc	gacggcccgt	tgctcaggcg	catctacgag	cacgtgaaga	gcaacacgcc	360
gcgcgggaag	gcgctcgccg	agcaccgcgt	cacgatggtc	ggcgctcgact	tcaacaagga	420
ctctcgggtg	gcgacggagc	tcaacctgag	caggcacgcg	gttccgcacc	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	ggaggggctcg	ttcgccctgc	agcgctcgta	ctcctactac	atcccgcagct	60
cctacgcccc	actgctggac	aggtaccaca	gcacccctct	cgagaatccc	ggctgggggt	120
tcgcccgtgc	cggccgggac	tcgcaggagc	aggagatcca	cgccaccggg	acgctgaacg	180
tggtgggacg	cggggcgagc	caccagacgc	tcttcacgga	cctcggtcgg	ctcattgact	240
cggctcttcg	ggggggggac	ttcgcgctgc	agccggcggt	cgctcggtgg	acgggggtgcg	300
gcgacggccg	cttgctcagg	cgcattctacg	agcacgtgaa	gagcaacacg	ccgcgcggga	360
aggcgctcgc	cgagcaccgc	ctcacgatgg	tcggcgctcg	cttcaacaag	gactctcggg	420
tgggcagcga	gctcaacctg	agcaggcacg	cggctcccga	cctgggtgctg	ttcggggacg	480
tcggcaagcc	cggcgacatc	atggagctcc	tcggacggag	gggggtggac	ccgagcaggt	540
ccctccacgt	gcg					553

<210> 137

<211> 1880

<212> DNA

<213> *Alexandrium fundyense*

<400> 137

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tcattggagat	cctcggggcg	aacgggggtg	acccgagcag	gtccctccac	gtgcgtcctc	120
tcctggacca	cgaccggccg	taogtcccc	cggcccgcga	gatggaccgg	gacagcgcg	180
ccgggaggtt	cgcgaggtcg	cagctgccc	actgcgccc	cctcgacggc	gagggcaagc	240
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ccctgcaggg	ctcgttcggc	ctctgcatgc	tgaggtcat	gatgctggac	gtgccgacga	360
cgagggcgctc	cctgaacgat	tgcgctcgc	tccacttcga	cctcggtgcag	tgccctctcc	420
ggcagtagat	ggtgtcgccg	gcggccctcg	ccttgggcct	ggccatggcc	ggcctcctgc	480

cggggagcta	cgagggcgctc	cagacccacc	cggcgcgggg	gcggtactgc	cgcgtgatga	540
gccagcacct	cgtgcgccgg	ccgtaccaga	tccgcctcgc	cgaggtcggt	gacctgccga	600
ggctcgcg	cctggaggag	ctggcggtgg	gccgccttgg	cgccacgccc	gaggtcctgc	660
ggaggcgcc	ggagacgtct	ccgaccacgt	gcctggccgt	cgagatggac	cagctggtcg	720
tggccgtgct	ctacacgcag	cgggtggaca	gcgccgatgt	ggtggaccag	cagaagtcca	780
tgcaggtctc	cgactcgac	agcccagagc	gccgcgtcat	gcagctcatc	gcgatctgct	840
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agacgttcgc	cgggtcgatg	cgggactacg	tggacgagca	catcgccggc	accgcgtag	1020
atcccatcat	cggcctccac	accggcaacg	gagctcgggt	agtccgcctc	gtgcgcggct	1080
tcaggccgga	ggacgtgggc	aaccgcgggg	acggcggtgt	catacagtac	gacacgagca	1140
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cccccgggc	ggctcccgcg	ccatgcccc	cggactacga	gcaccacgag	gctcttgtcc	1260
tggccgctct	gggcagcctg	atgctgaaga	acggcggcac	cgaggcggcg	gccgcgggca	1320
gcgccgacgt	cagatttgtg	gacatggacc	tcctggactc	cctcaacttc	accgacttcg	1380
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acctcggctt	ccagtggcgg	gacgagatcg	ccgatggcgt	ggaccgggac	gtgcgcactt	1740
ggggcgctca	cccccgctgg	accaggtcgc	tctcgtctcc	gaagctgtac	gacgacgtcg	1800
aggcgcgctg	ttgcgagctg	accggcatct	ggaagtgcgt	tctgtaccgc	agcgttacca	1860
tgctcaacat	gggagtcac					1880

<210> 138

<211> 2570

<212> DNA

<213> Alexandrium fundyense

<400> 138

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tcctggacca	cgaccggccg	tacgtcccc	cggcccgcga	gatggaccgg	gacagcgccg	180
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ccctgcaggg	ctcgttcggc	ctctgcatgc	tggaggtcat	gatgctggac	gtgcccagca	360
cgaggcgctc	cctgaacgat	tgcgtctcgc	tcacttcga	cctcgtgcag	tgcctctccc	420
ggcagtacat	ggtgtcgcgc	gcggccttcg	ccttgggcct	ggccatggcc	ggcctcctgc	480
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<400> 139

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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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cggcatctgg	aagtgcgttc	tgtacccgag	cgttaccatg	ctcaacatgg	gagtcacccc	540
gagcctcgtg	ggcgagagcg	ggttcctcct	cctggacatc	aacgcccacg	actgtgtgca	600
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tgcaagacg	accctcgacc	tcaacgcgc	cgagggggac	cttcagcgca	agcggcttct	1140
ggcggcgacc	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	agcggtctggc	cggccaggcg	gacggggggc	cgcgcctcgg	180
ccccgcaccg	gcccgcgcg	ccgcgcgcgc	gcccgcctgcg	gccaggagg	aggccgcgga	240
ggctccgctg	gcctcctttg	actcagtgtg	cgccaagctc	gaggggtgct	ccgcgctggt	300
cgacggctgc	tggcgcatcg	acgtggcgaa	ctgcagctac	ctcggcttcc	agtggcggga	360
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gcgatgacga	ccctcgacct	caacgcgcgc	gaggggacct	tcagcgcaag	cggcttctgg	1140
tggcgaccct	cgaattctgt	gaggggctca	aggcgctcgg	gtgccccccac	acctaccacg	1200
ggttccc						1207

<210> 147

<211> 873

<212> DNA

<213> Alexandrium fundyense

<400> 147

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gaccggcatc	tggaagtgcg	ttctgtaccc	gagcggttacc	atgctcaaca	tgggagtcac	180
cccgagcctc	gtgggcgaga	gcgggttcc	cctcctggac	ataaacgccc	acgactgcgt	240
gcagacggcc	gccaggctct	gcaagaaggg	cgccaccgtg	gtgcgcctga	ggcacaacga	300
cgcgaggagc	ctcgagcaca	tgctctcgtc	gatcccgcag	gggcccacat	cacctacgtg	360
tgcgacggcg	tgtactccac	ggacggagag	ctcgccgact	agcccacat	atgtgcttgt	420
ctgaggccgc	gtggggccaa	gatacccgtg	gacgactcgc	atggctgcgg	cggttcttggc	480
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agtgcgatga	cgaccctcga	cctcaacgcc	gccgaggggg	accttcagcg	caagcggcctt	780
ctggcgcgga	ccctcgaatt	ctgtgagggg	ctcaaggcgc	tcgggtgccc	cacacctacc	840
acgggttccc	catcgtcaac	atctactgga	ccc			873

<210> 148

<211> 597

<212> DNA

<213> Alexandrium fundyense

<400> 148

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ccaggctcgt	ctcgtctccg	aagctgtacg	acgacgtcga	ggcgcgctgt	tgcgagctga	120
ccggcatctg	gaagtgcgtt	ctgtaccoga	gcgttaccat	gctcaacatg	ggagtcaccc	180
cgagcctcgt	gggagagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	240
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cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	360
gcgacggcgt	gtactccacg	gacggagagc	tcgccgactt	gcccgcata	tgtgcttgtc	420
tgaggccgcg	cggggccaag	atactcgtag	acgactcgca	tggctgcggc	gttcttggcc	480
gcaaccccga	ctcggagcaa	cccttcgggt	atggtggcgg	cggcgctcgtc	gagtacttcg	540
rgctggacta	cgcgagaaac	aacatcatct	acgccgggca	gctgagcaag	gcgttca	597

<210> 149

<211> 723

<212> DNA

<213> Alexandrium fundyense

<400> 149

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ccaggctcgt	ctcgtctccg	aagctgtacg	acgacgtcga	ggcgcgtgt	tgcgagctga	120
ccggcatctg	gaagtgcgtt	ctgtacccga	gcgttaccat	gctcaacatg	ggagtcaccc	180
cgagcctcgt	gggcgagagc	gggttcctcc	tcctggacat	aaacgcccac	gactgcgtgc	240
agacggccgc	caggctctgc	aagaaggggc	ccaccgtggt	gcgcctgagg	cacaacgacg	300
cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	360
gcgacggcgt	gtactccacg	gacggagagc	tcgccgactt	gcccgccata	tgtgcttgct	420
tgaggcccg	cggggccaag	atactcgtag	acgactcgca	tggctgcggc	gttcttgccc	480
gcaaccccga	ctcggagcaa	cccttcgggt	atggtggcgg	cggcgtcgtc	gagtacttcg	540
ggctggacta	cgcgagaaac	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	ggcgcgtgt	tgcgagctga	120
ccggcatctg	gaagtgcgtt	ctgtacccga	gcgttaccat	gctcaacatg	ggagtcaccc	180
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cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	360
gcgacggcgt	gtattccacg	gacggagagc	tcgccgactt	gcccgccata	tgtgcttgct	420
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gcaacccctg	actcggagca	acccttcggg	tatggtagcg	gcggcgtcgt	cgagtacttc	540
gggctggact	acgcggagaa	caacatcatc	tacgccgggc	agccgagcaa	ggcgttcaat	600
tcgcccggcg	gattcgtcgg	ctgtgcgcgc	gagaccgatg	agaagttcgg	cattctgaac	660
ttggccaaga	actcgaacac	actcgtgttc	acagggccga	tctgtactgc	cggcctgtcg	720
ag						722

<210> 151

<211> 721

<212> DNA

<213> Alexandrium fundyense

<400> 151

acgagatcgt	cgatggcgtg	gaccgggacg	tgcgcacttg	gggcgtccac	ccccgtgga	60
ccaggctcgt	ctcgtctccg	aagctgtacg	acgacgtcga	ggcgcgtgt	tgcgagctga	120
ccggcatctg	gaagtgcgtt	ctgtacccga	gcgttaccat	gctcaacatg	ggagtcaccc	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	tcgccgactt	gcccgccata	tgtgcttgct	420
tgaggcccg	cggggccaag	atactcgtag	acgactcgca	tggctgcggc	gttcttgccc	480
gcaaccccga	ctcggagcaa	cccttcgggt	atggtggcgg	cggcgtcgtc	gagtacttcg	540
ggctggacta	cgcgagaaac	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

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caggctcgtc	tcgtctccga	agctgtacga	cgacgtcgag	gcgcgtggt	gcgagctgac	120

cggcatcttg	aagtgcgttc	tgtacccgag	cgttaccatg	ctcaacatgg	gagtcatccc	180
gagcctcgtg	ggcgagagcg	ggttcctcct	cctggacata	aacgcccacg	actgcgtgca	240
gacggccgcc	aggctctgca	ggaagggcgc	caccgtgggtg	cgctgagggc	acaacgacgc	300
ggagcagctc	gagcacatgc	tctcgtcgat	cccgcagggg	gccgacatca	cctacgtgag	360
cgacggcgctg	tactccacgg	acggagagct	cgccgacttg	cccgccatat	gtgcttgctt	420
gaggccgcgc	ggggccaaga	tactcgtaga	cgactcgcat	ggctgcggcg	tccttgggccg	480
caaccccgac	tcggagcaac	ccttcgggta	tgggtggcggc	ggcgtcgtcg	agtacttcgg	540
gctggactac	gcggagaaca	acatcatcta	cgccgggcag	ctgagcaagg	cgttcaattc	600
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tgcgatgacg	accctcgacc	tcaacgccgc	cgagggggac	cttcagcgca	agcggtctct	780
ggcgggcgacc	ctcgaattct	gtgaggggct	caaggcgctc	gggtgcccc	acacctacca	840
cgggttcccc	atcgtcaaca	tctactggac	cc			872

<210> 153

<211> 873

<212> DNA

<213> Alexandrium fundyense

<400> 153

acgagatcgc	cgatggcgctg	gacctggacg	tgcgcacttg	ggcggtccac	cccccggtgga	60
ccaggctcgt	ctcgtctccg	aagctgtacg	acgacgtcga	ggcgcgctgt	tgcgagctga	120
ccggcatctg	gaagtgcgtt	ctgtaccoga	gcgttaccat	gctcaacatg	ggagtcaccc	180
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cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	ggccgacatc	acctacgtgt	360
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tgaagccgcg	cggggccaag	atactcgtag	acgactcgca	tggctgcggc	gttcttgggc	480
gcaaccccgga	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
tggcgggcgc	cctcgaattc	tgtgaggggc	tcaaggcgct	cgggtgcccc	cacacctacc	840
acgggttccc	catcgtcaac	atctactgga	ccc			873

<210> 154

<211> 827

<212> DNA

<213> Alexandrium fundyense

<400> 154

ccaccccccg	tggaccaggc	tcgtctcgtc	ttcgaagctg	tacgacgacg	tcgaggcgcg	60
ctgttgcgag	ctgaccggca	tctggaagtg	cgttctgtac	ccgagcggtta	ccatgctcaa	120
catgggagtc	atcccagacc	tcgtgggcga	gagcggggttc	ctcctcctag	acataaacgc	180
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cgtcgagtac	tacgggctgg	actacgcgga	gaacaacatc	atctacgccg	ggcagctgaa	540
caaggcggttc	aattcgcccc	gcggattcgt	cggctgtgcg	cgcgagaccg	acgagaagtt	600
cggcattctg	aacttggtca	agaactcgaa	cacacttggtg	ttcacagggc	cgatctgtac	660
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gcgcaagcgg	cttctggcgg	cgaccctcga	attctgtgag	gggtcgaagg	cgctcgggtg	780
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<210> 155

<211> 670

<212> DNA

<213> Alexandrium fundyense

<400> 155

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------------	------------	------------	------------	------------	------------	----

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gggagtcac	ccgagcctcg	tgggcgagag	cgggttcctc	ctcctgggca	taaacgccc	180
cgactgcgtg	cagacggccg	ccaggctctg	caagaagggc	gccaccgtgg	tgcgcctgag	240
gcacaacgac	gcggagcagc	tcgagcacat	gctctcgctg	atcccgagg	gggcccacat	300
cacctacgtg	tgcgacgggt	tactccacgg	acggagagct	cgccgacttg	cccgccatat	360
gtgcttgtct	gagggcgcgc	ggggccaagg	tactcgtaga	cgactcgcat	ggctgcggcg	420
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ttctgagctt	ggccaagaac	tcgaacacac	tcgtgttcac	agggccgatc	tgtactgccg	660
gcctgtcgag						670

<210> 156

<211> 533

<212> DNA

<213> Alexandrium fundyense

<400> 156

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ccatgctcaa	catgggagtc	atcccgagcc	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	cggctgtgcg	cgc	533

<210> 157

<211> 1414

<212> DNA

<213> Alexandrium fundyense

<400> 157

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tcaacgccc	cgactgtgtg	cagacggccg	ccaggctctg	caagaagggc	gccaccgtgg	120
tgcgcctgaa	gcacaacgac	acggagcagc	tcgagcacat	gctctcgctg	atcccgagg	180
gggcccacat	cacctacgtg	tgcgacggcg	tgtactccac	ggacggagag	ctcgtgact	240
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tgcgcgcgtt	ttgatcctgc	tgtgttgtcg	tagcgtgcaa	gcagcgaggg	tcaggcggat	1260
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ggtagcgctt	gtccgtgtct	gccatcttag	ctggtcacta	ttcgcatcaa	cactcgcaag	1380
gtacgcgtct	gctaaaaaaa	aaaaaaaaaa	aaaa			1414

<210> 158

<211> 1315

<212> DNA

<213> Alexandrium fundyense

<400> 158

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tgcgcctgag	gcacaacgac	gcggagcagc	tcgagcacat	gctctcgtcg	atcccgcagg	180
gggcccacat	cacctacgtg	tgcgacggcg	tgtactccac	ggacggagag	ctcggccgact	240
tgcccgccat	atgtgcttgt	ctgaggccgc	gcggggccaa	gatactcgta	gacgactcgc	300
atggttgccg	cgttcttggc	cgcaaccccc	actcggagca	acccttcggg	tatggtggcg	360
gcggcgctcg	cgagtacttc	gggctggact	acgcggagaa	caacatcatc	tacgccgggc	420
agctgagcaa	ggcgttcaat	tcgcccggcg	gattcgctcg	ctgtgcgcgc	gagaccgacg	480
agaagttcga	cattctgaac	ttggccaaga	actcgaacac	actcgtgttc	acagggccga	540
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ccaagggcca	ggcaggtttt	ggctgcccgc	atcttgatcc	tgctgtgttg	tcgtagcgtg	1140
caagcagcaa	gggccaggcg	gagtctgtgc	ttgtacacca	agggccaggc	aggttttggc	1200
tgcgcgcgtt	tttatccggc	tgtgtgtgtg	tagcgtgcaa	gcagcaaggg	tcaggcggat	1260
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<210> 159

<211> 1453

<212> DNA

<213> *Alexandrium fundyense*

<400> 159

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gcgcctgaag	cacaacgacg	cggagcagct	cgagcacatg	ctctcgtcga	tcccgcaggg	180
ggccgacatc	acctacgtgt	gcgacggcgt	gtactccacg	gacggagagc	tcgcccactt	240
gccccgccata	tgtgcttgtt	tgaggccgcg	cggggccaaag	atactcgtag	acgactcgca	300
tggttgccgc	gttcttggcc	gcaacccccg	ctcggagcaa	cccttcgggt	atggtggcgg	360
cggcgtcgtc	gagtacttcg	ggctggacta	cgcggagaac	aacatcatct	acgccgggca	420
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gaagttcggc	attctgaact	tggccaagaa	ctcaaacaca	ctcgtgttca	cagggccgat	540
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cctgatcaag	cgctaccgcg	cctccgcccgt	gccgcgcgcg	atctgatcgg	ctgcccggagc	960
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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
ggccgacatc	acctacgtgt	gcgacggcgt	gtactccacg	gacggagagc	tcgccgactt	240
gcccgcata	tgtgcttgtt	tgaggccgcg	cggggccaag	atactcgtag	acgactcgca	300
tggctgcggc	gttcttggcc	gcaaccccg	ctcggagcaa	cccttcgggt	atggtggcgg	360
cggcgtcgtc	gagtacttcg	ggctggacta	cgcggagaac	aacatcatct	gcgccgggca	420
gctgagcaag	gcgttcaatt	cgcccggcgg	attcgctcgg	tgtgcgcgc		469

<210> 161

<211> 457

<212> DNA

<213> *Alexandrium fundyense*

<400> 161

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ctgtgtgcag	acggccgcca	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	ggtggcgggc	gcgtcgtcga	360
gtacttcggg	ctggactacg	cggagaacaa	catcatctac	gccgggcagc	tgagcaaggc	420
gttcaattcg	cccggcggat	tcgtcggctg	tgcgcgc			457

<210> 162

<211> 424

<212> DNA

<213> *Alexandrium fundyense*

<400> 162

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gggcgccacc	gtgtgcgcgc	tgaagcacia	cgacgcggag	cagctcgagc	acatgctctc	120
gtcgatcccg	cagggggccg	acatcaccta	cgtgtgcgac	gacgtgtact	ccacggacgg	180
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cgggtatggt	ggcggcggcg	tcgtcgagta	cttcgggctg	gactacgcgg	agaacaacat	360
catctacgcc	gggcagctga	gcaaggcggt	caattcgccc	ggcggattcg	tcggctgtgc	420
gcgc						424

<210> 163

<211> 503

<212> DNA

<213> *Alexandrium fundyense*

<400> 163

taaacgcccc	cgactgcgtg	cagacggcgg	ccaggctctg	caagaagggc	gccaccgtgg	60
tgcgcttgag	gcacaacgac	gcggagcagc	tcgagcacat	gctctcgtcg	atcccgcagg	120
gggcccacat	cacctacgtg	tgcgacggcg	tgtactccac	ggacggagag	ctcgccgact	180
tgcccgccat	atgtgcttgt	ctgaggccgc	gcggggccaa	gatactcgta	gacgactcgc	240
atggtctgcg	cgttcttggc	cgcaaccccc	actcggagca	acccttcggg	tatggtggcg	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

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ccatatgtgc	ttgtttgagg	ccgcgcgggg	ccaagatact	cgtagacgac	tcgcatggct	180
gcggcgcttc	tggccgcaac	cccgactcgg	agcaaccctt	cgggtatggt	ggcggcgggc	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	cttgcgccgc	atatgtgctt	gtttgaggcc	gcgcggggcc	aagatactcg	120
tagacgactc	gcatggctgc	ggcgttcttg	gccgcaaccc	cgactcggag	caacccttcg	180
ggatggtg	cgggcgctc	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	tgcggcgccc	ccgaccgggg	gcacctcatg	tcggtggagc	120
atgcgacgat	cgcggaacgc	gccccgaacg	ggatcgacct	ggcgacaaat	gccttcatgc	180
tcgtccacgg	ctggacggcg	gcgcccctgc	tcctggagct	cgtggccaac	ttcagcgcg	240
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tgacaacagc	tgtgaatctg	agcaagcagg	gcgtcccgcga	cgtggtcatc	tctggcgatg	1260
tgggtaagcc	tgcgagagata	cttgcc				1286

<210> 167

<211> 1282

<212> DNA

<213> *Alexandrium fundyense*

<400> 167

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actgcgccgc	catccgtgcc	ggcgccccga	ccgggggac	ctcatgtccg	tggagcatgc	120
gacgatcgcg	gacgcggctc	cgaacgggat	cgacctggcg	acaaatgcct	tcatgtcctg	180
ccacggctgg	acggcgccgc	ccctgctcct	ggagctcgtg	gccaaacttca	gcgcgccct	240
ggagggggcg	gccagaccg	cgggggagct	ggccgcggag	acgggcgcgc	aggaggggccc	300
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gcttgatcag	ttccctctga	cgatggtcgg	cgttgacctc	aatgaggatc	cgcgagtgc	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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ggtccccgac	gggatcgacc	tggtgacaaa	tgccttcacg	ctcgtccacg	gctggacggc	180
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atttgccctg	cagccaagtt	tcgttgtgga	cactggctgt	ggcgacggga	gcctgctcat	1080
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tctgacgacg	gtcggcgctg	acctcaatga	ggatccgcga	gtgacaacag	ctgtgaatct	1200
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	cccagccggg	ggcacctcat	gtccgtggag	catgcgacga	tcgcggacgc	120
ggtccccgac	gggatcgacc	tggcgacaaa	tgccttcacg	ctcgtccacg	gctggacggc	180
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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
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gttgggcgtc	ggcactatga	acgcgaaggg	cgtgatcatg	atgtcgtcaa	agggggccat	780
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<210> 171

<211> 1267

<212> DNA

<213> Alexandrium fundyense

<400> 171

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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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<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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ggccaagggc	ggcgaggcga	cccagcgctt	cgggtcctcg	gagatcatca	gcgtgcagaa	1860
gcgctgcctc	aacgtctacg	cccagcccat	ctaccagaag	cggttcacgg	acatggccaa	1920
gaagtgcctc	ccggacatgc	tcaagtacat	cctcgccata	gagtccatcc	tggtcgaggt	1980
cgagggggccg	gtcctgcagg	agttccagtt	gatccaagat	ctcgagtaca	agtcgggtcca	2040
gagaggccgc	gagaatttga	tgtactacat	gtcaagccat	tggctggccc	acccagagat	2100
acgcgatcag	agccagcagt	tactcctcct	cacgctgcag	accagtgtcg	gggcaataac	2160
cacttgtagg	ctggcgctcc	gcgggcacct	cgaatctgcg	gagccacata	cgagagtctc	2220
agtgcgaaaa	aaaaaaaa					2238

<210> 187

<211> 295

<212> DNA

<213> Alexandrium fundyense

<400> 187

cgtggaggag	catgttgaca	gaatcttgaa	tgttggtggc	agtgggtgcgc	aacaccggac	60
cctctttaag	gatatgatgc	gacacatcag	taccgtgttc	aagggcgagg	catttgccctt	120
gcagccaatt	ttcgttggtg	acactggctg	tggcgacggg	agcctgctca	tacatatcta	180
tgaacataatc	aaacagcaca	caccccgggg	gaaagtgtct	gatcagttcc	ctctgacgat	240
ggtcggcgctt	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	aagggcgggg	catttgccctt	gcagccaagt	ttcgttggtg	120
acactggctg	tggcgacggg	agcctgctca	tacatatcta	tgaacataatc	aaacagcaca	180
caccccgggg	gaaagtgtct	gatcagttcc	ctctgacgat	ggtcggcgctt	gacctcaatg	240
aggatccgcg	ggtgacaaca	gctgtgaatc	tgagcaagca	ggcggtcccc	cacgtggtca	300
tctctggcga	tgtgg					315

<210> 189

<211> 293

<212> DNA

<213> Alexandrium fundyense

<400> 189

tggtgcgcaa	caccggaccc	tctttaagga	tatgatgcga	cacatcagta	ccgtgttcaa	60
gggagaggca	tttgccctgc	agccaagttt	cggttggtgg	actggctgtg	gcgacgggag	120
cctgctcata	catatctatg	aacatatcaa	acagcacaca	ccccggggga	aagtgtttga	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	tttgccctgc	agccaagttt	cggtgtggac	actggctgtg	gcgacgggag	120
cctgctcata	catatctatg	aacatatcaa	acagcacaca	ccccggggga	aagtgtttga	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	cggtgttcaag	ggcgaggcat	60
ttgccttgca	gccaagtttc	gttgtggaca	ctagctgtgg	cgacggggagc	ctgctcatac	120
atatctatga	acatatcaaa	cagcacacac	ccccggggga	agtgtttgat	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

gagtgaagtac	gtcaatgcgc	acttctctgg	ggccccggacc	gacagcacgc	tggacttcca	60
ctcctccgcc	ggagcgaggt	tcttccgctt	ggaggagggc	ttccgccccg	aggacaccga	120
caacggcggc	acaggagtg	tcacgccta	cgacatcagg	agggctctgc	ccaggagggc	180
ggctgcgggc	gcgccccga	gcaggccgc	gccgaggacg	aagggtccct	cgctgcagct	240
ggtccaggac	gtcatgacca	gcacgggcta	cccccccaac	ctcaatgacc	tcaccaaggg	300
cttcttcgac	tacggcatgg	actccctgga	gctcgtccgc	atccggaaca	agctgagcct	360
cgccctgcag	acggagctcc	ccgcgacgct	gctcctcgac	ttccccaccg	tgacgacact	420
cgtggagcgg	ctggaccagg	accgggcccc	cgagtccgat	gaggaggagg	aggtacggga	480
ggaggccaag	gccacggcca	gagccccggc	caaggccaag	gccctggcca	agggcgggcga	540
ggcgaccag	cgcttcgggc	cctcggagat	catcagcgtg	cagaagcgct	gcctcaacgt	600
ctacgcccc	cccatctacc	agaagcggtt	cacggacatg	gccaagaagt	gcttccccga	660
catgctcaag	tacatcctcg	ccatagagtc	catcctggtc	gaggtcgagg	ggccgggtcct	720
gcaggagttc	cagctgatcc	aagatctcga	gtacaagtcg	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

agtgaagtac	tcaatgcgca	cttctctggg	ggccccggacc	acagcacgct	ggacttccac	60
tcctccgccg	gagcgaggt	cgctccgctt	gtggagggtc	ttccgccccg	ggacaccgac	120
aacggcgcca	caggagtggt	catcgccctac	gacatcagga	gggtctctgc	caggaggaggc	180
gctgcggggc	cgcccccgag	caggccgcgc	ccgaggacga	aggtccctc	gctgcagctg	240
gtccaggacg	tcacgaccag	catcggtctac	ccccccaacc	tcaatgacct	caccaagggc	300
ttcttcgact	acggcatgga	ctccctggag	ctcgtccgca	ttccggaaca	gctgagcctc	360
gccctgcaga	cggagctccc	cgcgacgctg	ctcctcgact	ttccccaccg	gcacgacctc	420
gtggagcggc	tgaccaggga	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	agatacgcga	tcagagccag	840
cagttactcc	tcctcacgct	gcaggaccag	tgctggggca	ataaccactt	gtaggctggc	900
gctccgcggg	cacctcgaat	ctgcgagacc	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	cgctccgctt	gtggagggct	tccgccccga	ggacaccgac	120
aacggcggca	caggagtgg	catcgccctac	gacatcagga	gggtctgtcc	cagggaggcg	180
gctgcggggc	cgccccgag	caggccgccc	ccgaggacga	aggtccctc	gctgcagctg	240
gtccaggacg	tcatgaccag	catcggttac	cccccaacc	tcaatgacct	caccaagggc	300
ttcttcgact	acggcatgga	ctccctggag	ctcgtccgca	tctggaacaa	gctgagcctc	360
gccctgcaga	cggagctccc	cgcgacgctg	ctcctcgact	tccccaccgt	gcacgacctc	420
gtggagcggc	tggaccagga	ccggggcccc	gagtcggatg	aggaggagga	ggtgcgggag	480
gaggccaagg	ccacggccag	agccccggcc	aaggccaagg	ccctggccaa	gggcggcgag	540
gcgaccagc	gcttcggggc	ctcgagatc	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	agatacgcga	tcagagccag	840
cagttactcc	tcctcacgct	gcagaccagt	gctggggcaa	taaccacttg	taggctggcg	900
ctccgcgggc	acctcgaatc	tgcggagcca	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	ctggtcgagg	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	ctggtcgagg	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 tcacgtgca 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
 tacagatmga ccctgtgarc

20

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

23

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

20

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

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

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

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

<210> 205
 <211> 20
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <220>
 <221> misc_feature
 <222> (10)..(10)
 <223> 'r' = g or a
 <400> 205
 ctcccttcctr 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 cgcatcc 18

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

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

<210> 214
 <211> 10
 <212> PRT
 <213> Alexandrium fundyense
 <400> 214
 Val Asp Thr Gly Cys Gly Asp Gly Ser Leu
 1 5 10
 <210> 215

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

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

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

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

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

<210> 220
 <211> 27
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primer sequence
 <400> 220
 ttgatacctgc cagtagtcat 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
 gcggttcct 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
 aaccctcgg gtatgggtggc ggcggcgctc tcgagtactt cgggctggac tacgcgga 360
 acaacatcat ctacgcccggc cagctgagca aggcgttcaa ttgcccggc ggattcgtca 420
 gctgtgcgcg cgagaccgac aaaaatttcg gcgttctgaa cttggccaaa aactcgaaca 480
 cactcgtgtt cacaggggcg atctgtactg cgggcctgtc gactgcgaaa acaaccttcg 540
 acctcaacgc cgccgagggg gaccttcaac gcaagcggct tctggcggct accctcgaaa 600
 ttctgcgagg ggctcaaggc gctcgggtgc cccacacct accacgagtg ccccatcgtc 660
 aatacggggg ggaacacac aagctacgca agcgttctg ggtgagccat aggcgctccc 720
 gtggccaca aatataacag gaaaccaccg ccacttctc tgctattca 769

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

<210> 226
 <211> 773
 <212> DNA
 <213> *Alexandrium catenella*
 <400> 226
 cagctatgac catgattacg ccaagctatt taggtgacac tatagaatac tcaagctatg 60
 catccaacgc gttgggagct ctcccatatg gtcgacctgc aggcggcacg cgaattcact 120
 agtgatttgc agcgtatgta ctccactac gtcccgacct 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	tggcgacgga	gctcaacctg	540
agcaggcacg	cggtcccgc	cctgggtgctg	ttcggagacg	tcggcaagcc	cgccgacatc	600
atggagatcc	tcggacggag	cggggtggac	ccgagcaggt	ccctccacgt	gcgctccttc	660
ctagaccacg	accaatcgaa	ttcccgcggc	cgccatggcg	gccgggagca	tcgcagctcg	720
ggcccaattc	gccctatagt	gagtcgtatt	acaattcact	ggccgtcgtt	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

tttgacgga	tgctactcct	actacgtccc	tgctcctac	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	tggcagcggc	gacgggactc	tacttaggca	300
gatctacgag	cacgtgaagt	cgatgacgcc	tcgaggacgt	cacctgagcc	agcatccgct	360
gaccatggta	ggtgttgact	tcagcgagga	gtccagagcc	gcgacctccc	gcaacctgag	420
ccaccacgcc	atccctcaca	tggtgctcct	cggggacatt	ggcgagcccg	cttgagatca	480
cggcgtgcgc	tggcaaggaa	gggtgtcgac	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	ctgacgggtc	ccctcggcaa	agttgaggtc	60
gagggtcgtc	ttcgactcgc	acaggccggc	agtagacatc	ggccctgtga	acacgagcgt	120
gttcgagttc	ttggccaagt	tcagaatgcc	gaacttctcg	tcgggtctcg	gtgcgcagcc	180
cacgaatccg	ccgggcgaat	tgaacgcctt	gctcagctgc	ccggcgtaga	tgatgttggt	240
ctccgcgtag	tccagcccga	agtacttgac	gacgccggcg	ccgccatatc	cgaaggggtg	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	ggggcaccgc	agcgccttga	gcccctcgca	aaattccagg	60
gtcgccctcaa	gaagccgctt	gcgctgacgg	tccccctcgg	caaagttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtacag	atcgccctg	tgaacacgag	cgtgttcgag	180
ttcttggcca	agttcagaat	gccgaacttc	tcgtcgggtc	cgctgcgca	gcccacgaat	240
ccgccgggcg	aattgaacgc	cttgctcagc	tgcccggcgt	agatgatgtt	gttctccgcg	300
tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaaggg	ttgctccgag	360
tcgggggttgc	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	ggggcaccgc	agcgccttga	gcccctcgca	aaattccagg	60
gtcgccctcaa	gaagccgctt	gcgctgacgg	tccccctcgg	caaagttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtacag	atcgccctg	tgaacacgag	cgtgttcgag	180
ttcttggcca	agttcagaat	gccgaacttc	tcgtcgggtc	cgctgcgca	gcccacgaat	240
ccgccgggcg	aattgaacgc	cttgctcagc	tgcccggcgt	agatgatgtt	gttctccgcg	300
tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaaggg	ttgctccgag	360
tcgggggttgc	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	ggggcaccgc	agcgccttga	gcccctcgca	aaattccagg	60
gtcgccctcaa	gaagccgctt	gcgctgacgg	tccccctcgg	caaagttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtacag	atcgccctg	tgaacacgag	cgtgttcgag	180
ttcttggcca	agttcagaat	gccgaacttc	tcgtcgggtc	cgctgcgca	gcccacgaat	240
ccgccgggcg	aattgaacgc	cttgctcagc	tgcccggcgt	agatgatgtt	gttctccgcg	300
tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaaggg	ttgctccgag	360
tcgggggttgc	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	ggggcaccgc	agcgccttga	gcccctcgca	aaattccagg	60
gtcgccctcaa	gaagccgctt	gcgctgacgg	tccccctcgg	caaagttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtagag	atcggccctg	tgaacacgag	cgtgttcgag	180
ttcttgcca	agttcagaat	gccgaacttc	tcgtcgggtc	cgctgcgca	gcccacgaat	240
ccgccgggcg	aattgaacgc	cttgcctcagc	tgcccggcgt	agatgatgtt	gttctccgcg	300
tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaaggg	ttgctccgag	360
tcgggggttg	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	ggggcaccgc	agcgccttga	gcccctcgca	aaattccagg	60
gtcgccctcaa	gaagccgctt	gcgctgacgg	tccccctcgg	caaagttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtagag	atcggccctg	tgaacacgag	cgtgttcgag	180
ttcttgcca	agttcagaat	gccgaacttc	tcgtcgggtc	cgctgcgca	gcccacgaat	240
ccgccgggcg	aattgaacgc	cttgcctcagc	tgcccggcgt	agatgatgtt	gttctccgcg	300
tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaaggg	ttgctccgag	360
tcgggggttg	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
gccaggctcg						670

<210> 236

<211> 670

<212> DNA

<213> *Alexandrium minutum*

<400> 236

gggaacccgt	ggtaggtgtg	ggggcaccgc	agcgccttga	gcccctcgca	aaattcgagg	60
gtcgcmctcaa	gaagccgctt	gcgctgamgg	tccccctcgg	craarttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtagag	atcggccctg	tgaacacgag	cgtgttcgag	180
ttcttgcca	agttcagaat	gccgaacttc	tcgtcgggtc	cgctgcgca	rcsacgaat	240
ccgccgggcg	aattgaacgc	cttgcctcagc	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	ccctcsgggga	tygacgagag	cacgcgctcr	540
agstgstccg	tgctgttgtg	cttcaggcgc	acgacggtga	ckcccttctt	gcagagcctg	600
gcggctgtct	gcacgcagtc	gtgggcgttt	atgtccagga	ggaggaascc	gctctcgccc	660
gccaggctcg						670

<210> 237

<211> 670

<212> DNA

<213> *Alexandrium minutum*

<400> 237

gggaacccgt	ggtaggtgtg	ggggcaccgc	agcgccttga	gcccctcgca	aaattcgagg	60
gtcgcmctcaa	gaagccgctt	gcgctgamgg	tccccctcgg	craarttgag	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtagag	atcggccctg	tgaacacgag	cgtgttcgag	180
ttcttgcca	agttcakaat	gccgaacttc	tcgtcgggtc	cgctgcgca	rcsacgaat	240
ccgccgggcg	aattgaacgc	cttgcctcagc	tgcccggcgt	agatgatgtt	gttctccgcg	300

tagtccagcc	cgaagtactt	gacgacgccg	ccgccgccat	atccgaaggg	ttgctccgag	360
tccgggttry	ggccaagaac	gccgcaaccg	tgmagtcgt	ccacgagtat	cttggccccg	420
cgccgcctca	aacaagcaca	tayggcgggc	aagtcggcga	gctctccgtc	cgtggagtag	480
acsccgtcgc	acacstaggt	gatgtcggcc	ccctcsggga	tcgacgagag	cacgcgctcr	540
agstgstccg	tgtygttggt	cttcaggcgc	acgrcggtga	ckcccttctt	gcagagcctg	600
gcggcygtcy	gcacgcagtc	gtgggcggtt	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	tcgtcgggtt	cgctgcgca	rccsacgaat	240
ccgccgggcg	aattgaacgc	cttgcctcgc	tgccccggcg	agatgatgtt	gttctccgcg	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	gtgggcggtt	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	caaagttagg	gtcgaggggtc	120
gtcttcgcac	tcgacaggcc	ggcagtagag	atcgcccttg	tgaacacgag	cgtgttcgag	180
ttcttggcca	agttcagaat	gccgaacttc	tcgtcgggtt	cgctgcgca	gcccacgaat	240
ccgccgggcg	aattgaacgc	cttgcctcgc	tgccccggcg	agatgatgtt	gttctccgcg	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	gtgggcggtt	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	cgccgttgag	gtccaggggtc	120
gtcytygcr	tcgacaggcc	ggcggtacag	atcgcccttg	tgaacacgag	ygtgttcgag	180
ttcttsgcca	agttcaggat	gccgaacttc	tcgtcgggtt	cgccgcgca	gccgacgaat	240
ccgccgggcg	agttgaacgc	cttgcctcgc	tgccccggcg	agatgatgtt	gttctccgcg	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	gtgggcggtt	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 ggcagtacag atcggccctg tgaacacgag tgtgttcgag 180
 ttcttgcca agttcagaat gccgaacttc tcgtcgggtc cgcgcgcaca gccgacgaat 240
 ccgccgggcg aattgaacgc cttgctcagc tgcccggcgt agatgatgtt gttctccgcy 300
 tagtccagcc cgaagtactc gacgacgccg ccgccaccat acccgaagggt ttgctccgag 360
 tcgggggttg gcgaagaac gccgcagcca tgcgagtcgt ctacgagtat cttggccccg 420
 cgcggcctca aacaagcaca tatggcgggc aagtcggcga gctctccgtc cgtggagtac 480
 acgccgtcgc acacgtaggt gatgtcggcc ccctgcggga tcgacgagag catgtgctcg 540
 agctgctccg cgtcgttgtg cytcaggcgc accacggtgg cgccttctt gcagagcctg 600
 gcggccgtct gcacgcagtc gtgggcgttt atgtccagga ggaggaaccc gctctcgccc 660
 acgaggctcg 670

<210> 242
 <211> 670
 <212> DNA
 <213> *Alexandrium fundyense*
 <400> 242
 gggaacccgt ggtaggtgtg ggggcacccg agcgccttga gcccctcgca gaattcgagg 60
 gtcgccgcca gaagccgctt gcgctgaagg tccccctcgg cggcggttgag gtcgaggggtc 120
 gtchtegcac tcgacaggcc ggcagtacag atcggccctg tgaacacgag tgtgttcgag 180
 ttcttgcca agttcagaat gccgaacttc tcgtcgggtc cgcgcgcaca gccgacgaat 240
 ccgccgggcy aattgaacgc cttgctcagc tgcccggcgt agatgatgtt gttctccgcy 300
 tagtccagcc cgaagtactc gacgacgccg ccgccaccat acccgaagggt ttgctccgag 360
 tcgggggttg gcgaagaac gccgcagcca tgcgagtcgt ctacgagtat cttggccccg 420
 cgcggcctca aacaagcaca tatggcgggc aagtcggcga gctctccgtc cgtggagtac 480
 acgccgtcgc acacgtaggt gatgtcggcc ccctgcggga tcgacgagag catgtgctcg 540
 agctgctccg cgtcgttgtg cytcaggcgc accacggtgg cgccttctt gcagagcctg 600
 gcggccgtct gcacgcagtc gtgggcgttt atgtccagga ggaggaaccc gctctcgccc 660
 acgaggctcg 670

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

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

<221> misc_feature
 <222> (12)..(12)
 <223> 'k'= g or t
 <400> 244
 cgagygtgtt 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
gcctcaaaca	caacaaatag	gggcggcaat	tggtcacttg	tttgtcccgg	ggtaccaccc	360
gtacctatgt	agggacctcg	cccccatg	agaaaaacaa	aagcattgcc	tgggtttttg	420
cggggggtgg	ttccccgggc	ccccaccggg	gggccccttt	tttcagaacc	ccggcggggc	480
cgttttcccc	cccctttttg	ggtttttttt	tttttcaaaa	accaatcatc	ccggaacctt	540
gtgggcgaga	gcgggttcct	cctcctgtac	ataaacgccc	acgactgcgt	gcagacggcc	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	catggctg	gcgttcttgg	ccgcaacccc	840
aactcggagc	aacccctcgg	gtatgggtgg	ggcggcgctc	tcgagtactt	cgggctggac	900
tacgcggaga	acaacatcat	ctacgcggg	cagctgagca	aggcgttcaa	ttcgcccggc	960
ggattcgtca	gctgtgcg	cgagaccgac	aaaaatttcg	gcgttctgaa	cttggccaaa	1020
aactcgaaca	cactcgtgtt	cacagggccg	atctgtactg	ccggcctgtc	gagtgcgaaa	1080
acaaccttcg	acctcaacgc	cgccgagggg	gaccttcaac	gcaagcggct	tctggcggct	1140
accctcgaaa	ttctgcgagg	ggctcaaggc	gctcgggtgc	cccacacct	accacgagtg	1200
ccccatcgtc	aatacggggg	gggaacacac	aagctacgca	agcgttcttg	ggtgagccat	1260
aggcgctccc	gtggcccaca	aatataacag	gaaaccaccg	cccacttctc	tgctattcca	1319