

LISTADO DE SECUENCIAS

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<120> MÉTODOS Y COMPOSICIONES PARA LA COMBINACIÓN DE MUTACIONES ASOCIADAS CON LA RESISTENCIA/TOLERANCIA A HERBICIDAS EN EL ARROZ

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<150> 62/371,582

<151> 2016-08-05

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<170> Patente en versión 3.5

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

115					120					125						
Glu	Ile	Arg	Trp	Val	Ile	Asp	Ser	Val	Val	Gly	Lys	Glu	Asp	Gly	Leu	
130					135					140						
Gly	Val	Glu	Asn	Ile	His	Gly	Ser	Ala	Ala	Ile	Ala	Ser	Ala	Tyr	Ser	
145					150					155					160	
Arg	Ala	Tyr	Lys	Glu	Thr	Phe	Thr	Leu	Thr	Phe	Val	Thr	Gly	Arg	Thr	
165					170					175						
Val	Gly	Ile	Gly	Ala	Tyr	Leu	Ala	Arg	Leu	Gly	Ile	Arg	Cys	Ile	Gln	
180					185					190						
Arg	Leu	Asp	Gln	Pro	Ile	Ile	Leu	Thr	Gly	Tyr	Ser	Ala	Leu	Asn	Lys	
195					200					205						
Leu	Leu	Gly	Arg	Glu	Val	Tyr	Ser	Ser	His	Met	Gln	Leu	Gly	Gly	Pro	
210					215					220						
Lys	Ile	Met	Ala	Thr	Asn	Gly	Val	Val	His	Leu	Thr	Val	Ser	Asp	Asp	
225					230					235					240	
Leu	Glu	Gly	Val	Ser	Asn	Ile	Leu	Arg	Trp	Leu	Ser	Tyr	Val	Pro	Ala	
245					250					255						
Tyr	Ile	Gly	Gly	Pro	Leu	Pro	Val	Thr	Thr	Pro	Leu	Asp	Pro	Pro	Asp	
260					265					270						
Arg	Pro	Val	Ala	Tyr	Ile	Pro	Glu	Asn	Ser	Cys	Asp	Pro	Arg	Ala	Ala	
275					280					285						
Ile	Arg	Gly	Val	Asp	Asp	Ser	Gln	Gly	Lys	Trp	Leu	Gly	Gly	Met	Phe	
290					295					300						
Asp	Lys	Asp	Ser	Phe	Val	Glu	Thr	Phe	Glu	Gly	Trp	Ala	Lys	Thr	Val	
305					310					315					320	
Val	Thr	Gly	Arg	Ala	Lys	Leu	Gly	Gly	Ile	Pro	Val	Gly	Val	Ile	Ala	
325					330					335						

Val Glu Thr Gln Thr Met Met Gln Thr Ile Pro Ala Asp Pro Gly Gln
340 345 350

Leu Asp Ser Arg Glu Gln Ser Val Pro Arg Ala Gly Gln Val Trp Phe
355 360 365

Pro Asp Ser Ala Thr Lys Thr Ala Gln Ala Leu Leu Asp Phe Asn Arg
370 375 380

Glu Gly Leu Pro Leu Phe Ile Leu Ala Asn Trp Arg Gly Phe Ser Gly
385 390 395 400

Gly Gln Arg Asp Leu Phe Glu Gly Ile Leu Gln Ala Gly Ser Thr Ile
405 410 415

Val Glu Asn Leu Arg Thr Tyr Asn Gln Pro Ala Phe Val Tyr Ile Pro
420 425 430

Met Ala Ala Glu Leu Arg Gly Gly Ala Trp Val Val Val Asp Ser Lys
435 440 445

Ile Asn Pro Asp Arg Ile Glu Cys Tyr Ala Glu Arg Thr Ala Lys Ser
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Asn Val Leu Glu Pro Gln Gly Leu Ile Glu Ile Lys Phe Arg Ser Glu
465 470 475 480

Glu Leu Gln Asp Cys Met Ser Arg Leu Asp Pro Thr Leu Ile Asp Leu
485 490 495

Lys Ala Lys Leu Glu Val Ala Asn Lys Asn Gly Ser Ala Asp Thr Lys
500 505 510

Ser Leu Gln Glu Asn Ile Glu Ala Arg Thr Lys Gln Leu Met Pro Leu
515 520 525

Tyr Thr Gln Ile Ala Ile Arg Phe Ala Glu Leu His Asp Thr Ser Leu
530 535 540

Arg Met Ala Ala Lys Gly Val Ile Lys Lys Val Val Asp Trp Glu Glu

545 550 555 560

Ser Arg Ser Phe Phe Tyr Lys Arg Leu Arg Arg Arg Ile Ser Glu Asp
565 570 575

Val Leu Ala Lys Glu Ile Arg Ala Val Ala Gly Glu Gln Phe Ser His
580 585 590

Gln Pro Ala Ile Glu Leu Ile Lys Lys Trp Tyr Ser Ala Ser His Ala
595 600 605

Ala Glu Trp Asp Asp Asp Asp Ala Phe Val Ala Trp Met Asp Asn Pro
610 615 620

Glu Asn Tyr Lys Asp Tyr Ile Gln Tyr Leu Lys Ala Gln Arg Val Ser
625 630 635 640

Gln Ser Leu Ser Ser Leu Ser Asp Ser Ser Ser Asp Leu Gln Ala Leu
645 650 655

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Leu Ile

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<212> ADN
<213> Oryza sativa

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ctgcgaaagc ccatattagg cgccagcttc atccagatgt ctgttcccag gacaagaata
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201

<210> 8
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<212> ADN
<213> *Oryza sativa*

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acctgtccac cataagtcct tatttgtcag aggttacaat ygcgatgtgt gtctatactc
120

tatactgcaa agatgaatac taacaagttt ttcttgggct taaaagaaga aaaactagga
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acagcctcac tagtttgcta g
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<210> 9
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<213> *Oryza sativa*

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180

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201

<210> 10
<211> 201
<212> ADN
<213> *Oryza sativa*

<400> 10
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gtgagacgag aaaagcatga gagaaaacga tctgtgtgca tgcatagggc tggacgaaaa
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gctcgtgact cgttagctcg c
201

<210> 11
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<212> ADN
<213> *Oryza sativa*

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180

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201

<210> 12
<211> 201
<212> ADN
<213> *Oryza sativa*

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ggccttacgc taactcaaaa c
201

<210> 13
<211> 201
<212> ADN
<213> *Oryza sativa*

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<210> 14
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<212> ADN
<213> *Oryza sativa*

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ttaccagaaa caaaatattc atctggaaat ctgggaaatt ttcagaacag ctcacagggtg
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<210> 15
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<212> ADN
<213> *Oryza sativa*

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gtaataatta aatctttaca acaagatctc acatgattat attttgatga aaaatcacia
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attactttta tgatatgtct a
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<210> 16
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<212> ADN
<213> *Oryza sativa*

<400> 16
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<210> 17
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ggctgagtgt tgcattaagc aaatctggac cggatttgag ggaattttct cgcgcagtgg
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agatctatga taaatctcgt a
201

<210> 18
<211> 201
<212> ADN
<213> *Oryza sativa*

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201

<210> 19
<211> 201
<212> ADN
<213> *Oryza sativa*

<400> 19

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201

<210> 20
<211> 201
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<213> *Oryza sativa*

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ccatctggca agttaattcc agcattaacg tgttctaaaa rccactctac ttatgagaag
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ccgggccacc acattcatac attacagcca gaaacaacaa atccaggaag ttaatacgtg
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attaagaatg catcaaacaa g
201

<210> 21
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<213> *Oryza sativa*

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gacgactaat ttggcagctc agctcacctg cacggctgca ctgtgctgtg cccggtgggc
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gaagccattt caccgcggg c
201

<210> 22
<211> 201
<212> ADN

<213> Oryza sativa

<400> 22

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tccaggtacg cattctctac tgttatctac tgaaccagag rggaaaaaaaa caaaaactag
120

gatgaatgca gtgtcacttt gctgcttgta attctctgaa tttctgaatg aaagaaaaga
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aaagaaaaga agcgaaactg g
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<210> 23

<211> 201

<212> ADN

<213> Oryza sativa

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atagctataa gaggcacgca tcatcgacgc aagccgactg rgtgtggcgc ctacgtgatc
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gttggtttgt ttcgcttggt tgggcataca gctatgagaa ctttgttggg ggcccatact
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<210> 24

<211> 201

<212> ADN

<213> Oryza sativa

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aacttgtagg cctcatttga ttttctagaa aaaaatggag raaaaacata ggaataagaa
120

tcctatgtga attggtactg ttcatccctt tgatttgtag gaattgaaca aaggaaaagc
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atggggaaaa aaatcctatg a
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<210> 25
<211> 201
<212> ADN
<213> *Oryza sativa*

<400> 25
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ccaccgatgg ccacttaaag tccgttgagc tcgatcgcca ratccggcgg ctccacaggg
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ccgtcggcaa cgcggtcgtc gacgacaagt acttggtctt cgggaccggc tccaccacc
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tgatcaacgc gctggtgtac g
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<210> 26
<211> 201
<212> ADN
<213> *Oryza sativa*

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<210> 27
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<213> *Oryza sativa*

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gaaagaaggc tgtcatatca attactcaat catgaccaga tcacgatct gatgcagtta
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<210> 28
<211> 401
<212> ADN
<213> *Oryza sativa*

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ctttggaatt tcattgatag gatgaaaatc tcttgccgca tgaagcctga cggagtttcc
180

gttagccaaa gtggcatcag rtacagcata ttccaaggaa tctgtgtgct tcctatcagg
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ttttgctgga atggaaaatt gtgctggctc agttttgctg ttccccctac ttttcaataa
300

atcaggttca ccttcttttc gcagaccagt tgaattttgt atattctctt tacaagcaga
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<211> 401
<212> ADN
<213> *Oryza sativa*

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caacattttt ctccctgtaa gttccaatgc tccacaatat ttgtatcaag tgttttgagg
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ttccaggata tgcttcagaa tccattgctc cccatctcaa tagaatgcat aagctgaaaa
180

ggcaagaaaa agtggaataa raaatagatt ttctacaagc acatgatcat tgggtgggcac
240

tgccacaga taaaactagc tagctctcgg cagtcttacc catgggaaac agtaggatct
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401

<210> 30
<211> 398
<212> ADN
<213> *Oryza sativa*

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120

gaagcacaga taggtatggt atcttgcaat ttgagcagct gtgcatgaag accgtcagct
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tcgtttgggt gggcaatmtg cagcagtcag ctcatcagtt cttgtaagac tcaactgatca
240

acacagattg tgcagccact aagttactta tactgcattg ctatggtgat aatttaaggg
300

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398

<210> 31
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<212> ADN
<213> *Oryza sativa*

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120

cactttttta taaatatctt tataaaaaca agaagtcaaa gttatgtttt agagaccgag
180

tctctgttct aaacgacttc ytttataagt atggaggag tatccatttc acatatactt
240

atggtcttgt ttacatccca acaaatttta gccaaaaaca tcacatcaaa tatttagcca
300

catgtatagg acattaaata taaaaaaca attacacagt ttgcatgtaa attgcgagac
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401

<210> 32
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<213> *Oryza sativa*

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tctccgtgac attgagacta gggtttggct cctggccgtg gagtcagaga gtcagtgtaa
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agctgacgga gaatatgcac yttccagtgt tactcaaaat ctagctactg gaaacaatac
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caatattata gaacaaacag ctgatgttat cacaaaaata gacaatagta tgagttcacc
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<210> 33
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<212> ADN
<213> *Oryza sativa*

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gttgtaatcc ccatactccc aaccagaag ggaaaaaaaa caactccaaa acccycaact
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tttaaaaatg tgggaacaat caaacatat gcttgagata taccacaaa gccatcggcg
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gccgcttaca gcagagtaca ccctcatctt gcacgcctcc gaagaagcag gagccgtgat
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<210> 34
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<213> *Oryza sativa*

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aatgaatagt gaacagtacc gacgtgaggt ttataggatt ttatatgact aggggtgaac
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gttggataga agggaatgtg ytagtgctgt tctgaacctc ttgcgcatac attaacatgt
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tttatctaata ctaataaaca tgattaaatt tagcgtttgc ttttacagta gtagaaatat
300

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401

<210> 35
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<212> ADN
<213> *Oryza sativa*

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ctcaacggct cacacacaac ttcatatata tgtaccctaaa aaagcactat tagatcaatg
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gttataattg tttcaccacg raatattcaa ctttactcaa tgttttgttt aacaagttcc
240

ttttggtcac ttgccaattt ttctagatca tacagtacaa tctattgatc acaattcaca
300

ttgaataact aggtcaagcc attctgtaca tgcccatgca tgaacttact gtactaatat
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<210> 36
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gcagactttc aactaacctg gcatgaaagc ttggattgtc actgggttga ttgttgctgc
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tgctgttatg aaagctgtat a
201

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<212> ADN
<213> Oryza sativa

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<210> 38
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<212> ADN
<213> *Oryza sativa*

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gtgctgcata ctaccatgcc aactttgcgt atccgtcggc gtccatcttc gccaggatgc
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cggggaagga gaagaagagg cggcggcgcag gccgaagagg cgaggatagg gatgaggtgg
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401

<210> 39
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<213> *Oryza sativa*

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120

tcctcctcgt cgtcgccgtc gccgcctcgg cgaagactgc accggcgatg ccagacgagg
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gccagcagct gcacgcgagg cggcgccacg gcggtggcgg cggcggcgtc ggcgtcggca
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agcggcgggc ggtgccgatg ccgccgccca gccgcgccg cgaggagatc gacgcgcgct
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<210> 40

<211> 401

<212> ADN

<213> *Oryza sativa*

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ctgcagagtt gcaggtttga cgaatgcagc ttatctacaa aattcccatc agagggaaca
180

cagttacaga agaactaggg gaagtacaga ttgcaaatcc ataaggatct tctttagaac
240

cgtatacgta aagggcttca tggattggcc actatatatg ggtgtcaccc tcaatcgtga
300

atctgcaagg tcagatatca gtatatcaaa tgcagattgc ctcatcgcag attgctgtgg
360

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<210> 41

<211> 401

<212> ADN

<213> *Oryza sativa*

<400> 41

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cgacgcgtcg ggggtggcat cggcgagggc gagcatgtcg tcgtccagtg gacgcggact
120

ctagggtgat cacgctcggc cctgtcacgc tcaaaacaat actacggcac atctgattac
180

gttgacagga tctgagacca caccagaact atccccattcc gatcatgcat gtgaaaaaaaa
240

aaacaaaggc caactattcc atttagcagt aatcaagatc cgatcttctc ttttcttgtg
300

aaaattcgac atgtttccgg ttaccaaccg aggaacacag attaattact ctagtttttt
360

cgaagagcag aagaggaata ttgattaccc ccacaaaacc c
401

<210> 42
<211> 401
<212> ADN
<213> *Oryza sativa*

<400> 42
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atgatcataa atagttttat aataaagcat gacggatttt tgtttcaagt ttggttgctg
120

aaaaacgtac ggacaaacca tgaactaact tgctattttg ctccacatgg gtttgtctcg
180

aagcaaccag gaattgatca acttcggtgg tttgccaaga acatgaaacc tggggataag
240

gatttttttc gactttgcta atgctggctg tctggattag gaacagaaca ggtattgcta
300

ctgcttttat tcctaagctt ctaatacttc tgctcatacg gatacggcca tatacataca
360

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401

<210> 43
<211> 401
<212> ADN
<213> *Oryza sativa*

<400> 43
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120

ccctagccgc ctccgccgat ccacgcacgc ctccgcctcc gcctccgcct tgaccgctcc
180

gcctccgctt ccgcctccgt cgatccacgc ctccacctcc acgcgaccac gcctccatct
240

ctccatccct ctccgtcgcc gtctctgatg aacgccttgc cggatctacc accgagggtc
300

gctgcctcgc cggatccgtg accttgtctc atctccgcct ctccagtctt tggatcggtg
360

gccgtgctct cgatttcctc tttctttttc attttttttg c
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<210> 44

<211> 401

<212> ADN

<213> *Oryza sativa*

<400> 44

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tgtcacgagt gcgctcaggc agctgggcct tgattccttg agtctaaatg ggctgcactt
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tgattgggct gggttcatat gagattaggg gaaaaaacac gaacattcca gtaaaatggg
180

gagtgtgaac tgtgaagaag ggggtaaacg gtgtgcggac gtgagacgag aaaagcatga
240

gagaaaacga tctgtgtgca tgcatagggc tggacgaaaa gctcgtgact cgtagctcg
300

ctcggttcgt gtctggctcg gctcggctcg gctcggctcg tttggatttg ttaacgagcc
360

gagctaaggt ttcagctcgt tatctataac gagccagctc g
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<210> 45

<211> 401

<212> ADN

<213> *Oryza sativa*

<400> 45

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tggtgtgtgt cccttttggt tcgcttttct taatcctctc tagggcttct gatagccctc
120

catctgtccg tcctttgccc gtttgcttct tggcctaaac caccgaaaag gtgggtccgt
180

tttgctggac gcctggaata ctcttcaact cgattggaac agcaggctcc gtgtatgtgt
240

aactatggct gtgttttagat ctaaagttta gattcaaagt atagatttaa acttcagtca
300

ttttcatca catcaacctg tcatatacac acaacttttt agtcacatca tctttaattt
360

taacccaaat ataaatttta cgctgaacta aacacagtat a
401

<210> 46
<211> 401
<212> ADN
<213> *Oryza sativa*

<400> 46
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gagagagaca ggcggtgtcg ccggagcagt gaggaggag ggcggtcga gagagagaag
120

agagaggcga tggcgacgac gaccggatcc gcgacggcga cgacggatcc gcggcgacga
180

caaccggatc cgggtggcctc ctccacctcc gccttggcct cctcgacctc ggccaccgcg
240

acctcctcca cctccgtctt ggctcctct gcgtggcggc gagagagagg caagcagcag
300

cggcgagaga gagagaggag aaagcggcgg cggcgggtggc tggggagggtg gcgccggcgc
360

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401

<210> 47
<211> 401
<212> ADN
<213> *Oryza sativa*

<400> 47

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agagaagaga gaggcgatgg cgacgacgac cggatccgcg acggcgacga cggatccgcg
120

gcgacgacaa ccggatccg gggcctctc cacctccgcc ttggcctcct cgacctcggc
180

caccgcgacc tcctccacct ccgtcttggc ctctctgcg tggcggcgag agagaggcaa
240

gcagcagcgg cgagagagag agaggagaaa gcggcggcgg cggtggtggt ggaggtggcg
300

ccggcgctcg cgggagagag agggagaggg aggggaggac ggcgacggca ccgagtggag
360

ggagtgaggt ggcgtggagc gaagaaaaa gaagaggagg g
401

<210> 48

<211> 401

<212> ADN

<213> *Oryza sativa*

<400> 48

aagaccgcga gtgcgaggat ttcgaggatc aagctccaga tctcgagcaa ggcaagccac
60

ctttgaacat cttgagccta tatttgaaat ttaattatgt tgcttgaaaa atattatgca
120

ttgataggat cgcacttaat ctgtcgtccc gtctgcaagg cagattggcg gaccaccta
180

atttgttgca ttgatcctcc cttgttaatt gttatatcat gtccccctgt aaccatctag
240

ttgcgtctcg acattcgcg accctgtgcg agcatcgacg gacgccttca aacttaaaat
300

ctgaaaaaca acttgggtaa aacttgggtt tacaaaagac ttggaaaact cgacacctgg
360

gtcggtgctt gcgaactaaa tggattttcc aaaaccgcgg a
401

<210> 49

<211> 401

<212> ADN

<213> *Oryza sativa*

<400> 49

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60

aatggcgtag ttaatgttat gatttgccag cattctcagc tgctgattct caggctgatt
120

ctacttggtt ggtagaaaat ctacttatcc aggaacaagc gtagggtaac ttttcctttt
180

tttctcagct atgtgaaaag ggagaaaact cgctacactt tataggaaat gaactactct
240

tctaccgacg gatatacctaa aggctatcct ctggtacctc ggccttacgc taactcaaaa
300

ccaaactaaa atggggtgat cggagctatt ctctagaatt ttgacccaa attgagcgaa
360

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401

<210> 50

<211> 401

<212> ADN

<213> *Oryza sativa*

<400> 50

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aaagatgtgt ggaactatga cttctagata tcacaggcat ctagcatctt gatttttatt
120

caagactgca cataacatct ttacattcta gagggaaatg atccgactta agtagtttga
180

tagttcacct cagggaggaa gtcctttgat agtggttatag atgtctcccg aagcaccttg
240

actgccactt cctctccatt gtccaatatg ccatgataaa ccataccaaa tcctcctttt
300

ccaatgatag actggaagtt gttagttata gtcttcaact ctgtatatgt gaatcttctg
360

gtgtcagtat gcaggggagt atcctcttca tacatatcat a
401

<210> 51

<211> 401

<212> ADN

<213> *Oryza sativa*

<400> 51

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ctgctactga caatgagatt tccttgatgc ctccatccag cgatcccagg gaggttgtgg
120

aagtgcttct catgaccttc gaggcactgc ggcgtaggca tcttcaattg gatgagacac
180

aagagactag caaacgtgca gacctgaagg ctggtgccat catgttggcc agtaatctga
240

gggctaacat tgggaagagg attggagctg tccctggagt tgaagtaggg gatattttct
300

acttcaggat ggagctatgc attatcggct tgcatgcacc tagcatgggt ggaattgatt
360

atatgaataa gtttggtgat gaggatgact ctgtagcaat a
401

<210> 52

<211> 401

<212> ADN

<213> *Oryza sativa*

<400> 52

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gccacagtac aaaaggcgca gtgtgctcga gcatgctgat aattccaatt tcatcccatt
120

tgtcccattc cctcctgatt actttgccaa gaaaaataag cctgtggaga attcatcaga
180

tgcaggaata gtgccagaag gccctccatc agctgaaaaa ttaccagaaa caaaatattc
240

atctggaaat ctgggaaatt ttcagaacag ctcacaggtg atgggcagtc aggagcaaaa
300

caacatgaac aatgagaaca ggaacggaaa ttatccacat caaaacttga gtacaagtgg
360

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401

<210> 53
<211> 401
<212> ADN
<213> *Oryza sativa*

<400> 53
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cgtggcgggc gcggcagggc cggccggcgg cgagcggcgg ggggaggagg aggaggaggc
120

ggcggcgctg acggtgtggc ggaagtcgct gctgttcaac tgcaaggggt tcacggtgtt
180

cgacgccaaag gggaacctgg cgtaccgctg cgacagctac gacacggaga gcggcgacga
240

ggtcgtcctc atggacgccg ccggcgcccc ggccttcacc gtccgcagga agaggcagct
300

cagcctgcag ggggagcagt ggctcgtgtt cgccggcgag gcggacggcc ggcgggccgc
360

cgtgtacgag gtcaggcgga cgggcccggg cggcggcaag t
401

<210> 54
<211> 401
<212> ADN
<213> *Oryza sativa*

<400> 54
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tagtcttaac cagagacacc cacgtgctag tacttttagga gttttggttg ctattaatcg
120

attgagcaag taggggaaat attcctatca tctatgcttc aaataaagtt ttctcttaaa
180

ttactcatcc gatttacaat ccgattacac cgttgtgttc gtaataatta aatctttaca
240

acaagatctc acatgattat attttgatga aaaatcacao attactttta tgatatgtct
300

aaattacttt tagatttcac taagttactt cttagacata taaaagtaaa ttcagtaaag
360

cctaaaagta attacatata ttatagcagt aacttataac a
401

<210> 55
<211> 401
<212> ADN
<213> *Oryza sativa*

<400> 55
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tcgacgacga tcccatccgt ccgtccgtcg ctgcggctgc tgctgctgcc gccacaggcg
120

gtcagagcct ctggcacgat gccaacacgc gggcacgtgg tagggcagca cgggccattc
180

aggtaggtgtt tggatccagg gacttaactt tattctctat atttagacac taatttaaaa
240

tattaaatat agattactta caaaactaat tacataaatg aaagctaatt tgtgtgataa
300

cttttttaag cttaattaat ccataattag agaatgttta atgtagcatc acataagcta
360

atcatggatt aattaggctc aatagattcg tctcgcgaat t
401

<210> 56
<211> 401
<212> ADN
<213> *Oryza sativa*

<400> 56
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gcttctcgcc gtccggcgcca ttgcaccgca gcccctcctt gtcccgctg gtgacgattt
120

ccatgggcat tgcgccgact gactgtgtcg gcagcatgca tcgtctcggg cgttcaacgt
180

gtggagggga cgacgtataa gactacacgc gaagactgta ggtagagggtg cttttcccg
240

gaaaagtggc agtagcggcg gttggacagt aaccttcgtg tatggttgtg tgttcatctc
300

acgtactgtt cttttgcctc tcgctagctc gttcccgta tcaagggtgca tgctcgatgg
360

ccttaatggg ggaggttgcc gaaaggtagc agaggaaatc a
401

<210> 57
<211> 401
<212> ADN
<213> *Oryza sativa*

<400> 57
ggatggatag taaatataat atgaattgat ctattggatc agttatatat atatatatat
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atatatatat atatatatat atatatatat atatatagac acacacacac acaatgagga
120

tggtaaatta gtgacaatat atgaatgtgt tctattgtca aaacgaaagg gatcgatgag
180

ttatatctct aggttaatta gtttacaacg aagagttgaa gctggaataa acaagtcaaa
240

attatatctg tataacatca tagtaatgcc gaccatgtac gcatccacat ggccatacag
300

caacatcaga aacagaatth aattaattat ttgactaaac ccagaatcat ttgctgctgc
360

atcgaatcgt tcctctcgtc atcgccgacg caaacatgcg c
401

<210> 58
<211> 401
<212> ADN
<213> *Oryza sativa*

<400> 58
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ctaataaat catccatctc atcatatcat tagctccttg tgcttgtgag ttcactgttc
120

agagaagctg gttatcctcc ctgataagaa cagccgggag gtcagtgtgc tatggttttg
180

tttagttctg gaatgatcca gtcacccagc acaattgact ggctgagtgt tgcattaagc
240

aaatctggac cggatttgag ggaattttct cgcgcagtgg agatctatga taaatctcgt
300

accgatccag catagtgatt cgtccgcggg attaatactg taactaatcc atagattagc
360

gccattattg aaacacgctt tcttcttatt gttgttatta t
401

<210> 59

<211> 401

<212> ADN

<213> *Oryza sativa*

<400> 59

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gcggacggag tggcgacgga gagcctgcgg gagtcgagat cgtccgggga agcaacgacg
120

gcaacgacgg cagccttgta tcccgtcggc gaggtcacgc tcggccattg cgcacctctc
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ccttcgcca tcgccatcga gccccaccc acggcgcccg gccatccccg gcgaggagct
240

ctgttttttg tgggtgtcgg cggagttgga acgaaggagg gtcgttctcg gcatcgatgt
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cgccatctcc gatcctccac cgccaccgcc gccctcccc cctccattgc cgaccctcc
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401

<210> 60

<211> 401

<212> ADN

<213> *Oryza sativa*

<400> 60

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cttcacctcc cgctgcatcg ccgcctgccg ccaagcgcac ggccaagggg aaggagtcgt
120

ggcggcgcgg ggcgctcatg gcggtggagg acctgctgga tgttgctgct cctgttctcg
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ccattgtcgg agtcggcgcc gccacgccg acggagaatc tcaaggaggc gatgagcacg
240

ccgaggctcg gacccagctt cgtcgggtggg acaaagcggg actcgatgga gacggtggag
300

ctctcctcct cctcccccaa caccacctca tgtagcttcc ccctcggcgc gtcagtaggt
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401

<210> 61

<211> 401

<212> ADN

<213> *Oryza sativa*

<400> 61

tcctggagga tgagcgtgag cgtgcgcgca agatagcgca cgagatcaag ggattcggca
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gcttcaacct cagcagcgcg catgcgtcgg ggtcggcggc ggcagccctc cgcgcggggg
120

cgatggagca ccagtgttac ggccggagca actcgcggta cgagggcagg tggaggaggg
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aggcctgcgt ggacgacggc gacaaggaga acctgctggt ggtgtcgatg gccgaggcga
240

aggccgaggc ggcggcggag gagccgcacc actaccacca cccgttctac ggcttcgggc
300

agcagcggcc ggaggcgatg ctgctcctga gccagtagtg atcgtttggg tggatggttc
360

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401

<210> 62

<211> 401

<212> ADN

<213> *Oryza sativa*

<400> 62

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atgctcatgc caatggtgat ggtgatcagc gtttggcaca ctgcttcgcc aacggcctcg
120

aggcgaggct ggcaggtact ggtagtcaaa ttacaagaa ctacacgata actcggcttc
180

catgcactga tgtgctgaaa gcgtaccagc tttatTTggc agcttgccca tTTaagaaga
240

tctctcatta cTTtgccaat caaacaattt tgaatgctgt ggagaaggcc aagaaagtTc
300

acattgtcga ttatggcata tactatggat tTcagtggcc gtgtcttatt cagcggctat
360

ctaacaggcc tggaggccca ccaaagctta ggatcactgg a
401

<210> 63
<211> 401
<212> ADN
<213> *Oryza sativa*

<400> 63
gggcattggt gaaggctcag taaccggagg tcttgTTtga tggTTggcaa ctgaattgTT
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aattaccaat ttatttTctg tgcttctaT accagcagca tcacattctg gTTgTTgagg
120

gtccactgat acTTTtacct gTTgcagTTT attgTTTTaa ataatccaat caaactTTTg
180

tTTgagctta tTgctgaata gcacagcagc agtacatgca atgcaagatg cccagatgat
240

gagaataaag gcaatggcaa aaatataagt gctagTTcta tTTcaaaata acaaacagac
300

aacattgcat tctaaactTT tataaccaa caaacaagg aaacagggaa aattgctgaa
360

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401

<210> 64
<211> 201
<212> ADN
<213> *Oryza sativa*

<400> 64
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cagatattTc cagtgaaaat gctTTgctTc tTgaattTga kacagcaact gatgcagctg
120

ctgcgaaagc ccatattagg cgccagcttc atccagatgt ctgttcccag gacaagaata
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cttctgggtca tgaacttttt g
201

<210> 65

<211> 201

<212> ADN

<213> *Oryza sativa*

<400> 65

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acctgtccac cataagtcct tatttgtcag aggttacaat ygcgatgatgt gtctatactc
120

tatactgcaa agatgaatac taacaagttt ttcttgggct taaaagaaga aaaactagga
180

acagcctcac tagtttgcta g
201