

LISTADO DE SECUENCIAS

<110> Monsanto Technology LLC
 Armstrong, Charles L
 Kouranov, Andrei Y
 O'Brien, Brent A

<120> ELEMENTOS REGULADORES DE PLANTAS Y USOS DE ESTOS

<130> MONS:479WO

<160> 21

<170> PatentIn versión 3.5

<210> 1
 <211> 1973
 <212> ADN
 <213> Zea mays

<220>
 <221> misc_feature
 <222> (1)..(1973)
 <223> Una secuencia de ADN de un promotor con enlace operativo a un líder, P-Zm.GRMZM2G487322:2 que deriva de Zea mays.

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 120

 tccaaaattt acttagatct taactagtct aatccagtca tatccaacct aatctagatt
 180

 ttatctaaac ttgatgatc taatcaagag taagttactt aatgcgggta caaaagataa
 240

 ggccatactc ctagttcact cgagcctaaa ttgggtgactt agatcaactc ggccataccc
 300

 aacaacttga cctacatcat gtaatctatc tcatacctgat ctatcttaac cacactcccc
 360

 aaccctgatg atatacacta acatcgaatc aatgagggtca agaccggaga ggaaaagatc
 420

 aacattaaca aggaaggatg taacagtcaa agcgaatctc gagatgaatc aagacttaga
 480

 catttcagat gaagtttttc ctatctttct tacctcaaca tgtccatctt atatacctaca
 540

 taataagtag ctggatacct atgctctcct aataacatac tattgactat ataaaaaaat
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gagactctag acttttagaa acaactatag actaaaaaaaa tgaattacaa accaatcttt
660

ctatatccct ttgtttacta atctcggaga cgagatttct gttaaggggg taggatttgc
720

aacaccctaa tatcccactg ttggtatttg gggaaaatct ttctatagaa tttaaataga
780

tagaccaata gataccctc ttaaaaatat tattaagata tcccttttaa taataaattt
840

gaagatactc ttaaacaaga atacctttta ataaagatta tatattagag attatattct
900

taaagtaa atagtaactaa taaatagata cggttaagttt gatctcttga tgataatttt
960

ggtgaagcat tttatggaga acataacatt gacctccaat tctaaataaa cacataaaat
1020

tgtaa atgag aaaggggaatg tttatgaaac catttattcc tcccataaat agatggcaag
1080

gaaaaataat aaataatagt aatgtaaaca gtagaagtta tattcacttg ggaatttgaa
1140

gttcaaa atg ggagtttgaa tttgaagtga gaactttgaa atagaaaagg aatttttctt
1200

gcctttgaag taatttttaa accaatgaaa taatagatgt ttatgcctct aatttagatt
1260

tgacttgtga aatttttaaac tgaatttctt tggagcaaaa tcttatctca aactcaattt
1320

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1380

taaaa atgat aaattgtatt ttaaccggag tatacatttg aggggttata cctgagaaat
1440

tattcttaaa ttatattatt ttgtgtgtat gaattgtaca tttaaaagca ttggcataaa
1500

taa atgtgat gataaataaa taactaacat aaaattttat cttgcatgcc ggagttttat
1560

gttcttgagc attta atatt aaaatttaaa ctcat ttgaa tttggaatag aaatctaaaa
1620

aaacaaaaaa taaaaaaagc cactcaccct gagccatgac cgctcagcca cccacgtcca
1680

ctttcccatg catgtataac tcaagctggg agacttccct ggtagccgc gttcttagct
1740

taggttagtt ggaagctgcc gagcgaatca ccgtaaccgc accacgagct aaacgcgcgg
1800

ctaccataac catccgccca atctgcggtc tatagattta atgacggctg gttgcatgcg
1860

cccctaggtt gttagccatc gctaataaat actgggctgc tgtgattcct tcgtcacctc
1920

gaatagccag aaactatcgc cagcaaaggg agaacgccga ggtgagagag ata
1973

<210> 2
<211> 501
<212> ADN
<213> Zea mays

<220>
<221> misc_feature
<222> (1)..(501)
<223> Una secuencia de ADN de una 3' UTR, T-Zm.GRMZM2G487322:2 que
deriva de Zea mays.

<400> 2
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aggactgctg tctggatgtg aggttgctg tgggtctgcg ccgaccatgg cgccgccgcg
120

aagcctgctg cgcgccaccg cattggatcg acgggggagg aagaatcgta ggagccgtcc
180

gatcggtttt gggcgatctg gattagatgt ggtgtacca ttcgataggt taaatccgag
240

ccgttgatta gatatcagat caactagatc tgatcgcacc ctaataaatc tagatcatag
300

atctttgatc caacggcttg agttgcgtac cggttcacag ttatgaatat ctaatctgat
360

ccgtaggtag tcgatccaac ggcctagata tcgcgatacc ctttcggccg cctattttgc
420

ataagagccc ccggattttc ctaaaaacaa cccgcggtcc agtactggat tcaactgagtc
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tgcgtaaact ttatgcttta g
501

<210> 3
<211> 1998
<212> ADN
<213> Zea mays

<220>
 <221> misc_feature
 <222> (1)..(1998)
 <223> Una secuencia de ADN de un promotor con enlace operativo a un líder, P-Zm.GRMZM2G339781:1 que deriva de Zea mays.

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 120
 cgactccgac aaggatggct gccactagta gaacagtggc agtagcaggg ataagtggca
 180
 gctgagccta gagtcatgcg cagacgcgtt cctaggagca ctaaggatta aaatagcggg
 240
 atatgcaaaa tagcggcttc attttttttag gctacaagac tactgcacga ctatggttat
 300
 aaaagtatta aaaaatatgc atgatttatg caaaaaaac atggaattca atatatttga
 360
 ctaaggtcaa tatgttttca aggctctagg agactagaga tagtacacaa tacatgattc
 420
 gtggaattaa agtgtttggc acttcaataa catagttggc cactagctag gtagctacac
 480
 aacatgataa ttaatagggt tacttagttc taaatactaa agtagtaaag aatttactaa
 540
 ctcgctaaca tggtagcaac acaataccat gatttagtac ataccaaaaa agcttactag
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 tgcaatctat tgatcaagca tagagtcac tgaataagaa gaatgaatgc ttgaggacta
 660
 ttgatccatg tcaatatcgt gtgcatcatt ttattatgta taaagcaagt ttaggttatt
 720
 atgtatcaag caagttttaga ttaccttca ttacaataat tcatatcatt gagcttcac
 780
 atccttcttc attacattca ttatttggtg gtgcaccatg aaaagtacaa atagtgtggc
 840
 tatttagcgt taaagataca agtccatgc tagctagagc tcgtttggca gtgctgcgct
 900
 ccatgattct ctaactccaa gagctgattc tccaatagag tgattctcta gcaaaagtat
 960

atctatttga taaaaaccgt ttgacaaata gtctgtgatg tgattcttga ggggttggag
1020

agtggggagc agcgagaagc aagttttttt tggctccac cttctagtagc aaaacagaga
1080

gtaaattcat tccgctttca ccgtggagca gttcagtttt ttttgctatt tagctacgcg
1140

ggagtgattc tcgctgtgag cgaagctggt ggagctctac caaacgggta tagaagtatt
1200

acccacgcat gctatcgta agtacgtgg atggcagaac aatggagtag tatgtgggta
1260

gagtggaatt ttttttacat ctgggatata aagaaactct tttgtagctc ttgacatcca
1320

ccacctgatg atccatataa atagaaaaaa aataaattag taaaggggta agttgtaaaa
1380

tttaaatctgt ttttgtggcc tttaaataat gtgatgtatg tgagggattg taaaaagag
1440

tgtttgcac cagatataga gaaaaatttt ccggctgagt gggggactgg ggcgcacgta
1500

ctgatcgggt gtacgtgcgg atcgcataaa ctgggaccgg agaccgtgct gtggtcgcgc
1560

cgggccaggg cagcgccatg tgacccttt tctgagctca tgtgaggccg ggcgagccgc
1620

gagccagtat atcgatcgcc ggctgcatgc atgcaagggt ccgaaagaac ggatcgacgt
1680

cggcacgtcg catacacgtg ccgcgcgtga cgaaataact aaaaaagaaa gaaaagatgc
1740

tattttttagt ctcagagcac aagctattat tagggatttc cgtgatcaac caatgggtgc
1800

ctggtttcaa ggtcggccgg tgcaactgta gccaatcaa aacagtggag cctagctggc
1860

tacggatccg acacatcgcg catgcacaca tcaactcttg aaagccaacg ccgagacctg
1920

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1980

gcgcggccgc cgacgaac
1998

<210> 4
<211> 501
<212> ADN

<213> Zea mays

<220>

<221> misc_feature

<222> (1)..(501)

<223> Una secuencia de ADN de una 3' UTR, T-Zm.GRMZM2G339781:1 que deriva de Zea mays.

<400> 4

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gtcggcccag cggcggcggt ctatgtctcc gatgtgcatg aaaaattccc gctgttttct
120

ttggtgtttg gtatgtacgt tattatgtac gctgcctctt ctcaaagcat agtatgcata
180

gttctgtttt ctggcattcg atggccggtt gccccacctc ccctgaaaca cacacacccc
240

aacacagaca cgcagatacg tacgcacgct ctcagctgca aagtcatcac tgtaggaca
300

tgtgcaacct aaatattact ccctatgttt ataaatatat gactacgttg atttttttaa
360

aactttgatc acccatctta ttaaaaaaac tttgatttat tttttgtgat ttatttatca
420

cttaaggtag tttgtgctta acttaaaatt ttatatTTTT gaataaatat tttgaataga
480

caaattgtca aagttttcga a
501

<210> 5

<211> 2196

<212> ADN

<213> Zea mays

<220>

<221> misc_feature

<222> (1)..(2196)

<223> Una secuencia de ADN de un EXP, EXP-Zm.Xet:1 conformado por un promotor enlazado de manera operativa a un líder (P-Zm.Xet:1), enlazado de manera operativa a un intrón (I-Zm.Xet:1) que deriva de Zea mays.

<400> 5

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attccacggt ttgagctcgt tatggaaaca aactaatacc acgagtggct actattggag
120

gccctcttcg gccgaaggct ctcaaaacat tgtttttata attatctcta aatctgtttc
180

atgtagataa cttttatcga aggttacctt cggatggaga tgaggcacag taacagcggt
240

ttgcaaaaac gaagctaaaa ggcttcggct cagcggcacg catgcatgac gaagaagtta
300

gcaggagcaa ggcggagtcc tcaagacttg ttcagtaaga actatgaagg gaaaggacaa
360

caataccctt aatctgctcc atagttcata tgtatgggtc taagggtatg attgtagttt
420

ccacaagggt ataccccacg actataaata gaggaacaat gttatgcata tggcacgctt
480

ttttgccgga gaagagtgac tcgctcccc tatgaagttc ttttctcttt ctacctacac
540

gttgttgttc atcaaaccta ggtataattg taatcattca tcatataata aaagatggag
600

aaaagtaatg tcgaattaag attagttatc cattatatct tccataccgg attaattgta
660

tacatgacac ttaattttta caaaattaga tgggtatttc attttgatgc atggagtgac
720

atgaaaatga agtagtttcc aattttttta aaatttaagt ggcattgttc taactgacct
780

ttagtatatt tcattctttg ttcattcttt taaccttatt catttaatta atctctttga
840

gaagggttaa ttaaagggtc aaagtaaaaa aagattaatt catgtgtgtt gtcttgttta
900

tgatattctt ccggagttaa aaacaagcgg caaacctaaa gtattgttga acacaaaag
960

tgggtggacg ttcgtgctct ggcgatcaga ttaactggcg attatcctta tcttgtgcgt
1020

ggttattcat ctaatcacgt gggatttggt aactatcatc taagaacgga tccagacttc
1080

tccctgtata tatgaagggg tacggccgat tgagaacccc cgaacacatt ccaatcgaac
1140

caatctattt acattatctt tttttattat tcttgtccta ggagtagatg tagcctagtc
1200

ttagttgtag ctttctgcat atccatctcc acccctattc gactctacgt cgtctagatc
1260

catcttaggt ggctgccga ccctaggatc tcgcccttcc tgaggggcaa tatccaccct
1320

cctcatccct ttaagtaaag atctcttaac ttgattcctt aatttctagg caaatctaca
1380

tcatctagag acgtcccaga tgatctgttg atccggagcg ccctaagatc tttccctagt
1440

gggcgggatc taggacccca cgagaaggaa gacggccatg cgccatcgcg gaccatctaa
1500

ccctgtacgc ggaccgtccg gaacgacgca gggaaggagc agcccctgcc gccaggtcgc
1560

agactgtctg acccaaagcc gcagacaatc tgcgccaccg cagagggcag acggtgacct
1620

tagtgattgg cgctgccac gtcagcggca acaaagtatc atttaatgtc ccatttcggg
1680

gtcactcccg aaagtttagc tgcacgtgca gctcgatcac caacacatgt aacgtgcaca
1740

ttgtctattc cgggacacaa gaaacagagt gcctgcgcaa tactcaagcc gattaagccg
1800

cgtttacgtc ggaacagcat ggaggcaggt cttccatgaa gctaacctaa gccagctagc
1860

taacaagtca gcctcccaaa cattgccaa gacaagacct gttcttaata gacaacgaca
1920

gcaagagcaa ggataccaga agctgattct ttggccttgg tcgattggat tgcagagcca
1980

attagctagg tagcagtgcg gaccgcaggt aagtagtgag ttcctccacg gcacggccgc
2040

atctctgacg ggttttccgg tgggcgcggt caccgcgcgc ggcacgcagt caccatttct
2100

gcacaaatat atatgacatg ttgttgaatg catggacgcg acgcgtgccg cgtgcgcac
2160

gcatgcactg cttggccggt attgcagttt tcaggt
2196

<210> 6
<211> 1998
<212> ADN
<213> Zea mays

<220>
<221> misc_feature
<222> (1) .. (1998)

<223> Una secuencia de ADN de una secuencia de ADN de un promotor con enlace operativo a un líder, P-Zm.Xet:1 que deriva de Zea mays.

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attccacggt ttgagctcgt tatggaaaca aactaatacc acgagtggct actattggag
120

gccctcttcg gccgaaggct ctcaaaacat tgtttttata attatctcta aatctgtttc
180

atgtagataa cttttatcga aggttacctt cggatggaga tgaggcacag taacagcggt
240

ttgcaaaaac gaagctaaaa ggcttcggct cagcggcacg catgcatgac gaagaagtta
300

gcaggagcaa ggcggagtcc tcaagacttg ttcagtaaga actatgaagg gaaaggacaa
360

caataccctt aatctgctcc atagttcata tgtatgggtc taagggtatg attgtagttt
420

ccacaagggt ataccccacg actataaata gaggaacaat gttatgcata tggcacgctt
480

ttttgccgga gaagagtgcac tcgctcccc tatgaagttc ttttctcttt ctacctacac
540

gttggtgttc atcaaacctt ggtataattg taatcattca tcatataata aaagatggag
600

aaaagtaatg tcgaattaag attagttatc cattatatct tccataccgg attaattgta
660

tacatgacac ttaattttta caaaattaga tgggtatttc attttgatgc atggagtgc
720

atgaaaatga agtagtttcc aattttttta aaatttaagt ggcattgttc taactgaccc
780

ttagtatattt tcattctttg ttcattcttt taaccttatc catttaatta atctctttga
840

gaagggttaa ttaaaggac aaagtaaaaa aagattaatt catgtgtgtt gtcttgttta
900

tgatattctt ccggagttaa aaacaagcgg caaacctaaa gtattgttga acacaaaaag
960

tggtggacgg ttcgtgctct ggcgatcaga ttaactggcg attatcctta tcttgtgcgt
1020

ggttattcat ctaatcacgt gggatttggt aactatcatc taagaacgga tccagacttc
1080

tccctgtata tatgaagggg tacggccgat tgagaacccc cgaacacatt ccaatcgaac
1140

caatctatTT acattatcTT tttttattat tcttgtccta ggagtagatg tagcctagtc
1200

ttagttgtag ctttctgcat atccatctcc acccctattc gactctacgt cgtctagatc
1260

catcttaggt ggcttgccga ccctaggatc tcgcccttcc tgagggggcaa tatccaccct
1320

cctcatccct ttaagtaaag atctcttaac ttgattcctt aatttctagg caaatctaca
1380

tcatctagag acgtcccaga tgatctgttg atccggagcg ccctaagatc tttccctagt
1440

gggcgggatc taggacccca cgagaaggaa gacggccatg cgccatcgcg gaccatctaa
1500

ccctgtacgc ggaccgtccg gaacgacgca gggaaggagc agcccctgcc gccaggtcgc
1560

agactgtctg acccaaagcc gcagacaatc tgcgccaccg cagagggcag acggtgacct
1620

tagtgattgg cgctgcccac gtcagcggca acaaagtatc atttaatgtc ccatttcggg
1680

gtcactcccg aaagtttagc tgcacgtgca gctcgatcac caacacatgt aacgtgcaca
1740

ttgtctattc cgggacacaa gaaacagagt gcctgcgcaa tactcaagcc gattaagccg
1800

cgtttacgtc ggaacagcat ggaggcaggt cttccatgaa gctaacctaa gccagctagc
1860

taacaagtca gcctcccaaa cattgccaa gacaagacct gttcttaata gacaacgaca
1920

gcaagagcaa ggataccaga agctgattct ttggccttgg tcgattggat tgcagagcca
1980

attagctagg tagcagtg
1998

<210> 7
<211> 191
<212> ADN
<213> Zea mays

<220>
<221> misc_feature
<222> (1)..(191)

<223> Una secuencia de ADN de un intrón, I-Zm.Xet:1 que deriva de Zea mays.

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gcggtcaccg cgcgcgccac gcagtcacca tttctgcaca aatatatatg acatgttggt
120
gaatgcatgg acgcgacgcg tgccgcgtgc gcatcgcatg cactgcttgg ccggtattgc
180
agttttcagg t
191

<210> 8
<211> 498
<212> ADN
<213> Zea mays

<220>
<221> misc_feature
<222> (1)..(498)
<223> Una secuencia de ADN de una 3' UTR, T-Zm.Xet:1 que deriva de Zea mays.

<400> 8
aagccctacc aattaatagt gtgattagac atgggcatag ttcacgaaa cagagaaatc
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gatccgaaat caaaaccaa agaatgata tacggagtac atgaattatg attcacttgt
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attgtataac tatatttcat ttatgtctga tgtctcacat tgatttgcta tgtatttatt
180
tactgtatta ctattattct cttatcaatt attgttattt aaaatataga ttgtgttgtc
240
taaatttgtt tttaaaacca gcatattgtt ttattctgtt aacatctcct gaaaagggtc
300
ggttaattag attagaacca atggcaaadc tagcacaaaa tatgagtga gtcacactta
360
caaaaacaaa cactaaaata tcaaacgag gacatctaag ttaagctgtg tgacgcacgc
420
ggcacgatgt tgtctggttt catgtgccaa gccatagggtg gtggtggccg aagtagcttt
480
gtagctgttg tgtcagtc
498

<210> 9
<211> 2183
<212> ADN
<213> Zea mays

<220>
<221> misc_feature
<222> (1)..(2183)
<223> Una secuencia de ADN de un EXP, EXP-Zm.Sat6:1 conformado por un promotor enlazado de manera operativa a un líder (P-Zm.Sat6:1), enlazado de manera operativa a un intrón (I-Zm.Sat6:1) que deriva de Zea mays.

<400> 9
ttttttttta attttaaaat acgttttgcc gagtgccaga tcgcgggcac tcgacaaagg
60

cgactttgcc gagtgtcacc tgacaggcac tcggcaaaga gtttttctat gttctttgcg
120

agtgtcaacc gactgacact cggaagcta tctttaccga gtgtcaaaat ttaacactcg
180

gcaaaataca tttaaatttt ttaaattttg tctcccaaac tttttgtggt atgttcctac
240

actatgtaga cctacatgta tcatttggg acaattataa catagtttcc atagttagta
300

gatttagttc gtttatttga atttcttcgg aaaattcaaa tttgaactgc aggtcactcg
360

aaacttgga aaccgtgcat gaaaaaatga tattcatgtt acttagcata agttacgacc
420

gattgcagaa gcgtaccgga aacttcgagc aacatgctca ctaaacaatgg ccgtgaactt
480

ggcatccaca tgtttaaaaa ttgtataaaa cacacacaaa gtcagaaaat catgaaactt
540

gtccacgtgt catgatatca tatgtatagg ctgtgataaa aatttttagaa tgtttgaga
600

aagttgtgag acactatgtg tagacacatg attgtctttg ccgagtgcct acctgtgccg
660

agtgttttagc actcggcaaa gggctctttt gccgagagcc taactttacc gagtgcgaca
720

ctcggtaaag tcttctttgc cgagtgcccg aaaaaggca ctcggcaaag aatacaacac
780

tcggcgaagc ctcggattcc ggtagtgtcg tggcattgct tgccaaacca ataggcactt
840

gagctttgca gtcgcacaca ttgttggtct tccggatgtc tagtacagct catggaggtt
900

attgatttct ctagtacaat ctaaactttt atctaaaagc aatatttcat cctctctgtc
960

ttatcacaca atctttggca gtatatcaac taccacacat tctattattht attttcaact
1020

ctcctatcca catccaacta cctaccgacg gcacccgcct ctggcccccg cctttggccc
1080

cgccccgag gctcgctgct accctatcca gttgcacaga atggcgcgct gtatgtaggg
1140

ttattcctaa tttcctagcc aaccgtaggt taggtcatct cgagcggtcc gtgtacgtgt
1200

agtgtgtata tggacacgta aaatattgtht tcacactata tactaaattg tttataaagt
1260

ggactttgaa atagatagca ggatagggag gcggctgaag gtatccttat agtgthtatct
1320

tttcagtcga ccggtgcaac gtgattccaa ccatatttcc tcaccctccc gtgctcgagt
1380

acggacagcc ttaagctcac atacttgagc aacaatatct tgggtgcagat ttccttaagg
1440

taatgcaggg tcttctcgaa acaatgacag ccttctaaat caattacaat taacaattac
1500

ttttatatac agacaaggat aataaatagt acttcctcca ttctttttta tttatcgtgt
1560

tttaattcaa aaaaataata gccggtgaca atattcgtaa acggaggtaa tactttataa
1620

cgtaaagata aataataaat aaaaagataa caatttaatt atactaggtg attatataag
1680

aatattgtct ttacttatgc atctaaaata ttggagaagt gcattataca tgtgttattht
1740

tgtagctgtg tgatgcgcgt gctatgttht ggcggtgtga ttccccctct ccgatccgat
1800

ccattcttht caccccaata acaaccagga tgcgctgtag gctgtagctt ctccttccta
1860

tggatagcat aatgatgtcc gaaacgggaa aacgacgaga gcttccacct ccctcctccc
1920

cgtccccgcc gctctctgca gggcaggccc atgcgggtga ggtaccggtg acgacgcggc
1980

ggcccacggc cgagagcgcg gaccgcaggt aagtagtacg tacgttaatt aaatgatgat
2040

atgggtatga ttagaagcta gctaccgcga tcgttgctag ctagtagtaa ctagcaattg
2100

cgatcgagga ttccctcgtg gccgacctg atgtgtggtt gtctgagacg cgcgtgggtgc
2160

tggtgtggcg gcagtttgca ggt
2183

<210> 10
<211> 1998
<212> ADN
<213> Zea mays

<220>
<221> misc_feature
<222> (1)..(1998)
<223> Una secuencia de ADN de un promotor con enlace operativo a un líder, P-Zm.Sat6:1 que deriva de Zea mays.

<400> 10
ttttttttta attttaaaat acgttttgcc gagtgccaga tcgcgggcac tcgacaaagg
60

cgactttgcc gagtgtcacc tgacaggcac tcggcaaaga gtttttctat gttctttgcg
120

agtgtcaacc gactgacact cggaagcta tctttaccga gtgtcaaaat ttaacactcg
180

gcaaaataca tttaaatttt ttaaattttg tctcccaaac tttttgtggt atgttcctac
240

actatgtaga cctacatgta tcatttgtgg acaattataa catagtttcc atagttagta
300

gatttagttc gtttatttga atttcttcgg aaaattcaaa tttgaactgc aggtcactcg
360

aaacttgga aaccgtgcat gaaaaaatga tattcatggt acttagcata agttacgacc
420

gattgcagaa gcgtaccgga aacttcgagc aacatgctca ctaaacaatgg ccgtgaactt
480

ggcatccaca tgtttaaaaa ttgtataaaa cacacacaaa gtcagaaaat catgaaactt
540

gtccacgtgt catgatatca tatgtatagg ctgtgataaa aattttagaa tgtttgaga
600

aagttgtgag aactatgtg tagacacatg attgtctttg ccgagtgccct acctgtgccg
660

agtgttttagc actcggcaaa ggttctcttt gccgagagcc taactttacc gagtgcgaca
720

ctcggtaaag tcttctttgc cgagtgcccg acaaaaggca ctcggcaaag aatacaacac
780

tcggcgaagc ctcggattcc ggtagtgctg tggcattgct tgccaaacca ataggcactt
840

gagctttgca gtcgcacaca ttgttggtct tccggatgct tagtacagct catggagggt
900

attgatttct ctagtacaat ctaaactttt atctaaaagc aatatttcat cctctctgtc
960

ttatcacaca atctttggca gtatatcaac taccacacat tctattattt attttcaact
1020

ctcctatcca catccaacta cctaccgacg gcacccgcct ctggcccccg cctttggccc
1080

cgcccccgag gctcgctgct accctatcca gttgcacaga atggcgcgct gtatgtaggg
1140

ttattcctaa tttcctagcc aaccgtaggt taggtcatct cgagcgggtcc gtgtacgtgt
1200

agtgtgtata tggacacgta aaatattggt tcacactata tactaaattg tttataaagt
1260

ggactttgaa atagatagca ggataggagc gcggctgaag gtatccttat agtgttatct
1320

tttcagtcga ccggtgcaac gtgattccaa ccatatttcc tcaccctccc gtgctcgagt
1380

acggacagcc ttaagctcac atacttgagc aacaatatct tgggtgcagat ttccttaagg
1440

taatgcaggg tcttctcgaa acaatgacag ccttctaaat caattacaat taacaattac
1500

ttttatatac agacaaggat aataaatagt acttcctcca ttctttttta tttatcgtgt
1560

tttaattcaa aaaaataata gccggtgaca atattcgtaa acggaggtaa tactttataa
1620

cgtaaagata aataataaat aaaaagataa caatttaatt atactagggtg attatataag
1680

aatattgtct ttacttatgc atctaaaata ttggagaagt gcattatata tgtgttattt
1740

tgtagctgtg tgatgcgcgt gctatgttta ggcgtggtga ttccccctcct ccgatccgat
1800

ccattctttg caccccaata acaaccagga tgcgctgtag gctgtagctt ctccttccta
1860

tggatagcat aatgatgtcc gaaacgggaa aacgacgaga gcttccacct ccctcctccc
1920

cgtcccggcc gctctctgca gggcaggccc atgcgggtga ggtaccggtg acgacgcggc
1980

ggcccacggc cggagacg
1998

<210> 11
<211> 178
<212> ADN
<213> Zea mays

<220>
<221> misc_feature
<222> (1)..(178)
<223> Una secuencia de ADN de un intrón, I-Zm.Sat6:1 que deriva de Zea mays.

<400> 11
caggtaaagta gtacgtacgt taattaaatg atgatatggg tatgattaga agctagctac
60

cgcgatcggt gctagctagt agtaactagc aattgcgacg gaggattccc tcgtggccga
120

tcctgatgtg tggttgtctg agacgcgcgt ggtgctggtg tggcggcagt ttgcaggt
178

<210> 12
<211> 498
<212> ADN
<213> Zea mays

<220>
<221> misc_feature
<222> (1)..(498)
<223> Una secuencia de ADN de una 3' UTR, T-Zm.Sat6:1 que deriva de Zea mays.

<400> 12
tgatcgagcg catgcacgca ggggaacgag gggacgggtc gagaagaagc agatgctgcc
60

gtgttctcag tctctcagct cgatcgagaa tgtgatttgt gcgtgtgcaa ttttgcgtga
120

tgtgtcgtac gtaagtgtaa gtcgtagcat cagcttcgtt ctctcgtat atgtctggaa
180

atgggatgcc attctacttc cggtgcatgg taccctgtag ttcaaggatt catgtatata
240

tatagcagta ttatacacat atgcatatac atagcaggct gcctatgcac atgaattggg
300

gtctagtccc atgttggtat acatatataa tatggttcta tagttagatt ttgtgggatt
360

attagtccaa tagagaaaat caattaaatc ctagaaaatc tcaaagcctc gtgtatgaca
420

aggggatggg ggaacaata atcccacatt actaatTTAA gtggacctag ctgactagt
480

ttataggtca cctgatcg
498

<210> 13
<211> 2145
<212> ADN
<213> Zea mays

<220>
<221> misc_feature
<222> (1)..(2145)
<223> Una secuencia de ADN de un EXP, EXP-Zm.GRMZM2G049726:1 conformado por un promotor enlazado de manera operativa a un líder (P-Zm.GRMZM2G049726:1), enlazado de manera operativa a un intrón (I-Zm.GRMZM2G049726:1) que deriva de Zea mays.

<400> 13
cttcaactcgt cggctcgagg acccccggg ctcgaaacac cgacacgtag acgtttggaa
60

acttggcccc actcgtagcc tctaaggatg tagtgggcct aagggccact attagcggcc
120

atgggtacat gtaccctaag cgctacaaac aaaggccac atagagaaga caggctatga
180

gctccactta tgaggtgggt taaagtgaca agatgcctat gaagaaatag aggtataatt
240

gactgaggcc ctgaccacat agtagctagg ggcacctcca ccacttagga cataagtggg
300

cacccttcca caacgacact taccagccaa atgaagagct ctgaatgcga cacatagcct
360

agcctggcct ggtcccactt ggacctccat agggtagcag ccgagtgcc catgtacata
420

aataagaaat ggaaggctcc ggacctctt aatgggatcc ggacctgctc ccataaatat
480

tgggcaagac taggagcccc taggcacctg aacgctagag gccaccgatg caaatgggg
540

tctaggcaca ccaaagtcc cctagatcat cgtgaaaact gtggtcaatg gaggaccact
600

cgtccataga ctggagggct ctgataatgc cacctggctc cgtcaggccc tacgccccca
660

atgggggtcca ggaaagccac acgcccttct gaccatgctg cgtacccgat caaggggatg
720

gcagagttag aagacatgcg ggttgtacct gactgggcgg gcacaactat agacgcccac
780

aaccgtctcc tcgttaccag gatccattac tacatgctcc aaaaatatct cagtggcatt
840

ttggtcggtg ctcacacacc tagctacgta gtcaaagaca atattaatga tcgcgtacca
900

gtcatgccac ttctccaaac ctccatggcg tgtgtgaccc caaatatcta cagtgtgctc
960

cactttgttc aaggacacct atagtagtat ggaaggcgta cttcttcgac tatcacctct
1020

ctagatctct ttgtacagcc tccgggggtgc tagatatgat catctaaaaa ccagaatgta
1080

caactacaac aattcatatg acatcgacaa atagtaaagt aggggagtta tggcttgact
1140

cacacctaac taatgtacct atcctttccc ttggtctata aaaggaaaag cacggtctca
1200

gtaaaaaggg caagcaggac agaattagac tggctaaggc aagtaacaca agcccaagca
1260

atacaattta aagaggacgt aagctattat aattaccttc cgccggcatg aacctctcta
1320

aaaactttct tgtttctgta tgaaatcccc aatagagtcc ggttagtggt agcaccgatc
1380

cttagtccaa aaaccaggcc atctgagcgc tagcaaacca aaatctcata gctaaacttt
1440

acctagacga cgtcgatttt tctacaaaac gacaaccaag aatgagagga gtttttttaa
1500

aaaaaaacac acacacacaa tcgggcacga ttagatctga ttttgaaagt ttgaatttta
1560

tatgtgtata tatgcaagtg taccagttct ttgtttaccg gccggatatc atgtcatccc
1620

tttttgtgtg tactagtcag gtgttttctc cgtgcttcaa gataacgggt tgtccgcagt
1680

tgcgagcctc taaaacatgt gaataccaac tcgacagcgc catgatctat gtatagcaga
1740

tacgcagcta cagactacag tgattctgat tcaatttgag catgtttatt cttttgtttt
1800

tctgttttta ggcatggcag ccactggcac aatatatagc ctaacgtgtc tcttcgtggc
1860

cgaggctagc tgcaggggtg gcgttcggcc ggccgtacgc accgtacggc ggcgcggcgc
1920

cttccttccc taccctacaa cgacgatcga cgatgtgcta gccaccccca ccgacacatc
1980

catccagcgg tgcccacccg gaccgcaggt aagtagtacg tatatatggt gccctagact
2040

atatatatat acgtatccag catatctcct gctggcgcgc gcatgcggca tatatatgta
2100

acaagcaagc atgtgtggcg gcggcattga tggcagtttg caggt
2145

<210> 14
<211> 1998
<212> ADN
<213> Zea mays

<220>
<221> misc_feature
<222> (1)..(1998)
<223> Una secuencia de ADN de un promotor con enlace operativo a un líder, P-Zm.GRMZM2G049726:1 que deriva de Zea mays.

<400> 14
cttcactcgt cggctcgagg acccccgggt ctcgaaacac cgacacgtag acgtttggaa
60

acttggcccc actcgtagcc tctaaggatg tagtgggcct aagggccact attagcgcgc
120

atgggtacat gtaccctaag cgctacaaac aaaggcccac atagagaaga caggctatga
180

gctccactta tgaggtgggt taaagtgaca agatgcctat gaagaaatag aggtataatt
240

gactgaggcc ctgaccacat agtagctagg gcgccctcca ccacttagga cataagtggg
300

cacccttcca caacgacact taccagccaa atgaagagct ctgaatgcga cacatagcct
360

agcctggcct ggtcccactt ggacctccat aggggtaccag ccgagtgcca catgtacata
420

aataagaaat ggaaggctcc ggacccctct aatgggatcc ggacctgctc ccataaatat
480

tgggcaagac taggagcccc taggcacctg aacgctagag gccaccgatg caaaatgggg
540

tctaggcaca ccaaagtgtc cctagatcat cgtgaaaact gtggtcaatg gaggaccact
600

cgtccataga ctggaggggt ctgataatgc cacctggctc cgtcaggccc tacgccccca
660

atgggggtcca ggaaagccac acgcccttct gaccatgctg cgtacccgat caaggggatg
720

gcagagttag aagacatgcg ggttgtacct gactgggcgg gcacaactat agacgcccat
780

aaccgtctcc tcgttaccag gatccattac tacatgctcc aaaaatatct cagtggcatt
840

ttggtcggtg ctcacacacc tagctacgta gtcaaagaca atattaatga tcgcgtacca
900

gtcatgccac ttctccaaac ctccatggcg tgtgtgaccc caaatatcta cagtgtgctc
960

cactttgttc aaggacacct atagtagtat ggaaggcgta cttcttcgac tatcacctct
1020

ctagatctct ttgtacagcc tccgggggtgc tagatatgat catctaaaaa ccagaatgta
1080

caactacaac aattcatatg acatcgacaa atagtaaagt aggggagtta tggcttgact
1140

cacacctaac taatgtacct atcctttccc ttggtctata aaaggaaaag cacggtctca
1200

gtaaaaaggg caagcaggac agaattagac tggctaaggc aagtaacaca agcccaagca
1260

atacaattta aagaggacgt aagctattat aattaccttc cgccggcatg aacctctcta
1320

aaaactttct tgttctcgta tgaaatcccc aatagagtcc ggttagtggt agcaccgatc
1380

cttagtccaa aaaccaggcc atctgagcgc tagcaaacca aaatctcata gctaaacttt
1440

acctagacga cgtcgatttt tctacaaaac gacaaccaag aatgagagga gtttttttaa
1500

aaaaaaacac acacacacaa tcgggcacga ttagatctga ttttgaaagt ttgaatttta
1560

tatgtgtata tatgcaagtg taccagttct ttgtttaccg gccggatatc atgtcatccc
1620

tttttgtgtg tactagtcag gtgttttctc cgtgcttcaa gataacgggt tgtccgcagt
1680

tcgcagcctc taaaacatgt gaataccaac tcgacagcgc catgatctat gtatagcaga
1740

tacgcagcta cagactacag tgattctgat tcaatttgag catgtttatt cttttgtttt
1800

tctgttttta ggcattggcag ccactggcac aatatatagc ctaacgtgtc tcttcgtggc
1860

cgaggctagc tgcaggggtg gcgttcggcc ggccgtacgc accgtacggc ggcgcggcgc
1920

cttccttccc taccctacaa cgacgatcga cgatgtgcta gccaccccca ccgacacatc
1980

catccagcgg tgcccacc
1998

<210> 15
<211> 140
<212> ADN
<213> Zea mays

<220>
<221> misc_feature
<222> (1)..(140)
<223> Una secuencia de ADN de un intrón, I-Zm.GRMZM2G049726:1 que deriva de Zea mays.

<400> 15
caggtaagta gtacgtatat atgttgccct agactatata tatatacgta tccagcatat
60

ctcctgctgg cgcatgcatg cggcatatat atgtaacaag caagcatgtg tggcggcggc
120

attgatggca gtttgcaggt
140

<210> 16
<211> 501
<212> ADN
<213> Zea mays

<220>
<221> misc_feature
<222> (1)..(501)

<223> Una secuencia de ADN de una 3' UTR, T-Zm.GRMZM2G049726:1 que deriva de Zea mays.

<400> 16

ccgattacgc agttctatcg ccggcccata ggatcggatt ggatctatca ttcgcgaccc
60

aaagggcctg ttcgtttctg ttgggtttca caaaaattat tccggctaata taaaccttat
120

ataaattaga caagcaatct acataggaat tgttccgagt gttcaattct ctggaaccga
180

acaaggccta atactttttt tgaaagcacg ttcttattat acacatgtaa caggaaagca
240

cgtagacggt ggtgtagggt ttggtgaggtg agaaacggga ggtcttgcct tcctattgat
300

ttttcatcga tctgtgttgt ttttatttac gccattggcc gacattattt aatgatgtca
360

tgagccatgt ggtatacatg agcatgcac tccaccgcac ctaacatggt catgttaggg
420

ctagttcgtt ttcagctgaa tccatgtgga ttggatggaa ttatgtgggt ttaaattccat
480

agcaagtcaa aatctctact a
501

<210> 17

<211> 1998

<212> ADN

<213> Zea mays

<220>

<221> misc_feature

<222> (1)..(1998)

<223> Una secuencia de ADN de un promotor con enlace operativo a un líder, P-Zm.GRMZM2G141762:1 que deriva de Zea mays.

<400> 17

tgcccgggtc ggggccggaa gtcgcgcgtg gggcctgtcc atcgaacaaa agcgagagaa
60

aacgtgcatc ggccggtggt ggcccgtacg gtgggctggg ctcgaatcaa cagcagatga
120

attggtagac aagacagcgc gatgcatgaa tagtgctga ttgggcttct cgagatagac
180

gcgggttaatt gggccggatt gcacacgcaa aaacaaaaaa aaaaaactgt cggcgtttgc
240

agttgcagtt gggcagtggt cacacacgtt aacaacagca gaagcagcaa atgacacggc
300

tcggctcatc aattagctgc tgccacaaac aagggtttac ctgtcggctc atcaattagc
360

tactactaat aatcagcagc gctcggcact ctggcagcac aagcgcagga cccaccagta
420

ctgtgtgctg gacagcgtga gtactgagtt gggaagccac accccacacc acacggcgta
480

ttggctgtca accgacccgg atcgatcgac tagttgcggt tgccgtcgggt tgctcggaca
540

ctcagccctg tcaaggtagc agtactcctc ccggccttat cactccgggtg cagtgcagtg
600

gaaacaaaag gcagaaatcc ctaccacggc ggcgcattga tgaatccccg ctgctgtgac
660

tcagagcctg acgaggggggt gctatgctac ggcctactcc gggctaggggt gtggagcgag
720

tgtctgggac tgggagaatc cagcgtcgtg tactgtccac gcgtacgcgg gttctcggca
780

aggccaagtg ggcaacatgg caggggtggca agacgggtact gtatgtacct accggcacta
840

cgcttcgacg cctccttttt tccaaaacct tccaagcccc gcgttcaaac tgtgcctagg
900

cgacggatcc tcgggtgctag tagatcacac acacacacac acacacgggc gaaatgtcgg
960

cgagttaatg acggtgggta aagtgaaacc tggatccagc accagcagca gtctttcagg
1020

tttcaagaac actcaggtcc tgcgttactg tggactgtgg taaaagtgcc ggaagttcag
1080

ttcgacgggg gaagaaaaga agggccgcac ctgcacacag cacacctact acactagtag
1140

actgctgcaa tgtactacct gggccgtgct ccaaaagtcg taaccactcg gagacttccc
1200

tctgtcctat ctccgatcac tgatacatct cacaccctca ccacaccgtg acataatttg
1260

ccagtaggggt ttacgggtgcg gtatcgataa taaccacact acttgcacaa cagctcactt
1320

cttcggttatt ttttttttgt caagtgggggt cgatctggcg ctgcctatga ttcaagtgtg
1380

agaattcagc aacagccagc cagctcctgt ttccgtgtac atacgctttc taaaagctgg
1440

accaggccgg cccaatgctc cagttgcccg tgcgcgctgc ttgccccct accccaggcc
1500

tagccgcacg gaaatgaatg cgggccact gcccgacga cttgcaacta gtctccacc
1560

tgttcaatta aatccacaga cgctgggaaa acaattcttt ttgaaaggta gaaataaata
1620

aaagattgtg ggctgttgaa gtgcaatcta acccctttct cagactatct tctaaataac
1680

tacttttcgc agaatcaggc gtgtcatctc tagacgatga gattacacca gtcagctaca
1740

gatgacgaat ctgattaataaaa aaaatttggg gctagtatac tctaatacggtt ttacgctaga
1800

tatgttgtca ttaattaatt gataaaaaaa aaacaatatt tgtaactgat gccatgcatg
1860

cagcaggctg cacggcacgg tcgtccggaa ctccggatga tgatataaga ccagcgtcac
1920

ccccgcgcgc gcagcctgct gtgatgcgcc caagtcgatc aatcatcgtc cgctctcatc
1980

atctcatcgc aaagccaa
1998

<210> 18
<211> 1568
<212> ADN
<213> Zea mays

<220>
<221> misc_feature
<222> (1)..(1568)
<223> Una secuencia de ADN de un promotor con enlace operativo a un
líder, P-Zm.DSUL:1 que deriva de Zea mays.

<400> 18
tttgctcaca ggtgactcag tagatgacga tcatgatgcg ctttaggtca tatatttgaa
60

gttcatcact gacctcatca aggaacatgt ttctagtac cttggtgtta ggggtgttctt
120

atgggggtcgt aggtcatgct accatcactg tcgatcgagg cattgttagga atcgttcagt
180

caagtcattg accgcccttc actcaatcag tcattgaccg cccatcactc aaccagggtca
240

cgagtacctg acttatgcat gggacaatac ttcctttact aggtgcgata aggcactata
300

tggcaatggg tgtcttcatg ggggtaggct cgatgtcact ctgaagtcac aaccctaggc
360

gtgataccat actttttttg tgcaatagat agagcaactc gtaggtcatg gatccttagag
420

ttccaagggc ccttaagggg ggtctaggcg atcaagagga ctcaaggaga atgagagcgt
480

cttggagtgt cctagggggc ttgagtgcc tctgtttcac ttgttctaac aaatgggtgt
540

ggctgggata gtcttacatg tctacggagg cccgagacca gatcctctga tatgttaggc
600

ttgtatctta gctagagtcg aggttagtcg cggatcagac aattccttct atcgagggtc
660

tttgaaaggc atcctatcaa ctcattaggg tatgatctac tcccgttggt aataaacgta
720

ttttataaca caacactcac atcatgaatt gtattttaaac tcaaccagaa cttcagcatc
780

tcctcaccag tatgaatcat cacatattca tcaacgatgt tttcagagtc catgcctcta
840

aataaattta ttataaaaaa tattctataa ctaatctaata aatacttatt ttatattaaa
900

aaattagtac ttatataact ttagtcaaag ttcaaactgt ttgaggaagc caacattata
960

ctttttatgg atggttgaag tatacagttt tctataaaact ttgtcaaatt atgtatggta
1020

acttaactta gaaaataaca agaaataatg gagagatatc acatttggaa acggcgtagt
1080

attccacttg gaacactttt attttaagat gcaaaaaaaaa atggctgggtg gagctaaaat
1140

attttttatt tgagccgaga cattcttttt ttgtgaacta cttcatctgc gcagcggcag
1200

acttcgcgtg cgtattaatg tttatactgt gttgaacttt agatacataa accgataaac
1260

gcatgcaaataaaa taaaagttgt tcttgctgcc acgcctatcg gttgagttgc atgactttca
1320

ggccaacaca ctgcaagcaa aatggaattg gagatttact acgagagcga gtggtcaagt
1380

attcatgact agccggctgc ctcgtcttct tctcgaatgg aatggctccc acttgctgca
1440

aacggcccgc cggagacgct tcgttacccc actaatccct ggaaaggagt ttacatggac
1500

agtgggagcc tatataagca cgttcatggc gagacactac atccgagaag gacgatcagg
1560

cttcaggc
1568

<210> 19
<211> 2000
<212> ADN
<213> Zea mays

<220>
<221> misc_feature
<222> (1)..(2000)
<223> Una secuencia de ADN de un promotor con enlace operativo a un
líder, P-Zm.GRMZM2G512113:1 que deriva de Zea mays.

<400> 19
ccttccttcc atatttactt cttatttcaa ccaaaccaag atgttaggtt ttaggccag
60

aaccatgcat atgactgatt gtaagctgta ggcacagatg ccaatgtggt tttttttct
120

gttttcaact tttaatgact acatctctgc tgaggggtggc gggatgatgag caacctgtct
180

ctttatttat aacaaactca taccaagaat gacaggtgct tttgcttcta tatttggtga
240

tctactatat ttgcttctat attgggagtt caatataatg attaagtaat ataagtctcg
300

ggatatatatt tagttgatct actatatttg ttgtctgatt ggaatcctaa tacttttggt
360

aaattatatt tgttgacct atactttcaa gtaactgcag attacttctg tgaaaattat
420

acggaacaag cagactgggc actcagaagg ctatggtttt attgagtttt cctctcgagc
480

tactgcagaa catactctga taaacttcaa tcggcagatg atgtcgaatg ttgagatgac
540

ttttaagctg aactgggctt ctgctagcac tggatgataag cgtggagata gtggttctga
600

tcacacaata tttgttggtg atttggctca tgggtgttact gactccatgt tggaagatgt
660

gttcagagct aagtaccctt cagttagagg agctaattgtt gttgttgata cttgatagga
720

tgactggatg gcccaaagga tatggtttcg tgcgttttgg agatctgaat aatgcattgt
780

gaagatgtac atttgtgctt gtttgatctg aaaaggggac aactttttaga tatagcataa
840

taggatatga agatgaaaga tctgtactta gaaatttggt catgaatgct ttgtttgaca
900

tttaacttcg tatgctggca tctcagtga ttaagtgtta atgttacaat tattcttgga
960

tcaacaccat tcgagtattt gactattggt tgtcacgtgc acttattatt cttgcatcgc
1020

tattttgaac caatttttaa gttaccgtag caacgcaaaa cttgatctga gtgactgac
1080

gtgagctaatt gtaacagtat gaattatatg gcttgaacat ggtaggtgta aaatgttttg
1140

ttcatcggta gagtattcca gatgtgatcg gcttaacagt atgaaatata tagaactatg
1200

tgagccaatg taacagtatg aattatataa gttatcaaga tattatatgc cctcgttgca
1260

acgcacgggc actgacttat tatgataata tttgttggtc tgtatctatg tttcgtacta
1320

attttttact cccgtggcaa cgcacgggca cgaacctagt agaaagtgat aggagcaaaa
1380

tggaaagcga ggagtgtaaa tgaactcaga ttctaggatt ttttaatcga ttgaattttt
1440

ttatttcaaa taattaaaaa tacatttgtc tgacgtgatg ctgtgcatat ggatcaatca
1500

gaacatgtga catcgtaaaa gcagtcgggc taagggtcaa aatcgggtact gacacgtcac
1560

gtcagctgta tcgagcgaag gataatatcc gacatcagtt ctaacatgat tgggtactacc
1620

aactagactg atcgatcgac ggacctaccg atcgggtgttg gagtcgaaac gatcgggtacc
1680

gaccattgac tcgcctagtc atagcccatt gttagaacaa gacttagaca aatacacggt
1740

agatcatctc tccaattttt ttcaagaaga aaaaaaata gaatttgaga taactagtcc
1800

cgacctccca aggggaacatt tttaacagga cgctgcttc ctcccttttg ccctcggcag
1860

ccataactca tccgggaccg tcctctccct ccctccgtct cgccctatat aaaggcagac
1920

tagctagctc tttctttctcc accgtcgttc ttgccacaca cctgaccgac cttgcctcct
1980

ctccctccta tgccaccaa
2000

<210> 20
<211> 704
<212> ADN
<213> Zea mays

<220>
<221> misc_feature
<222> (1)..(704)
<223> Una secuencia de ADN de una 3' UTR, T-Zm.GRMZM2G512113:1 que
deriva de Zea mays.

<400> 20
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60

ttgtttcatc actcagcaga attcacgatg tatgtcttct tgaccttgca agacttttcg
120

ctagaggatg aatcccaact tcttgtgcct ttccatctcg cacctatcaa tcctcccatc
180

ttcttcgtct ccgtctatcc ctcttgagct tgtaccgctt tgcagttata gctagctage
240

tagctacgcc tacttccgcg tggactccgc tctctggaag taagtgtctc ctcgtcgcgt
300

gctgccgtgc attgtgttgc cggccggcag ctacttccgc acgaactcta ctagtacgct
360

attattctgt gtaatggaag gtttgtgatg tactccctgt ttatttgcta gttgtccatc
420

gcctttcagc ggaggcagca atagcttgag ctttgctact cgtgtaatta tacgtctcgg
480

aatgcagtt attagtgtgt cccgatgtgt tgtgttgtgt tgtgtctcat tcaggcactc
540

tgtgccatgc agttgcttga tctgtgtgtg tatgcctgtt ctcgctagtc atgtcttctt
600

gtcccaggtg aggctggcc tgaggaagaa ggggggtagt attcaaccgg ttgaaacaca
660

agtcagccca gcgccactga agtactgaac tgaggctaac ttat
704

<210> 21
<211> 2001
<212> ADN
<213> Artificial

<220>

<223> Una secuencia de codificación sintética optimizada para la expresión en plantas para la beta-glucuronidasa con un intrón procesable que deriva del gen St.LS1 con especificidad tisular inducible por luz.

<400> 21

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60

ttctccctcg accgtgagaa ctgcggcatc gaccagcgct ggtgggagtc cgccctccag
120

gagtctaggg ccatcgccgt gcccggttcc ttcaacgacc agttcgccga cgccgacatc
180

cgcaactacg cgggcaacgt ctggtatcag cgcgaggtgt tcatcccgaa gggctgggcg
240

ggccagcgca tcgtgctccg cttcgacgcc gtgacccact acggcaaggt ctgggtgaac
300

aatcaggagg taagtttctg cttctacctt tgatatatat ataataatta tcattaatta
360

gtagtaatat aatatttcaa atattttttt caaaataaaa gaatgtagta tatagcaatt
420

gcttttctgt agtttataag tgtgtatatt ttaatttata actttttctaa tatatgacca
480

aaatttggtg atgtgcaggt gatggagcac cagggcggtt acaccccggt cgaggccgac
540

gtgacgccgt acgtgatcgc cgggaagtcc gtccgcatca ccgtctgcgt gaacaatgag
600

ctgaactggc agaccatccc gcctggcatg gtcatcaccg acgagaacgg caagaagaag
660

cagtcctact tccacgactt cttcaactac gctggcatcc accgctccgt gatgctctac
720

accactccca acacctgggt ggacgacatc accgtggtca cccacgtggc ccaggactgc
780

aaccacgcct ccgtggactg gcaagtcgtt gccaacggcg acgtcagcgt cgagctgcgc
840

gacgccgacc agcaagtcgt tgccaccggc cagggcacca gcggcaccct ccaagtcgtc
900

aaccctcacc tctggcagcc tggcgagggc tacctctacg agctgtgcgt caccgccaag
960

agccagactg agtgcgacat ctaccctctc cgcgtcggca tcaggagcgt cgctgtcaag
1020

ggcgagcagt tcctcatcaa ccacaagcct ttctacttca ctggtttcgg ccgccacgag
1080

gacgctgacc tgagggggcaa gggtttcgac aacgtcctga tgggtccacga ccacgctctg
1140

atggactgga tcggtgccaa cagctacagg accagtcact acccgtagcg tgaggagatg
1200

ctggactggg ctgacgagca cggtatcgtc gtgatcgacg agactgctgc ggtcggtttc
1260

aacctgtctc tgggcattgg tttcgaggct gggaacaagc cgaaggagct gtactctgag
1320

gaagctgtca acggcgagac tcagcaagct catctccagg cgattaagga gctgattgcc
1380

agggacaaga accatccgtc tgtcgtgatg tgggtctattg cgaatgagcc ggacaccaga
1440

ccgcaagggg cgcgtgaata cttcgcgccg ctggcgaggg cgactcgcaa actggaccca
1500

acccgtccaa tcacgtgcgt caatgtcatg ttctgcgacg cccatacggg tacgatctcg
1560

gacctgttcg atgtttctttg tctcaatcgg tactatgggt ggtatgttca gagcggggat
1620

cttgagacgg cggagaaggt tcttgagaag gaactcctgg cgtggcaaga gaagctccat
1680

cagccgatca ttatcacgga gtacgggggt gacacacttg cgggccttca cagtatgtac
1740

acagatatgt ggtcggagga ataccagtgt gcatggttgg atatgtacca tcgtgtcttc
1800

gaccgggttt cagcggttgt cggcgaacaa gtctggaact tcgcagactt cgccacgagc
1860

caagggatac tgcgggtagg agggaacaag aagggaatct tcacacggga tcggaagccc
1920

aagtcagcag ccttcctggt gcagaagcga tggacaggaa tgaacttcgg agaaaagcca
1980

cagcaaggcg gaaagcagtg a
2001