

PhoenixTemp52503.tmp.txt
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<110> BASF Plant Science GmbH
Song, Hee-Sook
Dammann, Christian

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<130> PF58489

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<170> PatentIn version 3.3

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<210> 3
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 <222> (1)..(583)
 <223> BPSI.1 intron

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 gcatatacat gatggcatat gcagcatcta ttcatatgct ctaaccttga gtacctatct 840
 attataataa acaagtatgt tttataatta tttcgaatct gatatacttg gatgatggca 900

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tatgcagcag ctatatgtgg attttttttag ccctgccttc atacgtatt tatttgcttg 960
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<400> 5
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<210> 6
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<400> 6
atttgtgagt aaaacagagg aggtctca 29

<210> 7
<211> 35
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<220>
<221> primer_bind
<222> (1)..(35)

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<210> 8
<211> 30
<212> DNA
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cggaccggtg catcttgcac ctgcatgtac 30

<210> 9
<211> 11
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<213> unknown

<220>
<223> AG-motif binding protein

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<220>
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 <223> n is a, c, g, or t

<400> 10
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<210> 11
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 <212> DNA
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<400> 11
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<210> 12
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<220>
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 <222> (11)..(17)
 <223> n is a, c, g, or t

<400> 12
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<210> 13
 <211> 21
 <212> DNA
 <213> Arabidopsis thaliana

<400> 13
 acttacgaaa tttaggtaga a 21

<210> 14
 <211> 21
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<213> Arabidopsis thaliana

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<400> 14
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<210> 15
 <211> 21
 <212> DNA
 <213> Arabidopsis thaliana

<400> 15
 aattacaata taatgtatat a 21

<210> 16
 <211> 21
 <212> DNA
 <213> Arabidopsis thaliana

<400> 16
 atatacatta tattgtaatt t 21

<210> 17
 <211> 21
 <212> DNA
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<220>
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 <222> (8)..(21)
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<400> 17
 nnntacannn nnnnnnnnnn n 21

<210> 18
 <211> 17
 <212> DNA
 <213> Petunia hybrida

<400> 18
 aacattttgt tacaata 17

<210> 19
 <211> 11
 <212> DNA
 <213> Glycine max

<400> 19
 tgtttttatt a 11

<210> 20
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 <213> Glycine max

<220>
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<220>
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 <222> (7)..(11)
 <223> n is a, c, g, or t

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<210> 21
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 <213> Helianthus annuus

<400> 21
 tttattatta t 11

<210> 22
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<400> 22
 nnnnnnatta n 11

<210> 23
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 <212> DNA
 <213> Helianthus annuus

<400> 23
 attattatta t 11

<210> 24
 <211> 17
 <212> DNA
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<220>
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<400> 24
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<210> 25
 <211> 17
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 <223> n is a, c, g, or t

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

<400> 25
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<400> 26
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<210> 27
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 <223> n is a, c, g, or t

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 <222> (9)..(15)
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<400> 27
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 <212> DNA
 <213> unknown

<220>
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<400> 28

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		17
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<210> 33
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<220>
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naaaannnnn n 11

<210> 34
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<220>
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<400> 34
agaagaaaat gtttacctcc t 21

<210> 35
<211> 21
<212> DNA
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<220>
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<223> n is a, c, g, or t

<400> 35
nnnnnnnnnn nnnnacctnn n 21

<210> 36
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<220>
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<400> 36
aaaatgttta c 11

<210> 37
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<220>
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<220>
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<223> n is a, c, g, or t

<400> 37
naaatnnnnn n 11

<210> 38
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<212> DNA
<213> unknown

<220>
<223> MADS-box protein

<400> 38
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<210> 39
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<220>
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<400> 39
nnnnnnnatt tnnnnnnnnn n 21

<210> 40
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<212> DNA
<213> unknown

<220>

<223> cis-element in the GAPDH promoters conferring light inducibility
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<210> 41
 <211> 17
 <212> DNA
 <213> Solanum tuberosum

<400> 41
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<210> 42
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 <212> DNA
 <213> Solanum tuberosum

<220>
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<220>
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 <223> n is a, c, g, or t

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 <213> unknown

<220>
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<400> 43
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<210> 44
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<220>
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<400> 44
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<210> 45
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<400> 45
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<210> 46
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<220>
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<220>
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<210> 50
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<210> 51
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atggaccgac tacta 15

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 aacgtcgaga cgccaaaacg tttggaggaa gatccggctg ctccaggagg aggatcggat 720
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 cctgatcaga aatcaagaca aggacgcgaa gaagactttc cgacgagaag ccatgagttt 900
 gatctgaaga aggaatctga tatcaacaag aattctccgg caagatttgg aggggaatca 960
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<212> PRT

<213> Arabidopsis thaliana

<400> 140

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Ser Lys Val Leu Lys Lys Val Lys Glu Lys Ala Lys Lys Ile Lys Asn
35 40 45

Ser Leu Thr Lys His Gly Asn Gly His Asp His Asp Val Glu Asp Asp
50 55 60

Asp Asp Glu Tyr Asp Glu Gln Asp Pro Glu Val His Gly Ala Pro Val
65 70 75 80

Tyr Glu Ser Ser Ala Val Arg Gly Gly Val Thr Gly Lys Pro Lys Ser
85 90 95

Leu Ser His Ala Gly Glu Thr Asn Val Pro Ala Ser Glu Glu Ile Val
100 105 110

Pro Pro Gly Thr Lys Val Phe Pro Val Val Ser Ser Asp His Thr Lys
115 120 125

Pro Ile Glu Pro Val Ser Leu Gln Asp Thr Ser Tyr Gly His Glu Ala
130 135 140

Leu Ala Asp Pro Val Arg Thr Thr Glu Thr Ser Asp Trp Glu Ala Lys
145 150 155 160

Arg Glu Ala Pro Thr His Tyr Pro Leu Gly Val Ser Glu Phe Ser Asp
165 170 175

Arg Gly Glu Ser Arg Glu Ala His Gln Glu Pro Leu Asn Thr Pro Val
180 185 190

Ser Leu Leu Ser Ala Thr Glu Asp Val Thr Arg Thr Phe Ala Pro Gly
195 200 205

Gly Glu Asp Asp Tyr Leu Gly Gly Gln Arg Lys Val Asn Val Glu Thr
210 215 220

Pro Lys Arg Leu Glu Glu Asp Pro Ala Ala Pro Gly Gly Gly Ser Asp
225 230 235 240

Tyr Leu Ser Gly Val Ser Asn Tyr Gln Ser Lys Val Thr Asp Pro Thr
245 250 255

His Lys Gly Gly Glu Ala Gly Val Pro Glu Ile Ala Glu Ser Leu Gly
260 265 270

Arg Met Lys Val Thr Asp Glu Ser Pro Asp Gln Lys Ser Arg Gln Gly
275 280 285

Arg Glu Glu Asp Phe Pro Thr Arg Ser His Glu Phe Asp Leu Lys Lys
290 295 300

Glu Ser Asp Ile Asn Lys Asn Ser Pro Ala Arg Phe Gly Gly Glu Ser
305 310 315 320

Lys Ala Gly Met Glu Glu Asp Phe Pro Thr Arg Gly Asp Val Lys Val
325 330 335

Glu Ser Gly Leu Gly Arg Asp Leu Pro Thr Gly Thr His Asp Gln Phe
340 345 350

Ser Pro Glu Leu Ser Arg Pro Lys Glu Arg Asp Asp Ser Glu Glu Thr
355 360 365

Lys Asp Glu Ser Thr His Glu Thr Lys Pro Ser Thr Tyr Thr Glu Gln
370 375 380

Leu Ala Ser Ala Thr Ser Ala Ile Thr Asn Lys Ala Ile Ala Ala Lys
385 390 395 400

Asn Val Val Ala Ser Lys Leu Gly Tyr Thr Gly Glu Asn Gly Gly Gly
405 410 415

Gln Ser Glu Ser Pro Val Lys Asp Glu Thr Pro Arg Ser Val Thr Ala
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Tyr Gly Gln Lys Val Ala Gly Thr Val Ala Glu Lys Leu Thr Pro Val
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Tyr Glu Lys Val Lys Glu Thr Gly Ser Thr Val Met Thr Lys Leu Pro
450 455 460

Leu Ser Gly Gly Gly Ser Gly Val Lys Glu Thr Gln Gln Gly Glu Glu
465 470 475 480

Lys Gly Val Thr Ala Lys Asn Tyr Ile Ser Glu Lys Leu Lys Pro Gly
485 490 495

Glu Glu Asp Lys Ala Leu Ser Glu Met Ile Ala Glu Lys Leu His Phe
500 505 510

Gly Gly Gly Gly Glu Lys Lys Thr Thr Ala Thr Lys Glu Val Glu Val
515 520 525

Thr Val Glu Lys Ile Pro Ser Asp Gln Ile Ala Glu Gly Lys Gly His
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530

535

540

Gly Glu Ala Val Ala Glu Glu Gly Lys Gly Gly Glu Gly Met Val Gly
 545 550 555 560

Lys Val Lys Gly Ala Val Thr Ser Trp Leu Gly Gly Lys Pro Lys Ser
 565 570 575

Pro Arg Ser Val Glu Glu Ser Pro Gln Ser Leu Gly Thr Thr Val Gly
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Thr Met Gly Phe Ser Asp Ser Gly Gly Ser Glu Leu Gly Gly Ser Gly
 595 600 605

Gly Gly Lys Gly Val Gln Asp Ser Gly Asn
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 <213> Arabidopsis thaliana

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 taacaaaatg tttttattat tattatagaa ttttactggt taaattaaaa atgaatagaa 180
 aaggtgaatt aagaggagag aggaggtaaa ctttttcttc ttttttttca ttttttcagg 240
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 taaatatcat accgacatca gtttgaaaga aaagggaaga aaagaaaaaa taaataaaag 660
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 gtagagagca aaatgacttt gacgtcacac cacgaaaaca gacgcttcat acgtgtccct 780
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PhoenixTemp52503.tmp.txt

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 Val Lys Ala Arg Ala Lys Lys Phe Lys Asn Ser Leu Thr Lys His Gly
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 50 55 60
 Asp Asp Asp Glu Leu Glu Pro Glu Val Ile Asp Ala Pro Gly Val Thr
 65 70 75 80
 Gly Lys Pro Arg Glu Thr Asn Val Pro Ala Ser Glu Glu Ile Ile Pro
 85 90 95
 Pro Gly Thr Lys Val Phe Pro Val Val Ser Ser Asp Tyr Thr Lys Pro
 100 105 110
 Thr Glu Ser Val Pro Val Gln Glu Ala Ser Tyr Gly His Asp Ala Pro
 115 120 125
 Ala His Ser Val Arg Thr Thr Phe Thr Ser Asp Lys Glu Glu Lys Arg
 130 135 140
 Asp Val Pro Ile His His Pro Leu Ser Glu Leu Ser Asp Arg Glu Glu
 145 150 155 160
 Ser Arg Glu Thr His His Glu Ser Leu Asn Thr Pro Val Ser Leu Leu
 165 170 175
 Ser Gly Thr Glu Asp Val Thr Ser Thr Phe Ala Pro Ser Gly Asp Asp
 180 185 190
 Glu Tyr Leu Asp Gly Gln Arg Lys Val Asn Val Glu Thr Pro Ile Thr
 195 200 205
 Leu Glu Glu Glu Ser Ala Val Ser Asp Tyr Leu Ser Gly Val Ser Asn
 210 215 220
 Tyr Gln Ser Lys Val Thr Asp Pro Thr Lys Glu Glu Thr Gly Gly Val
 225 230 235 240
 Pro Glu Ile Ala Glu Ser Phe Gly Asn Met Glu Val Thr Asp Glu Ser
 245 250 255
 Pro Asp Gln Lys Pro Gly Gln Phe Glu Arg Asp Leu Ser Thr Arg Ser
 260 265 270
 Lys Glu Phe Lys Glu Phe Asp Gln Asp Phe Asp Ser Val Leu Gly Lys
 275 280 285

PhoenixTemp52503.tmp.txt

Asp Ser Pro Ala Lys Phe Pro Gly Glu Ser Gly Val Val Phe Pro Val
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 Gly Phe Gly Asp Glu Ser Gly Ala Glu Leu Glu Lys Asp Phe Pro Thr
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 325 330 335
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 340 345 350
 Asp Lys Asn Ser Pro Met Gly Phe Gly Ser Glu Ser Gly Ala Glu Leu
 355 360 365
 Glu Lys Glu Phe Asp Gln Lys Asn Asp Ser Gly Arg Asn Glu Tyr Ser
 370 375 380
 Pro Glu Ser Asp Gly Gly Leu Gly Ala Pro Leu Gly Gly Asn Phe Pro
 385 390 395 400
 Val Arg Ser His Glu Leu Asp Leu Lys Asn Glu Ser Asp Ile Asp Lys
 405 410 415
 Asp Val Pro Thr Gly Phe Asp Gly Glu Pro Asp Phe Leu Ala Lys Gly
 420 425 430
 Arg Pro Gly Tyr Gly Glu Ala Ser Glu Glu Asp Lys Phe Pro Ala Arg
 435 440 445
 Ser Asp Asp Val Glu Val Glu Thr Glu Leu Gly Arg Asp Pro Lys Thr
 450 455 460
 Glu Thr Leu Asp Gln Phe Ser Pro Glu Leu Ser His Pro Lys Glu Arg
 465 470 475 480
 Asp Glu Phe Lys Glu Ser Arg Asp Asp Phe Glu Glu Thr Arg Asp Glu
 485 490 495
 Lys Thr Glu Glu Pro Lys Gln Ser Thr Tyr Thr Glu Lys Phe Ala Ser
 500 505 510
 Met Leu Gly Tyr Ser Gly Glu Ile Pro Val Gly Asp Gln Thr Gln Val
 515 520 525
 Ala Gly Thr Val Asp Glu Lys Leu Thr Pro Val Asn Glu Lys Asp Gln
 530 535 540
 Glu Thr Glu Ser Ala Val Thr Thr Lys Leu Pro Ile Ser Gly Gly Gly
 545 550 555 560

Ser Gly Val Glu Glu Gln Arg Gly Glu Asp Lys Ser Val Ser Gly Arg
565 570 575

Asp Tyr Val Ala Glu Lys Leu Thr Thr Glu Glu Glu Asp Lys Ala Phe
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Ser Asp Met Val Ala Glu Lys Leu Gln Ile Gly Gly Glu Glu Glu Lys
595 600 605

Lys Glu Thr Thr Thr Lys Glu Val Glu Lys Ile Ser Thr Glu Lys Ala
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Ala Ser Glu Glu Gly Glu Ala Val Glu Glu Glu Val Lys Gly Gly Gly
625 630 635 640

Gly Met Val Gly Arg Ile Lys Gly Trp Phe Gly Gly Gly Ala Thr Asp
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Glu Val Lys Pro Glu Ser Pro His Ser Val Glu Glu Ala Pro Lys Ser
660 665 670

Ser Gly Trp Phe Gly Gly Gly Ala Thr Glu Glu Val Lys Pro Lys Ser
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Pro Val Gln Lys Glu Leu
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PhoenixTemp52503.tmp.txt

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