

PF60880.ST25.txt  
SEQUENCE LISTING

<110> CropDesign N.V.

<120> Yield enhancement in plants by modulation of GARP transcription factor ZmRR10\_p

<130> PF60880

<150> US 60/941,300

<151> 2007-06-01

<160> 16

<170> PatentIn version 3.3

<210> 1

<211> 1415

<212> DNA

<213> Zea mays

<400> 1

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ttcagtttaa aggacttaaa attggtcagt ccctgtcat atagcttctt ttctttgttc     1320
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<210> 2

<211> 305

<212> PRT

<213> Zea mays

<400> 2

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20                               25           30
Leu Gly Thr Leu His Asn Ile Asp Ala Lys Pro Ser Gly Val Val Met
35                               40           45
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Ser Ser Gln Ser Leu Asn Thr Phe Pro Ala Ser Glu Gly Ile Ser Pro
 50                               55                               60
Asn Gln Asn Pro Leu Ile Ile Pro Ser Gln Pro Pro Ser Phe Val Ser
65                               70                               75                               80
Ser Ile Pro Pro Ser Met Lys His Glu Ser Leu Leu Gly Leu Pro Ser
                               85                               90                               95
Thr Ser Thr Ser Leu Leu Gly Gly Leu Asp Met Val Asn Gln Ala Ser
                               100                               105                               110
Thr Ser Gln Ala Leu Ile Ser Ser His Gly Thr Asn Leu Pro Gly Leu
                               115                               120                               125
Met Asn Arg Ser Ser Asn Ala Ile Pro Ser Pro Gly Ile Ser Asn Phe
                               130                               135                               140
Gln Ser Gly Asn Ile His Tyr Val Val Asn Gln Asn Ala Met Gly Val
145                               150                               155                               160
Ser Ser Arg Pro Pro Gly Val Leu Lys Thr Glu Ser Thr Asp Ser Leu
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Ser Cys Ser Tyr Gly Tyr Ile Gly Gly Ser Thr Ser Val Asp Ser Gly
                               180                               185                               190
Leu Phe Ser Ser Gln Ser Lys Asn Pro Gln Tyr Gly Leu Leu Gln Asn
                               195                               200                               205
Gln Asn Asp Val Asn Gly Ser Trp Ser Pro Ser Gln Asp Phe Asp Ser
                               210                               215                               220
Phe Gly Asn Ser Leu Gly Gln Gly His Pro Gly Thr Thr Ser Ser Asn
225                               230                               235                               240
Phe Gln Ser Ser Ala Leu Gly Lys Leu Pro Asp Gln Gly Arg Gly Arg
                               245                               250                               255
Asn His Gly Phe Val Gly Lys Gly Thr Cys Ile Pro Ser Arg Phe Ala
                               260                               265                               270
Val Asp Glu Val Glu Ser Pro Thr Asn Asn Leu Ser His Ser Ile Gly
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<212> DNA  
<213> Zea mays

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gaggagctga aaaacatctg gcaacatggt attaggaaaa aatttaatga aaacaaggac      420
catgagcatt ctggtagcct agatgacacc gatcgtaaca gaccaaccaa taatgataat      480
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ccgttaggag gactggaatt ccaagctttg gctgcttctg gtcagatccc tcctcaagct      900
ctggctgctt tgcaggatga actccttggt cgacctacaa gcagtttggc gttgcctgga      960
agggaccagt catctttgcg agtggctgca accaaaggaa acaagcacca tgaagaaaga     1020
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gatgccaaac cttctgggtg agttatgtca tctcagtcgt taaatacatt cccggctagt 1320
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<210> 4  
 <211> 686  
 <212> PRT  
 <213> Zea mays

<400> 4

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			20					25					30		
Met	Leu	Leu	Glu	Cys	Arg	Tyr	Asp	Val	Thr	Thr	Cys	Pro	Gln	Ala	Thr
		35					40					45			
Arg	Ala	Leu	Thr	Met	Leu	Arg	Glu	Asn	Arg	Arg	Gly	Phe	Asp	Val	Ile
		50				55					60				
Ile	Ser	Asp	Val	His	Met	Pro	Asp	Met	Asp	Gly	Phe	Arg	Leu	Leu	Glu
65				70					75					80	
Leu	Val	Gly	Leu	Glu	Met	Asp	Leu	Pro	Val	Ile	Met	Met	Ser	Ala	Asp
			85					90					95		
Ser	Arg	Thr	Asp	Ile	Val	Met	Asn	Gly	Val	Lys	His	Gly	Ala	Cys	Asp
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Tyr	Leu	Ile	Lys	Pro	Val	Arg	Met	Glu	Glu	Leu	Lys	Asn	Ile	Trp	Gln
	115					120					125				
His	Val	Ile	Arg	Lys	Lys	Phe	Asn	Glu	Asn	Lys	Asp	His	Glu	His	Ser
130					135					140					
Gly	Ser	Leu	Asp	Asp	Thr	Asp	Arg	Asn	Arg	Pro	Thr	Asn	Asn	Asp	Asn
145				150					155					160	
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210					215					220					
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225				230					235					240	
Thr	Arg	Glu	Asn	Val	Ala	Ser	His	Leu	Gln	Lys	Phe	Arg	Leu	Tyr	Leu
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Lys	Arg	Ile	Ala	Gln	His	His	Ala	Gly	Ile	Pro	His	Pro	Phe	Val	Ala
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Gln Asp Glu Leu Leu Gly Arg Pro Thr Ser Ser Leu Ala Leu Pro Gly		
305	310	315
Arg Asp Gln Ser Ser Leu Arg Val Ala Ala Thr Lys Gly Asn Lys His		
	325	330
His Glu Glu Arg Glu Ile Ala Phe Gly Gln Pro Ile Tyr Lys Cys Gln		
	340	345
Asn Asn Ala Tyr Gly Ala Phe Pro Gln Ser Ser Pro Ala Val Gly Gly		
	355	360
Leu Gln Pro Phe Ala Ala Trp Pro Asn Asn Lys Val Gly Met Pro Asp		
370	375	380
Ser Thr Ser Thr Leu Gly Asn Val Gly Asn Ser Gln Asn Ser Asn Met		
385	390	395
Leu Leu His Glu Leu Gln Gln Gln Pro Asp Thr Leu Leu Leu Gly Thr		
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Leu His Asn Ile Asp Ala Lys Pro Ser Gly Val Val Met Ser Ser Gln		
	420	425
Ser Leu Asn Thr Phe Pro Ala Ser Glu Gly Ile Ser Pro Asn Gln Asn		
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Pro Leu Ile Ile Pro Ser Gln Pro Pro Ser Phe Val Ser Ser Ile Pro		
450	455	460
Pro Ser Met Lys His Glu Ser Leu Leu Gly Leu Pro Ser Thr Ser Thr		
465	470	475
Ser Leu Leu Gly Gly Leu Asp Met Val Asn Gln Ala Ser Thr Ser Gln		
	485	490
Ala Leu Ile Ser Ser His Gly Thr Asn Leu Pro Gly Leu Met Asn Arg		
	500	505
Ser Ser Asn Ala Ile Pro Ser Pro Gly Ile Ser Asn Phe Gln Ser Gly		
	515	520
Asn Ile His Tyr Val Val Asn Gln Asn Ala Met Gly Val Ser Ser Arg		
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Pro Pro Gly Val Leu Lys Thr Glu Ser Thr Asp Ser Leu Ser Cys Ser		
545	550	555
Tyr Gly Tyr Ile Gly Gly Ser Thr Ser Val Asp Ser Gly Leu Phe Ser		
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Ser Gln Ser Lys Asn Pro Gln Tyr Gly Leu Leu Gln Asn Gln Asn Asp		
	580	585
Val Asn Gly Ser Trp Ser Pro Ser Gln Asp Phe Asp Ser Phe Gly Asn		
	595	600
Ser Leu Gly Gln Gly His Pro Gly Thr Thr Ser Ser Asn Phe Gln Ser		
610	615	620
Ser Ala Leu Gly Lys Leu Pro Asp Gln Gly Arg Gly Arg Asn His Gly		
625	630	635
Phe Val Gly Lys Gly Thr Cys Ile Pro Ser Arg Phe Ala Val Asp Glu		
	645	650
Val Glu Ser Pro Thr Asn Asn Leu Ser His Ser Ile Gly Asn Ser Gly		
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<210> 5  
 <211> 684  
 <212> PRT  
 <213> Zea mays

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Met	Leu	Leu	Glu	Cys	Arg	Tyr	Asp	Val	Thr	Thr	Cys	Pro	Gln	Ala	Thr		
		35					40					45					
Arg	Ala	Leu	Thr	Met	Leu	Arg	Glu	Asn	Arg	Arg	Gly	Phe	Asp	Val	Ile		
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Ile	Ser	Asp	Val	His	Met	Pro	Asp	Met	Asp	Gly	Phe	Arg	Leu	Leu	Glu		
65					70					75					80		
Leu	Val	Gly	Leu	Glu	Met	Asp	Leu	Pro	Val	Ile	Met	Met	Ser	Ala	Asp		
				85					90					95			
Ser	Arg	Thr	Asp	Ile	Val	Met	Lys	Gly	Ile	Lys	His	Gly	Ala	Cys	Asp		
			100					105					110				
Tyr	Leu	Ile	Lys	Pro	Val	Arg	Met	Glu	Glu	Leu	Lys	Asn	Ile	Trp	Gln		
		115					120					125					
His	Val	Val	Arg	Lys	Lys	Phe	Asn	Gly	Asn	Lys	Asp	His	Glu	His	Ser		
	130					135					140						
Gly	Ser	Leu	Asp	Asp	Thr	Asp	Arg	Asn	Arg	Pro	Thr	Asn	Asn	Asp	Asn		
145					150					155					160		
Glu	Tyr	Ala	Ser	Ser	Ala	Asn	Asp	Gly	Gly	Asp	Gly	Ser	Trp	Lys	Ser		
				165					170					175			
Gln	Lys	Lys	Lys	Arg	Glu	Lys	Glu	Asp	Asp	Glu	Thr	Asp	Leu	Glu	Ser		
			180					185					190				
Gly	Asp	Pro	Ser	Thr	Ser	Lys	Lys	Pro	Arg	Val	Val	Trp	Ser	Val	Glu		
		195					200					205					
Leu	His	Gln	Gln	Phe	Val	Asn	Ala	Val	Asn	His	Leu	Gly	Ile	Asp	Lys		
	210					215				220							
Ala	Val	Pro	Lys	Lys	Ile	Leu	Glu	Leu	Met	Asn	Val	Pro	Gly	Leu	Thr		
225					230					235					240		
Arg	Glu	Asn	Val	Ala	Ser	His	Leu	Gln	Lys	Phe	Arg	Leu	Tyr	Leu	Lys		
				245					250					255			
Arg	Ile	Ala	Gln	His	His	Ala	Gly	Ile	Pro	His	Pro	Phe	Val	Ala	Ser		
			260					265					270				
Ala	Ser	Ser	Ala	Lys	Val	Ala	Pro	Leu	Gly	Gly	Leu	Glu	Phe	Gln	Ala		
		275					280					285					
Leu	Ala	Ala	Ser	Gly	Gln	Ile	Pro	Pro	Gln	Ala	Leu	Ala	Ala	Leu	Gln		
	290					295					300						
Asp	Glu	Leu	Leu	Gly	Arg	Pro	Thr	Ser	Ser	Leu	Ala	Leu	Pro	Gly	Arg		
305					310					315					320		
Asp	Gln	Ser	Ser	Leu	Arg	Leu	Ala	Ala	Ile	Lys	Gly	Asn	Lys	Pro	His		
				325					330					335			
Gly	Glu	Arg	Glu	Ile	Ala	Phe	Gly	Gln	Pro	Ile	Tyr	Lys	Cys	Gln	Asn		
			340					345					350				
Asn	Thr	Tyr	Gly	Ala	Phe	Ser	Gln	Ser	Ser	Pro	Ala	Val	Gly	Gly	Leu		
		355					360					365					
Pro	Ser	Phe	Ala	Ala	Trp	Pro	Asn	Asn	Lys	Leu	Gly	Met	Thr	Asp	Ser		
	370					375					380						
Ser	Asn	Thr	Leu	Gly	Asn	Val	Gly	Asn	Ser	Gln	Asn	Ser	Asn	Met	Leu		
385					390					395					400		
Leu	His	Glu	Leu	Gln	Gln	Gln	Pro	Asp	Thr	Leu	Leu	Ser	Gly	Thr	Leu		
				405					410					415			
His	Asn	Ile	Asp	Val	Lys	Pro	Ser	Gly	Val	Val	Met	Pro	Ser	Gln	Ser		
			420					425					430				
Leu	Asn	Val	Phe	Pro	Ala	Ser	Glu	Gly	Ile	Ser	His	Asn	Gln	Asn	Pro		
		435					440					445					
Leu	Val	Ile	Pro	Ser	Gln	Ser	Pro	Ser	Phe	Leu	Ala	Ser	Val	Pro	Pro		
	450					455					460						
Ser	Met	Lys	His	Glu	Ser	Leu	Leu	Gly	Ser	Pro	Ser	Pro	Ser	Thr	Ser		
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Leu Leu Gly Gly Leu Asp Met Val Asn Gln Ala Ser Thr Ser Gln Pro
      485                      490                      495
Leu Ile Ser Ser His Gly Ala Asn Leu Pro Gly Leu Met Asn Arg Ser
      500                      505                      510
Ser Asn Ala Met Pro Ser Pro Gly Ile Ser Asn Phe Gln Ser Gly Asn
      515                      520                      525
Ile Pro Tyr Val Val Asn Gln Asn Ala Met Gly Val Ser Ser Arg Pro
      530                      535                      540
Pro Gly Val Leu Lys Thr Glu Cys Thr Glu Ser Leu Thr His Ser Tyr
      545                      550                      555                      560
Gly Tyr Ile Gly Gly Ser Thr Ser Val Asp Ser Ser Leu Leu Ser Ser
      565                      570                      575
Gln Ala Lys Asn Pro Gln Tyr Gly Leu Leu Gln Ser Gln Asn Asp Val
      580                      585                      590
Ser Ser Ser Trp Leu Ser Ser Gln Asp Phe Asp Ser Phe Gly Asn Ser
      595                      600                      605
Leu Gly Gln Gly His Pro Gly Ser Thr Ser Ser Asn Phe Gln Ser Ser
      610                      615                      620
Ala Leu Gly Lys Leu Pro Asp Gln Gly Arg Gly Arg Asn His Gly Phe
      625                      630                      635                      640
Val Gly Lys Gly Thr Cys Ile Pro Ser Arg Phe Ala Val Asp Glu Val
      645                      650                      655
Glu Ser Pro Thr Asn Leu Ser His Asn Ile Val Asn Ser Gly Asp Ile
      660                      665                      670
Val Asn Pro Asp Ile Phe Gly Phe Ser Gly Gln Met
      675                      680

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<210> 6  
 <211> 733  
 <212> PRT  
 <213> Zea mays

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      20      25      30
Ala Leu Pro Leu Leu Pro Cys Phe Asp Leu Pro Pro Phe Pro Thr Val
      35      40      45
Ser Trp Ile Ser Arg Ile Gln Thr Thr Ala Leu Val Ser Leu Pro Ser
      50      55      60
Cys Leu Leu Pro Ala Tyr Val Gln Glu Gly Pro Cys Leu Gly Asp Pro
      65      70      75      80
Gly Ala Trp Phe Leu Gly Ser Ala Ala Phe Ala Ala Val Gly Phe Ala
      85      90      95
Glu Pro Glu Pro Pro Glu Met Thr Val Asp Glu Leu Lys Leu Gln Ala
      100     105     110
Arg Ala Ser Gly Gly His Asp Ala Lys Asp Gln Phe Pro Val Gly Met
      115     120     125
Arg Val Leu Ala Val Asp Asp Asp Pro Thr Cys Leu Lys Ile Leu Glu
      130     135     140
Asn Leu Leu Leu Arg Cys Gln Tyr His Val Thr Thr Met Gly Gln Ala
      145     150     155     160
Ala Thr Ala Leu Lys Leu Leu Arg Glu Lys Lys Asp Gln Phe Asp Leu
      165     170     175
Val Ile Ser Asp Val His Met Pro Asp Met Asp Gly Phe Lys Leu Leu
      180     185     190
Glu Leu Val Gly Leu Glu Met Asp Leu Pro Val Ile Met Leu Ser Ala
      195     200     205

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Asn	Gly	Glu	Thr	Gln	Thr	Val	Met	Lys	Gly	Ile	Thr	His	Gly	Ala	Cys
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Asp	Tyr	Leu	Leu	Lys	Pro	Val	Arg	Ile	Glu	Gln	Leu	Arg	Thr	Ile	Trp
225					230					235					240
Gln	His	Val	Val	Arg	Arg	Arg	Ser	Cys	Asp	Ala	Lys	Asn	Ser	Gly	Asn
				245					250					255	
Asp	Asn	Asp	Asp	Ser	Gly	Lys	Lys	Leu	Gln	Val	Val	Ser	Ala	Glu	Gly
			260					265					270		
Asp	Asn	Gly	Gly	Val	Asn	Arg	Asn	Lys	Arg	Ile	Ser	Arg	Lys	Gly	Arg
		275					280					285			
Asp	Asp	Asn	Gly	Asp	Asp	Gly	Asp	Asp	Ser	Asp	Asp	Asn	Ser	Asn	Glu
	290					295				300					
Asn	Gly	Asp	Ser	Ser	Ser	Gln	Lys	Lys	Pro	Arg	Val	Val	Trp	Ser	Val
305					310					315					320
Glu	Leu	His	Arg	Lys	Phe	Val	Ala	Ala	Val	Asn	Gln	Leu	Gly	Ile	Asp
				325					330					335	
Lys	Ala	Val	Pro	Lys	Lys	Ile	Leu	Asp	Leu	Met	Asn	Val	Glu	Asn	Ile
			340					345					350		
Thr	Arg	Glu	Asn	Val	Ala	Ser	His	Leu	Gln	Lys	Tyr	Arg	Leu	Tyr	Leu
		355					360					365			
Lys	Arg	Leu	Ser	Ala	Asp	Ala	Ser	Arg	Gln	Ala	Asn	Leu	Thr	Ala	Ala
	370					375				380					
Phe	Gly	Gly	Arg	Asn	Pro	Ala	Tyr	Val	Asn	Met	Gly	Leu	Asp	Ala	Phe
385					390					395					400
Arg	Gln	Tyr	Asn	Ala	Tyr	Gly	Arg	Tyr	Arg	Pro	Val	Pro	Thr	Thr	Asn
				405					410					415	
His	Ser	Gln	Pro	Asn	Asn	Leu	Leu	Ala	Arg	Met	Asn	Ser	Pro	Ala	Phe
		420						425					430		
Gly	Met	His	Gly	Leu	Leu	Pro	Ser	Gln	Pro	Leu	Gln	Ile	Gly	His	Asn
	435						440					445			
Gln	Asn	Asn	Leu	Ser	Thr	Ser	Leu	Gly	Asn	Val	Gly	Gly	Met	Asn	Asn
	450					455				460					
Gly	Asn	Leu	Ile	Arg	Gly	Ala	His	Met	Pro	Leu	Gln	Asp	Thr	Ser	Lys
465					470					475					480
Cys	Phe	Pro	Thr	Gly	Pro	Ser	Gly	Asn	Ser	Phe	Ala	Asn	Ile	Ser	Asn
				485					490					495	
Ser	Thr	Gln	Leu	Val	Thr	Thr	Asn	Asn	Leu	Pro	Leu	Gln	Ser	Leu	Glu
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Cys	Asn	Thr	Thr	Trp	Pro	Thr	Ala	Val	Ser	Ser	Ser	Asn	Val	Gln	Glu
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Ile	Gly	Gln	Lys	Asp	Arg	Ile	Val	Asn	Arg	Pro	Lys	Leu	Glu	Pro	Leu
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Ser	Ser	Phe	Thr	Glu	Ala	Ser	Ser	Gln	Ile	Pro	Leu	Leu	Gly	Asn	Glu
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Gln	Thr	Leu	Gly	Gly	Ser	Asn	Ser	Gly	Gly	Cys	Val	Val	Pro	Pro	Leu
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Asn Asn Glu Leu Met Gly Thr Gly Arg Leu Gln Arg Gly Leu Ser Gly		
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Val Ile Ile Ser Asp Val His Met Pro Asp Met Asp Gly Phe Arg Leu	
50 55 60	
Leu Glu Leu Val Gly Leu Glu Met Asp Leu Pro Val Ile Met Met Ser	
65 70 75 80	
Ala Asp Ser Arg Thr Asp Ile Val Met Asn Gly Val Lys His Gly Ala	
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Trp

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Val	Ile	Pro	Ser	Gln
Ser	Pro	Ser	Pro	Ser
Phe	Leu	Ala		
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Ser	Val	Pro	Pro	Ser
Met	Lys	His	Glu	Ser
Leu	Leu	Gly	Ser	Leu
95		90		95
Pro	Ser	Thr	Ser	Leu
Leu	Gly	Gly	Leu	Asp
Met	Val	Asn	Gln	Ala
110		105		110
Thr	Ser	Gln	Pro	Leu
Ile	Ser	Ser	His	Gly
Ala	Asn	Leu	Pro	Gly
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Phe				
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Gln	Ser	Gly	Asn	Ile
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Gln	Asn	Ala	Met	Gly
Val				
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Leu				
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Tyr	Ile	Gly	Gly	Ser
Thr	Ser	Val	Asp	Ser
Ser				
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Leu	Leu	Ser	Gln	Ala
Lys	Asn	Pro	Gln	Tyr
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Ser				
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Asn				
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Tyr	Gly	Asn	Thr	Val	Gly	Leu	Ser	His	Pro	Gly	Ser	Ser	Ser	Ser	Ser				
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Phe	Gln	Ser	Ser	Asn	Val	Ala	Leu	Gly	Lys	Leu	Pro	Asp	Gln	Gly	Arg				
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Phe Ala Val Asp Glu Ile Glu Ser Pro Thr Asn Asn Leu Ser His Ser  
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Gly Gln Met  
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Ala Gln Thr Ala Leu Glu Leu Leu Arg Glu Asn Lys Asn Lys Phe Asp  
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Cys Asp Tyr Leu Leu Lys Pro Val Arg Ile Glu Glu Leu Lys Asn Ile  
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Trp Gln His Val Val Arg Lys Ser Lys Leu Lys Lys Asn Lys Ser Asn  
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Val Ser Asn Gly Ser Gly Asn Cys Asp Lys Ala Asn Arg Lys Arg Lys  
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Glu Gln Tyr Glu Glu Glu Glu Glu Glu Arg Gly Asn Asp Asn Asp  
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Val Pro Lys Lys Ile Leu Asp Leu Met Asn Val Asp Lys Leu Thr Arg  
210 215 220  
Glu Asn Val Ala Ser His Leu Gln Lys Phe Arg Val Ala Leu Lys Lys  
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Val Ser Asp Asp Ala Ile Gln Gln Ala Asn Arg Ala Ala Ile Asp Ser  
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His Phe Met Gln Met Asn Ser Gln Lys Gly Leu Gly Gly Phe Tyr His  
260 265 270  
His His Arg Gly Ile Pro Val Gly Ser Gly Gln Phe His Gly Gly Thr  
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PF60880.ST25.txt

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 Ser Thr Asn Ile Pro Gln Ser Asp Val His Ser Lys Pro Asp Thr Leu  
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 Glu Trp Asn Ala Phe Cys Asp Ser Ala Ser Pro Leu Val Asn Pro Asn  
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 465 470 475 480  
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 Ala Leu Thr Met Leu Arg Glu Asn Arg Arg Gly Phe Asp Val Ile Ile  
 35 40 45  
 Ser Asp Val His Met Pro Asp Met Asp Gly Phe Arg Leu Leu Glu Leu  
 50 55 60  
 Val Gly Leu Glu Met Asp Leu Pro Val Ile Met Met Ser Ala Asp Ser  
 65 70 75 80  
 Arg Thr Asp Ile Val Met Lys Gly Ile Lys His Gly Ala Cys Asp Tyr  
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 Xaa Gly Thr Leu His Asn Ile Asp Ala Lys Pro Ser Gly Val Val Met  
 35 40 45  
 Pro Ser Gln Ser Xaa Xaa Leu Asn Thr Phe Pro Ala Ser Glu Gly Ile  
 50 55 60  
 Ser Pro Asn Gln Asn Pro Leu Ile Ile Pro Ser Gln Pro Pro Ser Phe  
 65 70 75 80  
 Val Ala Ser Ile Pro Pro Ser Met Lys His Glu Ser Leu Leu Gly Ser  
 85 90 95  
 Pro Ser Pro Ser Thr Ser Leu Leu Gly Gly Leu Asp Met Val Asn Gln  
 100 105 110  
 Ala Ser Thr Ser Gln Pro Leu Ile Ser Ser His Gly Xaa Xaa Asn Leu  
 115 120 125  
 Pro Gly Leu Met Asn Arg Ser Ser Asn Ala Ile Pro Ser Pro Gly Ile  
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 Met Gly Val Ser Ser Arg Xaa Pro Pro Gly Val Leu Lys Thr Glu Xaa  
 165 170 175  
 Thr Asp Ser Leu Ser Xaa Ser Tyr Gly Tyr Ile Gly Gly Ser Thr Ser  
 180 185 190  
 Xaa Val Asp Ser Gly Leu Xaa Ser Ser Gln Ser Lys Asn Pro Gln Tyr  
 195 200 205  
 Gly Leu Leu Gln Xaa Gln Asn Asp Val Xaa Gly Ser Trp Ser Pro Ser  
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 Gln Asp Phe Asp Ser Phe Gly Asn Ser Leu Gly Gln Gly His Pro Gly  
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 Ser Thr Ser Ser Asn Phe Gln Ser Ser Xaa Xaa Ala Leu Gly Lys Leu  
 245 250 255  
 Pro Asp Gln Gly Arg Gly Arg Asn His Gly Phe Val Gly Lys Gly Thr  
 260 265 270  
 Cys Ile Pro Ser Arg Phe Ala Val Asp Glu Val Glu Ser Pro Thr Asn  
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 Asn Leu Ser His Ser Ile Gly Asn Ser Gly Asp Ile Val Asn Pro Asp  
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Ile Phe Gly Phe Ser Gly Xaa Met  
305 310