

TARDBP

Genomic Sequence



Coding Sequence



For help interpreting these results, view the [PARSENP Introduction](#) page.

#	View On Sequence	Nucleotide Change	Effect	Restriction Enzyme Differences from REBASE		Description	Zygoty
				Gained in Variant	Lost from Reference		
1	G C	T5604A	D95E	AluI , CviJI , HindIII	ClaI , Hin4I , SfaNI	6816	Homo
2	G C	C6598A	Q188K			4543	Homo
3	G C	G6602A	G189D			337	Homo
4	G C	A6619G	R195G		BseRI , MnlI	4433	Homo
5	G C	C6645A	R203=	SfaNI	AciI , BbvI , BsgI , Fnu4HI , NspBII , TauI , TseI	7010	Homo
6	G C	T6646A	C204S		BsgI , CviRI , NspBII	7010	Homo
7	G C	T6674C	L213P		AluI , BseSI , HgiAI , SacI , TspGWI	2569	Homo
8	G C	T6694A	Y220N		RsaI	3028	Homo
9	G C	C6696A	Y220*		RsaI , TspGWI	8227	Homo
10	G	G6805A	Intron			8565	Homo
11	G	G6875A	Intron	MseI	MboII	3818	Homo
12	G C	T6926A	D253E		BglII , DpnI , Hpy188I , MboI , XhoII	5826	Homo
13	G C	G6963T	A266S	Hpy188I	EspI	8672	Homo
14	G C	C7142T	A325=	NspBII	AciI , BglI , TauI	7581	Homo
15	G C	T7155C	L330=	Fnu4HI , NspBII , PstI , SfeI		8262	Homo
16	G C	T7166C	S333=	AluI , BseYI , CviJI		2635	Homo

17	G C	T7203C	S346P	CauII , CviII , HpaII , MwoI , ScrFI		6797	Homo
18	G C	C7297T	S377L		BseMII , NspBII , PvuII	7581	Homo

[Download Tab-Separated table](#)

No [protein homology model](#) was submitted. You may add one using any or all of the fields below.

Blocks Families:

Blocks File:

Sequence Alignment:

-OR-

Genomic Sequence

```

0
atTTTTtATGAGATATTACTGTCTTTTTGTCTTTTTGGCTAATGGAACAATAATTTACTATT 72

          M  A  E  M  Y  I  R  V  A  E  E  11
cattcaccgTcagctcgactgaggaaag atg gcc gag atg tac att cga gtt gcg gag gag 133

E  N  E  E  P  M  E  I  P  S  E  D  D  G  T  V  L  L  29
gag aat gag gag ccg atg gag atc ccg tca gag gat gat ggc acg gtt ttg ctt 187

S  T  V  S  A  Q  F  P  G  A  C  G  L  R  F  R  S  P  47
tcc aca gtg tcc gct cag ttt cca ggg gct tgt ggt ctg cgc ttc cgg agc cca 241

V  S  Q  C  M  R  G  V  R  L  V  D  G  I  L  H  A  P  65
gtg tct cag tgc atg agg ggg gtt cgt ctg gtg gac ggc att ctg cat gca cct 295

E  N  G  W  G  N  L  V  Y  V  V  N  Y  P  K  E  81
gag aac ggc tgg gga aac cta gtc tat gtg gtt aat tac cca aaa g gtatgtggta 351

caattaatataactaagcccaattttaaaaaatgTTTTtagaaagcatcctgaaaacatgcacaattgcacact 81
423

ttaaaaaataaaatatcatttataatctacctTTTTctcctctaatgcatgggtcacagTTTTcagttcatct 81
495

```

ttatttctggttgcttttttaaataatgtagggttggttaaaacagcttggcataggtggcaaaaaatagaat	81 567
aaaacctctgattaatttaaattgaacattacagcaagtcagacaagcaagagagcagtggttaggaaatag	81 639
ggctgggcgatttggcctaaaatcaagatctcaattaattaaaaattacaattaatttttttttttttttt	81 711
tttgccctcacagttcactgacaggttttgtacagtaaataatgctcacatattacaagtaagagatttttga	81 783
atgaaggggtgcattactttattttttaataattaaaagaaacaccatctactatctatgattatcttttga	81 855
caataattattggttactatttgattatttatcaatggttgaacagctgaaatttaaacacaccctaggtgta	81 927
ggaagggtagcagtagttctactaaaagtaattcttgtatattctgtaattaatattatcaacaatgcattc	81 999
cttgcacatcttctgtaaatgaatattttaatgtaaatatttgctttaatgtaatggaaaatagctgtctcaa	81 1071
agcatatctgtcgcagcttcccatcatcctcagtatgggtgcaaagtaaggctgaagaacgggtgtctatgtct	81 1143
tatttaaccagagatcagatgtggcttcaaagtggttacagaagtatgaatcagccacagcctttaacagca	81 1215
gggatcgcgtgactccacacactgtagggaaattaaataaaaaaattgcctagggaaaaagtaggtcgatta	81 1287
taggttcttaatgtcgatttgcgattaatcgcccaggcctagtagaaaatcaacaaatagatggattaataat	81 1359
agttaattatgtaattggtgggatgctttggttcaggatttttgcagccgatacagaatacaaatcttaga	81 1431
ttggtctgataccaagctccaattctgatgctttaagctttattatgcataaagcacattctccctctaagt	81 1503
atgatactaaagtgagatcttgctttacctaagagaataaataatggttgcataataatcccttaaacatgtc	81 1575
tcataaccatttagtgtcgacatgtcattgtaagaagcagctttacagaactaaatggataaaaacaggataa	81 1647
	81

aaaatagtaagaaaaattattgacaaaagggctgtgtgatattgcaaaaacatttatcatgatcatggtt	1719
catatcattcgatgtcaataattatggaatattttgaataatccttttaggaatattaggatttttttattt	81 1791
atthaaccactttatttgagtgtccaacattactaaggcaaatagttttaatagcaaaaaacaaaaatatt	81 1863
atacaaaatctcgtctctttatataaaaataaacataagtgttaaagagactctttaacctgatgaataaaat	81 1935
gtttacaatgtgtgtgcaactaaggccccgtttacactagtgcgtttttagttttaaaacggcgttgtagaat	81 2007
gaaaacgatccgcggtccacactcgcggttttaccagcggtttctgaactgctctccggtccacacaaaacgct	81 2079
gaaaacgcacatcacgtgaccacacagacactctcaggcaagcgctccagcatttctaccagatgagagct	81 2151
ctgcttgctcggactgctcattaagcatctcccgtggatctaactctcactatatttgctaaacgtgatattt	81 2223
cattcatgttggtgtctttatctaacgacataggccaattccctgactttggtcattggaatctattaagtt	81 2295
acttgttcacgggtaacatgttttgggttaagcgcaaagataagttaatgattaatccaggtacattgactga	81 2367
tcgcttgccctttatttctacaatgtataaaacttattgtatgttatacttttataattatcgattattaaaa	81 2439
ctgatattcagcaaaagagaggggtgcggtttcgtattttactgaaattgaaaggaggcagttgttataggct	81 2511
ccgttttgtttataaatatccacacagtgaagatgacgctcatatatgcagcagcgcctcaacatttctgc	81 2583
tgtctgttaagttgctaataattaaaaagaaaataggcagttccttaaactcatgtttacattttattggtgag	81 2655
aaagtgaacaacgtagccaaggatgatgtgaatgaagttataaagtacactggtccctttgaagatttacc	81 2727
gtgtcctcggatggttttccatatcaaactgaaaagggggagactgcagccttgatcaaacttgcgaaatct	81 2799
gaacttacaagaagaggatgagactgaactgtgtgtgggctacttaatattgaggaaaagcccaatcag	81 2871

atagggcgaacgtttgagccccgcctccgttttcagatgtctccgtctttcccccattccacactgagacggag	81 2943
cagcagcggttttagaatgaaaacggcctctccagcggttttcaaaaagctccgttttcgctcgctcgagaactc	81 3015
cggcgtagtgtagggacgggatggcgtaaccgtagcaaaaacttatgcggttttcaaactaaaacgcactagtgtaa	81 3087
acggggcctaaggtagatcaacattttgtatgggtgtaaataatgatgatacagcatggctcaacaataaagac	81 3159
tgcccgatggcccggggccagtggtgctgggacagtagacaggattgtagtgggccgatcgggc	81 3231
atgtgctgctttgtcactaaagttaatttggttgcaactgtcaattgctgcaaacaggggtgctttcacac	81 3303
ctaaacgtttgtttcggaacttgcttctgcttggccagtttagtatggctcgtttgacatatgtgaatccggca	81 3375
atcgcgctcatctccgcgcaaaaacaagcgggtctaagatcgtttgtaatgagaaggcaaaatgatccaacga	81 3447
actaacgaaccaggctttgctgattatgggttgtaataagtcattggctatatgaaaagagaattacgagtag	81 3519
ggccggatgtcattcctaccgtcaaagtgtgctttcatgtcgaatatgaaagtgaaagcatgctgaaatatt	81 3591
actgagatctgttatctgttaggaacactgacagaaattaccatctgatcatttgtccatattttaatctgt	81 3663
tactattttgcattaggcctattgttttgttcatttctgcaactgacacctggaaagaaagatctatatattgag	81 3735
tattaaatatcaatatatcagttcatctgttatttctctctaatttaagcctataatatatatatttccaaa	81 3807
tgtattaacatcacagttggatTTTTTaaactgtcagttgtattttaaagaaaagttatgctgaagttatgt	81 3879
ttggcttttgatatattattttaaataatttggttaagaaatagttattaacttctttttttgggtggggccag	81 3951
tgaaaattttggcagggcaagtaaaagtcagaaccactggccagattggggggccagtagaaaaaatccttag	81 4023

cgttgaaccctaatacagtaaacctctaacactgtcaacaaaacaaattgtgatgatcaaactctgagctttt	81 4095
aaataaaggaactagccatcattatthaaacacatattgaactttgaaaattgtgaagttgaatgaatatat	81 4167
taccctcatgctaaaaaatatctttcagatggggagctagtcgctggatgcacaaagaagaaacccaaaaagc	81 4239
cattctggcaacatccttgcgctcttttttatttacaacttcccactgcttctagccacggcactcacatg	81 4311
tggcactcacattctaacctgacgtggcaggggagcgagcgctgggtttgctttagcattaacaatgggctttg	81 4383
caccctaagcttatcggcattgtttccaaggagcatgctcagcagccacattttaataaaaaactgtaacgct	81 4455
tcatactgaaacttttttttctcgatggtgacaatgggtgctcgctcagtaaacatcgattccgattttattg	81 4527
cccagccctaattgacagtgacagtttagaaaagcttgatggaacaatttaacatgtcttgctgaaaa	81 4599
aaaggtttggagcgcatttatatgcataagttaaaatgcacacctataaatatattgcttctttactaaaaga	81 4671
aaatgggcctataaaactactgtttatagcaataagtatattacaaaagagtatattattaggcattccagta	81 4743
aaaaaatatatatthtttatatthtccagccaggttttagtgaaattgcaacattgacacagttggatgagaca	81 4815
ctagataggggcaatctctccactcacgtcacaacagctcaaaacactgcatatacaatggttgcaataaag	81 4887
agcccatgactcgcacaagttgcgccaataaaactgtataaacagaggtgtatataatctgttacatccgtata	81 4959
tatttagttgctgtggttgagagctcagtaatcgttcacaccgcgcgcatcatttttctccttgcttgtaaa	81 5031
gcaatgccagttgtgcatgtgctgcttctctccgctgaaaccgtaaacacacttgagatcagccaaat	81 5103
tggcgatcgagtcgtaaaatgtgattatcgtccaataccaatcttcgaccgatagatcggagcatccaagt	81 5175

aaatttttttttgattgaacaatgtttagtttagttttatttataaagcacatttttttacaacacaacgttgccc	81 5247
caaagtgctaaacacaatcaataactaaaaacaaaatctacataacaattaaaacacaaggcaaacccctcaa	81 5319
cattaaaaaggctcaaatactaggggaacaaagatggagtttcaaagcttgggatgataaccgcaaaagctc	81 5391
gatccccactataacttaactaataagggtcacatagttaaaaagtttgccttctgaattcttttagctgtc	81 5463
cacaaaaatcttgtgcatcttgattaaataagttttttttccaggatgtgtgaatgtgtgtgtgtatata	81 5535
tagcaattgagtttttcttttctag aa act gtt ctg cca gat aat aag agg aag atg gat	92 5595
E I D A S S A T K I K R G D Q K T S gag atc gat gct tca tct gcg acc aag atc aag aga gga gat cag aag act tca aD95E[1]	110 5649
D L I V L G L P W K T S E Q D L K D gat ctg att gtg ctg ggt ctg cca tgg aag act tca gag caa gac tta aaa gac	128 5703
Y F G T F G E V I M V Q tac ttc ggt aca ttt ggg gaa gtc atc atg gtg cag gtaaaatatactgatataaatata	140 5763
accatacaccgctgggtgtttgtccttgtactgtcatattgtgatgaaagctgttcatgatttctgtccttg	140 5835
tatctgatgtttgtatgtggctataaaaaatagaactggccttggactgtcagtccttgaaggcagattaaagca	140 5907
gtccttgacttgattttgttacactag gtc aag cgg gat gtg aag aca gga aat tca aaa	151 5967
G F G F V R F G D W E T Q S K V M T ggg ttt ggc ttt gtg agg ttt gga gac tgg gag act cag agt aag gtg atg aca	169 6021
Q R H M I D G R W C D C K L P N S K cag cgg cac atg att gat ggc cgg tgg tgc gac tgc aaa ctg ccc aac tca aag g	187 6076
tcagtgcgctcttttttttaaatgcttgttgtttgtttttttttttttgtttttgattgcttgttaattgtt	187 6148
tgtttttacagtgggcattttaaagtttaaggttaaaaaaaagattgttcaccggttatttgatagaaattgc	187 6220

atTTTacaattgcactttactatTTTacaatTTTccaacataatgctTTTataaattaaaatgtaacatacta	187 6292
gtgatggcaaaggtgcattttcatgattgtaatatTTgtagggctTaaacatctctTTTattattattatta	187 6364
ttatttattaagtgttaataagaataatacaaatcaaagctaaagaaaaggTTTTggtgtggcataaagtct	187 6436
actcgcaaacatatacagttcctgaatgtcacctgtctTTTtacagcttattgctactaaagatgcaacagcac	187 6508
atgcatatgTTTTaatgcagattaaaaatacaaaaccactgtgaaattcttcagttacgctaaaccattTTTgt	187 6580
TTTTaaaactTTtaacag	200 6636
Q G I D E P M R S R K V F	
caa ggt ata gat gaa cca atg agg agc cgt aaa gtg ttt	
aQ188K[2] gR195G[4]	
aG189D[3]	
V G R C T E D M T A D E L R Q F F M	218
gtg ggc cgc tgc aca gag gac atg act gcc gat gag ctc cgt cag ttc ttc atg	6690
aR203=[5] cL213P[7]	
aC204S[6]	
Q Y G E V T D V F I P K P F R A F A	236
cag tac gga gag gtc aca gac gtc ttt att ccc aaa ccg ttc aga gcg ttt gct	6744
aY220N[8]	
aY220*[9]	
F V T F A D D Q	244
ttt gtc acc ttt gca gat gac cag gcaagtcatgTTTTacatgataaaatcacagataaagagc	6808
a[10]	
tgaggcattcctaataatgaatgtactTTTTcaaaaatgacctgttcatgacaacattccagaccatattgaagaa	244 6880
a[11]	
V A A A L C G E D L I I K	257
atTTccaactTTTccag gtt gcc gcc gct ttg tgt gga gaa gat ctg atc atc aag	6938
aD253E[12]	
G V S V H I S N A E P K H N N T R Q	275
ggc gtc agt gtg cat atc tca aac gct gag ccc aaa cac aat aac act agg cag	6992
tA266S[13]	
M M E R A G R F G N G F G G Q G F A	293
atg atg gag cgg gca ggg cgc ttt ggg aat ggg ttc gga ggt cag ggt ttt gca	7046
G S R S N M G G G G G G S S S S L G	311
ggc agc cga agc aac atg ggt ggt ggt ggt ggg ggt agc tcc agc agc ttg gga	7100

N F G N F N L N P A M M A A A Q A A 329
 aat ttt ggc aat ttc aat cta aac ccg gcc atg atg gct gcc gcc cag gct gcc 7154
 tA325=[14]

L Q S S W G M M G M L A Q Q N Q S G 347
 ttg cag agt agt tgg ggt atg atg gga atg cta gct cag cag aat cag tcg ggt 7208
 cL330=[15] cS333=[16] cS346P=[17]

T S G T S T S G T S S S R D Q A Q T 365
 act tca ggc aca agc aca agt ggc acc agt tcc tct cga gac caa gcc caa aca 7262

Y S S A N S N Y G S S S A A L G W G 383
 tat agc tcg gct aac agc aat tac ggc agc agc tca gct gct ctc ggc tgg ggc 7316
 tS377L=[18]

T G S N S G A A S A G F N S S F G S 401
 acc ggc tct aac tcg ggc gct gcc agt gct ggc ttt aac tcc agt ttt ggc tct 7370

S M E S K S S G W G M 412
 agt atg gag tcc aag tca tcg ggg tgg ggt atg taagtgctttgtggttgaagtgtcggta 7431

412
 ttccctagcgtgttttggtaagatattttatcttcgagagacttatctcatcacgtgtggtttgggagtggggatg 7503

Coding Sequence

M A E M Y I R V A E E E N E E P M E 18
 atg gcc gag atg tac att cga gtt gcg gag gag gag aat gag gag ccg atg gag 54

I P S E D D G T V L L S T V S A Q F 36
 atc ccg tca gag gat gat ggc acg gtt ttg ctt tcc aca gtg tcc gct cag ttt 108

P G A C G L R F R S P V S Q C M R G 54
 cca ggg gct tgt ggt ctg cgc ttc cgg agc cca gtg tct cag tgc atg agg ggg 162

V R L V D G I L H A P E N G W G N L 72
 gtt cgt ctg gtg gac ggc att ctg cat gca cct gag aac ggc tgg gga aac cta 216

V Y V V N Y P K E | T V L P D N K R 89
 gtc tat gtg gtt aat tac cca aaa g | aa act gtt ctg cca gat aat aag agg 267

K M D E I D A S S A T K I K R G D Q 107
 aag atg gat gag atc gat gct tca tct gcg acc aag atc aag aga gga gat cag 321
 aD95E=[1]

K T S D L I V L G L P W K T S E Q D 125
 aag act tca gat ctg att gtg ctg ggt ctg cca tgg aag act tca gag caa gac 375

L	K	D	Y	F	G	T	F	G	E	V	I	M	V	Q		V	K		142
tta	aaa	gac	tac	ttc	ggt	aca	ttt	ggg	gaa	gtc	atc	atg	gtg	cag		gtc	aag		426
R	D	V	K	T	G	N	S	K	G	F	G	F	V	R	F	G	D		160
cgg	gat	gtg	aag	aca	gga	aat	tca	aaa	ggg	ttt	ggc	ttt	gtg	agg	ttt	gga	gac		480
W	E	T	Q	S	K	V	M	T	Q	R	H	M	I	D	G	R	W		178
tgg	gag	act	cag	agt	aag	gtg	atg	aca	cag	cgg	cac	atg	att	gat	ggc	cgg	tgg		534
C	D	C	K	L	P	N	S	K		Q	G	I	D	E	P	M	R		195
tgc	gac	tgc	aaa	ctg	ccc	aac	tca	aag		caa	ggt	ata	gat	gaa	cca	atg	agg		585
										aQ188K[2]							gR195G[4]		
										aG189D[3]									
S	R	K	V	F	V	G	R	C	T	E	D	M	T	A	D	E	L		213
agc	cgt	aaa	gtg	ttt	gtg	ggc	cgc	tgc	aca	gag	gac	atg	act	gcc	gat	gag	ctc		639
										aR203=[5]							cL213P[7]		
										aC204S[6]									
R	Q	F	F	M	Q	Y	G	E	V	T	D	V	F	I	P	K	P		231
cgt	cag	ttc	ttc	atg	cag	tac	gga	gag	gtc	aca	gac	gtc	ttt	att	ccc	aaa	ccg		693
										aY220N[8]									
										aY220*[9]									
F	R	A	F	A	F	V	T	F	A	D	D	Q		V	A	A	A		248
ttc	aga	gcg	ttt	gct	ttt	gtc	acc	ttt	gca	gat	gac	cag		gtt	gcc	gcc	gct		744
L	C	G	E	D	L	I	I	K	G	V	S	V	H	I	S	N	A		266
ttg	tgt	gga	gaa	gat	ctg	atc	atc	aag	ggc	gtc	agt	gtg	cat	atc	tca	aac	gct		798
										aD253E[12]							tA266S[13]		
E	P	K	H	N	N	T	R	Q	M	M	E	R	A	G	R	F	G		284
gag	ccc	aaa	cac	aat	aac	act	agg	cag	atg	atg	gag	cgg	gca	ggg	cgc	ttt	ggg		852
N	G	F	G	G	Q	G	F	A	G	S	R	S	N	M	G	G	G		302
aat	ggg	ttc	gga	ggt	cag	ggt	ttt	gca	ggc	agc	cga	agc	aac	atg	ggt	ggt	ggt		906
G	G	G	S	S	S	S	L	G	N	F	G	N	F	N	L	N	P		320
ggt	ggg	ggt	agc	tcc	agc	agc	ttg	gga	aat	ttt	ggc	aat	ttc	aat	cta	aac	ccg		960
A	M	M	A	A	A	Q	A	A	L	Q	S	S	W	G	M	M	G		338
gcc	atg	atg	gct	gcc	gcc	cag	gct	gcc	ttg	cag	agt	agt	tgg	ggt	atg	atg	gga		1014
										tA325=[14]							cL330=[15]		
																	cS333=[16]		
M	L	A	Q	Q	N	Q	S	G	T	S	G	T	S	T	S	G	T		356
atg	cta	gct	cag	cag	aat	cag	tcg	ggt	act	tca	ggc	aca	agc	aca	agt	ggc	acc		1068
																	cS346P[17]		
S	S	S	R	D	Q	A	Q	T	Y	S	S	A	N	S	N	Y	G		374
agt	tcc	tct	cga	gac	caa	gcc	caa	aca	tat	agc	tcg	gct	aac	agc	aat	tac	ggc		1122

S	S	S	A	A	L	G	W	G	T	G	S	N	S	G	A	A	S	392
agc	agc	tca	gct	gct	ctc	ggc	tgg	ggc	acc	ggc	tct	aac	tcg	ggc	gct	gcc	agt	1176
			tS377L[18]															
A	G	F	N	S	S	F	G	S	S	M	E	S	K	S	S	G	W	410
gct	ggc	ttt	aac	tcc	agt	ttt	ggc	tct	agt	atg	gag	tcc	aag	tca	tcg	ggg	tgg	1230
G	M																	412
ggt	atg																	1236