

FGENESH 2.6 Prediction of potential genes in Dicot_arab genomic DNA

Seq name: scaffold_14 [Using bases 2209000 to 2309000]

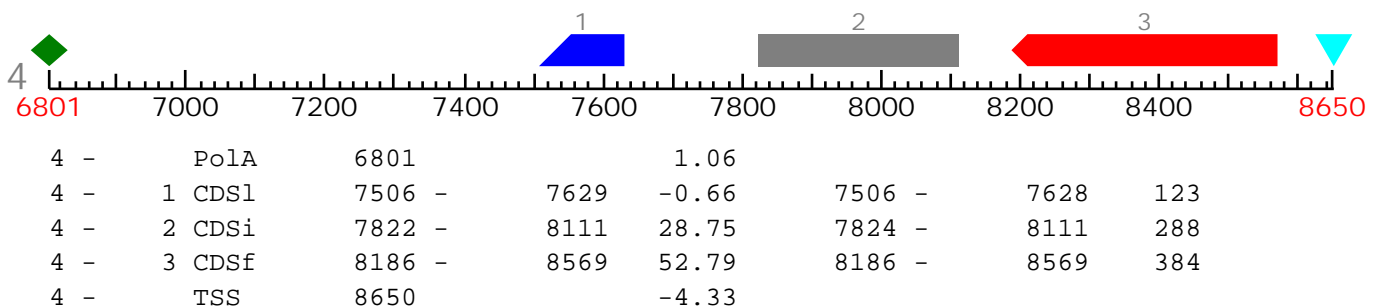
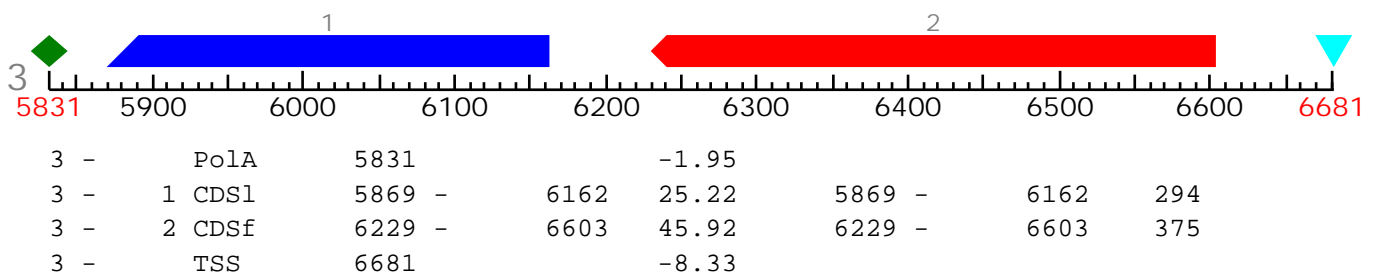
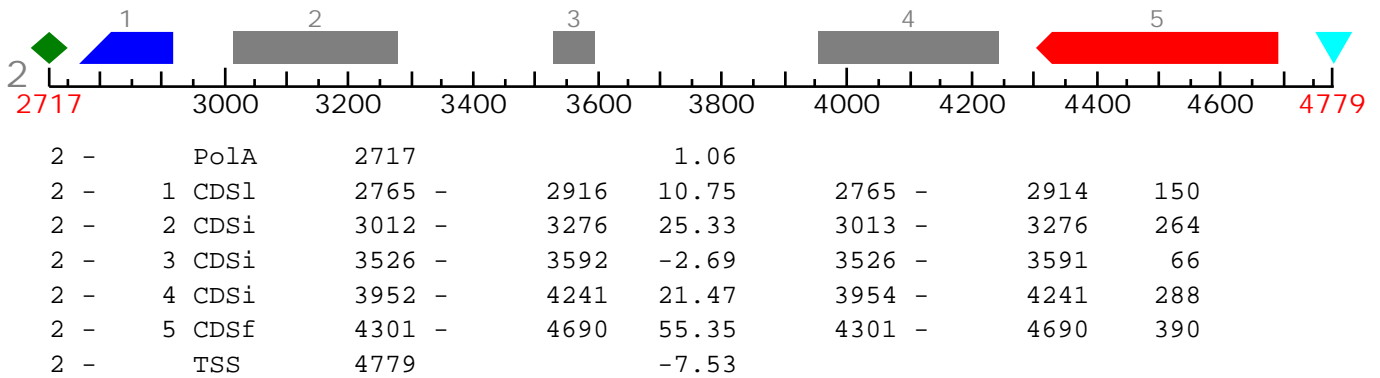
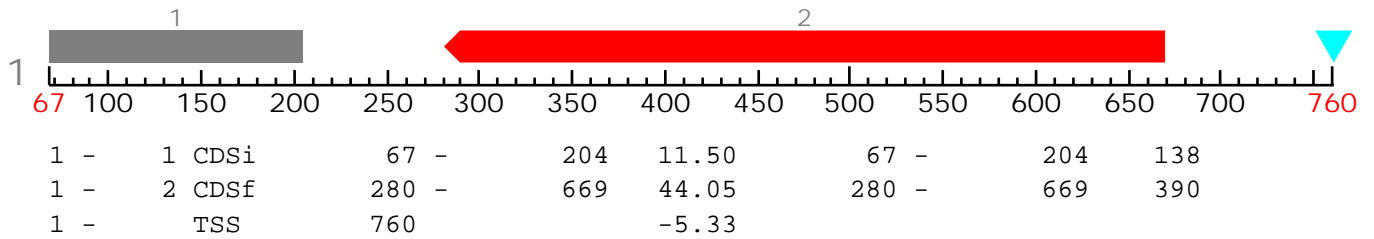
Length of sequence: 100001

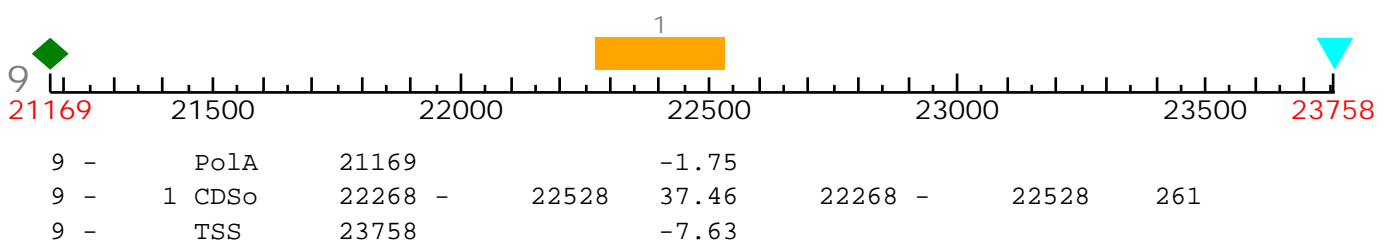
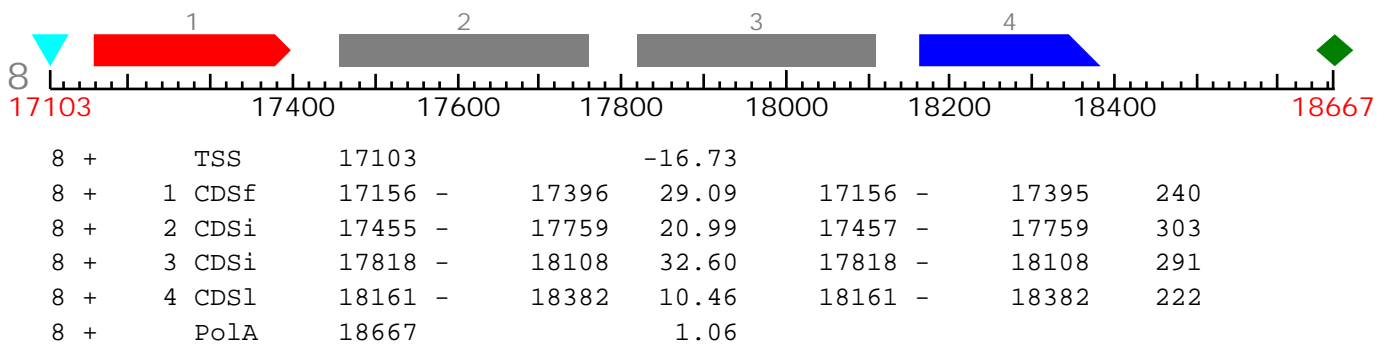
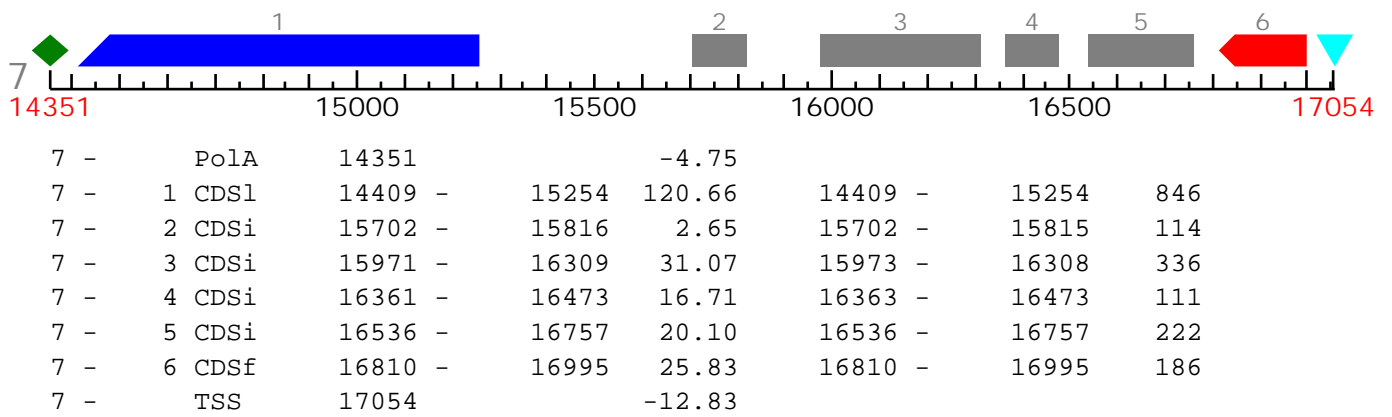
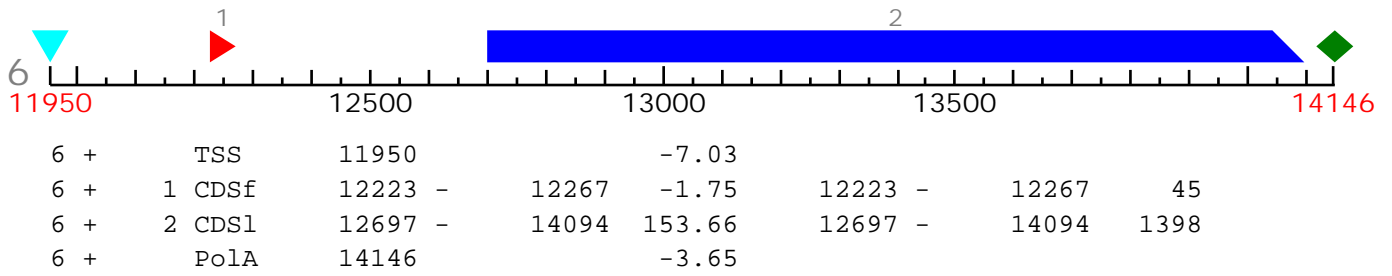
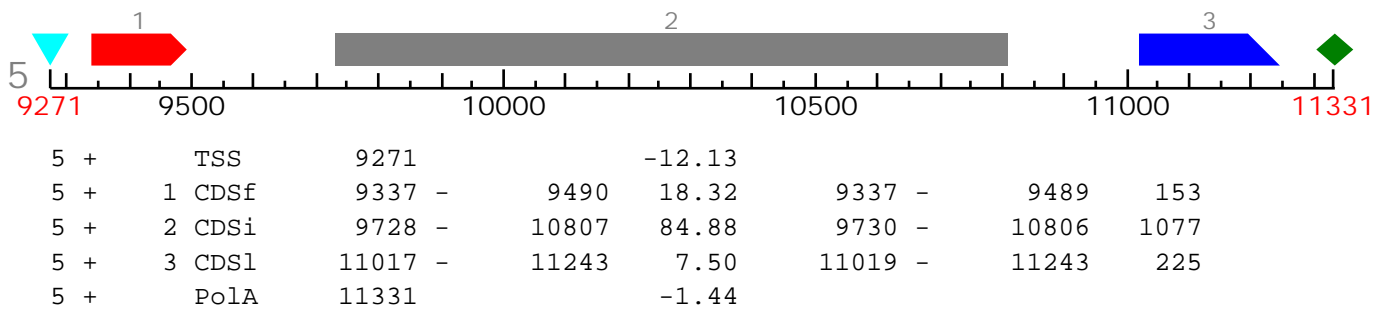
Number of predicted genes 31: in +chain 13, in -chain 18.

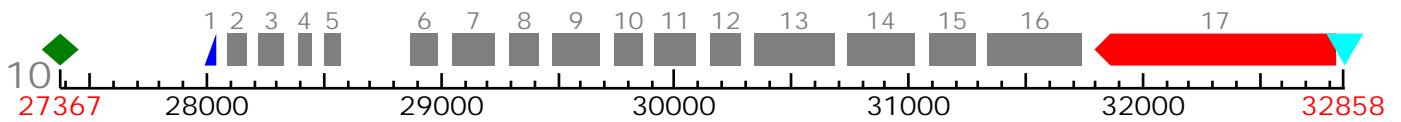
Number of predicted exons 154: in +chain 60, in -chain 94.

Positions of predicted genes and exons: Variant 1 from 1, Score: 3356.386719

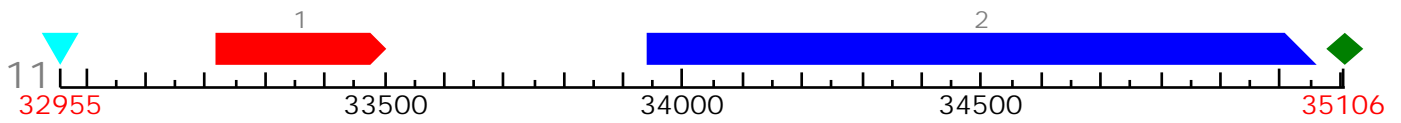
▶ CDSf
 CDSi
 ▶ CDSl
 CDSo
 ◆ PoIA
 ▼ TSS



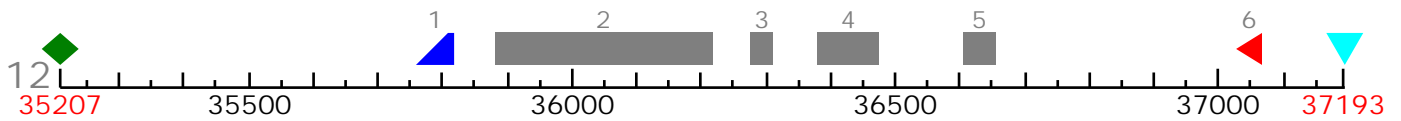




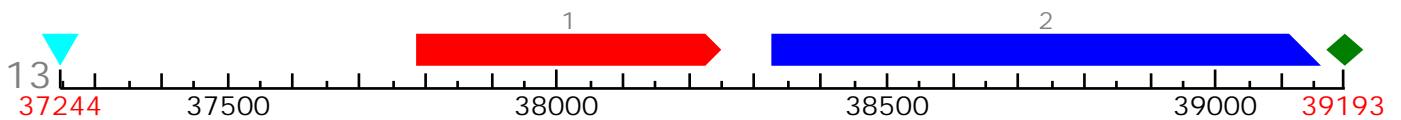
10 -	PoLA	27367			1.06			
10 -	1 CDSl	27984	-	28034	-0.39	27984	-	28034
10 -	2 CDSi	28081	-	28164	6.04	28081	-	28164
10 -	3 CDSi	28216	-	28323	14.85	28216	-	28323
10 -	4 CDSi	28382	-	28441	14.00	28382	-	28441
10 -	5 CDSi	28495	-	28566	10.62	28495	-	28566
10 -	6 CDSi	28864	-	28983	4.77	28864	-	28983
10 -	7 CDSi	29042	-	29224	26.03	29042	-	29224
10 -	8 CDSi	29287	-	29415	0.72	29287	-	29415
10 -	9 CDSi	29472	-	29673	12.92	29472	-	29672
10 -	10 CDSi	29735	-	29856	0.20	29737	-	29856
10 -	11 CDSi	29909	-	30085	21.18	29909	-	30085
10 -	12 CDSi	30147	-	30278	6.67	30147	-	30278
10 -	13 CDSi	30332	-	30676	20.48	30332	-	30676
10 -	14 CDSi	30730	-	31020	11.77	30730	-	31020
10 -	15 CDSi	31081	-	31281	13.76	31081	-	31281
10 -	16 CDSi	31332	-	31734	28.41	31332	-	31733
10 -	17 CDSf	31788	-	32821	114.13	31790	-	32821
10 -	TSS	32858			-13.03			



11 +	TSS	32955			-10.93			
11 +	1 CDSf	33215	-	33501	31.39	33215	-	33499
11 +	2 CDSl	33937	-	35059	129.87	33938	-	35059
11 +	PoLA	35106			-1.95			

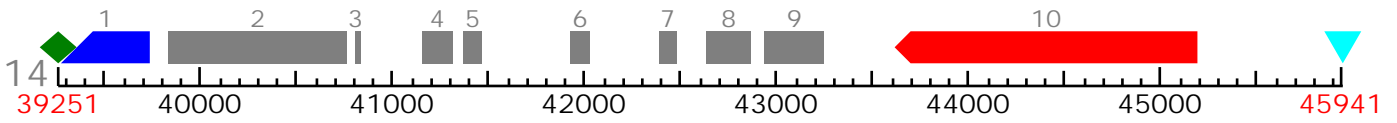


12 -	PoLA	35207			-1.95			
12 -	1 CDSl	35757	-	35816	1.12	35757	-	35816
12 -	2 CDSi	35879	-	36215	31.56	35879	-	36214
12 -	3 CDSi	36274	-	36309	6.19	36276	-	36308
12 -	4 CDSi	36378	-	36473	12.37	36380	-	36472
12 -	5 CDSi	36603	-	36653	9.24	36605	-	36652
12 -	6 CDSf	37025	-	37065	6.40	37027	-	37065
12 -	TSS	37193			-14.03			

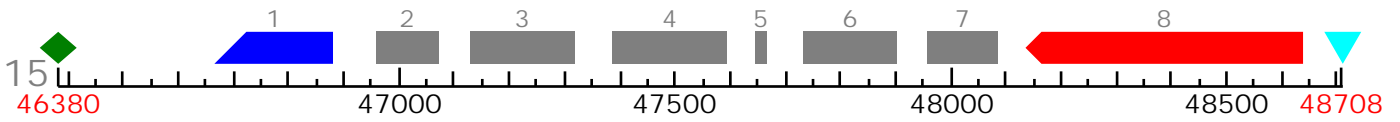


13 +	TSS	37244			-14.33			
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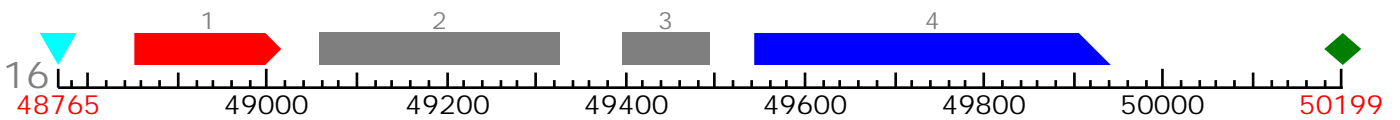
13 +	1 CDSf	37784 -	38247	42.62	37784 -	38245	462
13 +	2 CDSl	38323 -	39157	95.73	38324 -	39157	834
13 +	PolA	39193		-7.34			



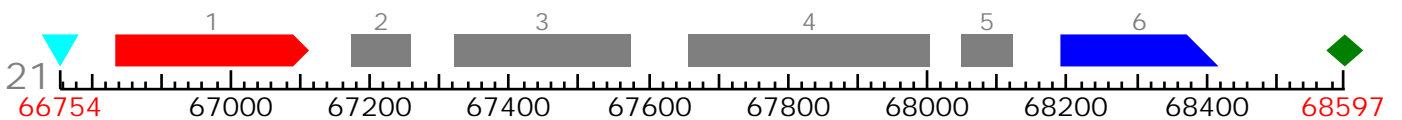
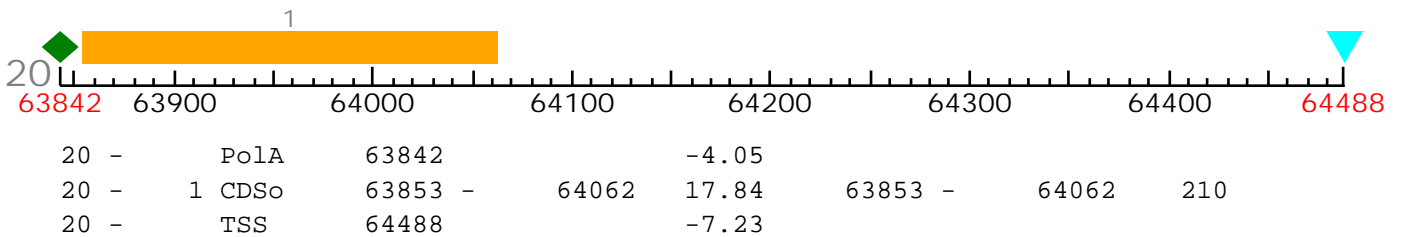
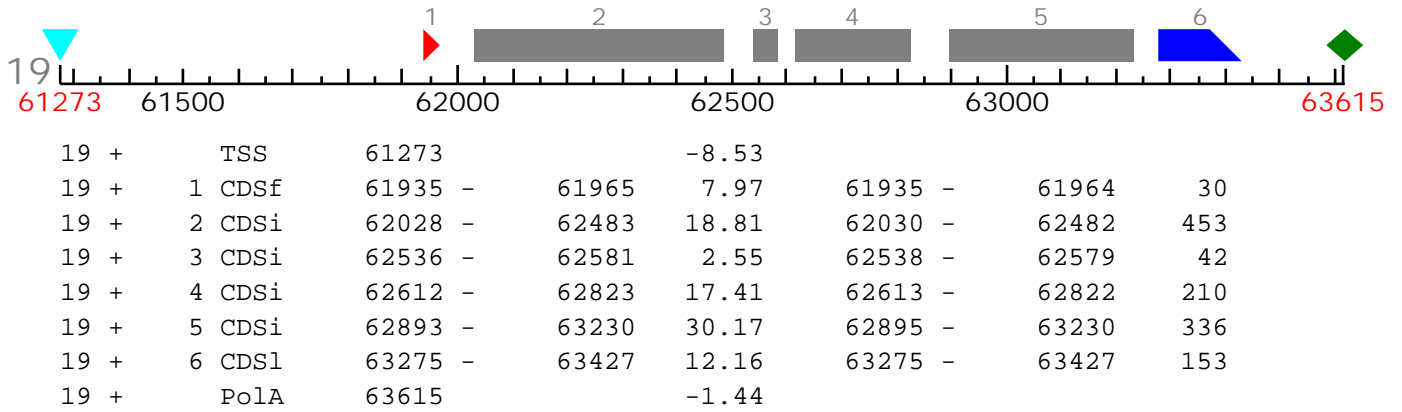
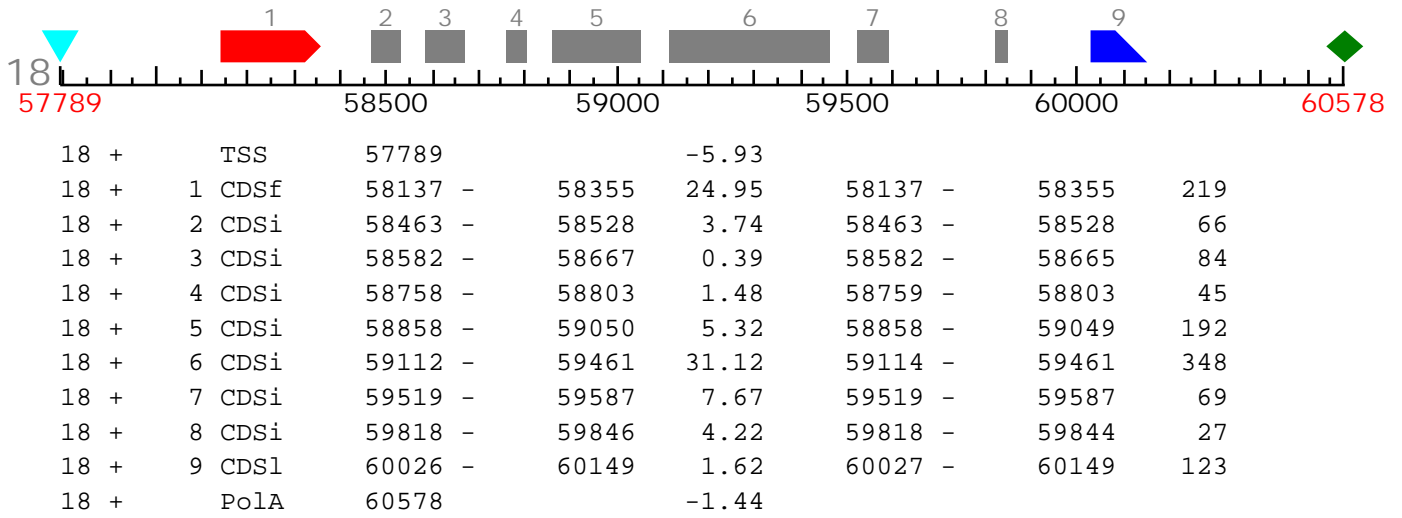
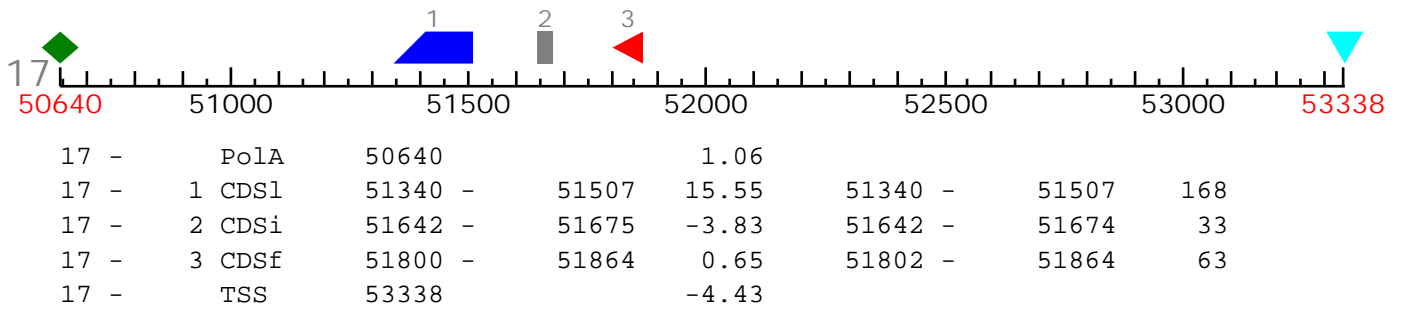
14 -	PolA	39251		-7.84			
14 -	1 CDSl	39265 -	39728	53.06	39265 -	39726	462
14 -	2 CDSi	39826 -	40755	104.14	39827 -	40753	927
14 -	3 CDSi	40796 -	40802	-9.66	40797 -	40802	6
14 -	4 CDSi	41145 -	41306	15.25	41145 -	41306	162
14 -	5 CDSi	41362 -	41457	14.53	41362 -	41457	96
14 -	6 CDSi	41919 -	42020	2.20	41919 -	42020	102
14 -	7 CDSi	42380 -	42470	-0.56	42380 -	42469	90
14 -	8 CDSi	42627 -	42861	19.22	42629 -	42859	231
14 -	9 CDSi	42929 -	43241	20.87	42930 -	43241	312
14 -	10 CDSf	43607 -	45184	170.03	43607 -	45184	1578
14 -	TSS	45941		-10.23			



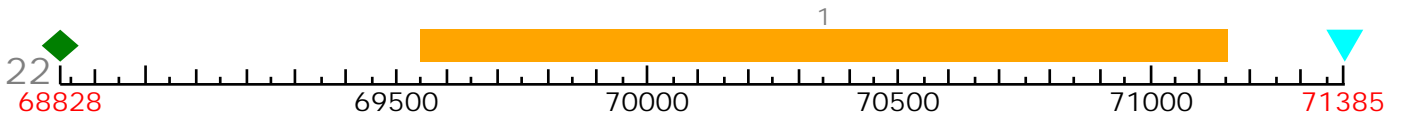
15 -	PolA	46380		1.06			
15 -	1 CDSl	46663 -	46878	10.50	46663 -	46878	216
15 -	2 CDSi	46956 -	47069	9.16	46956 -	47069	114
15 -	3 CDSi	47126 -	47316	24.60	47126 -	47314	189
15 -	4 CDSi	47385 -	47592	20.01	47386 -	47592	207
15 -	5 CDSi	47643 -	47663	-0.13	47643 -	47663	21
15 -	6 CDSi	47730 -	47900	13.00	47730 -	47900	171
15 -	7 CDSi	47955 -	48083	17.21	47955 -	48083	129
15 -	8 CDSf	48133 -	48636	60.96	48133 -	48636	504
15 -	TSS	48708		-11.03			



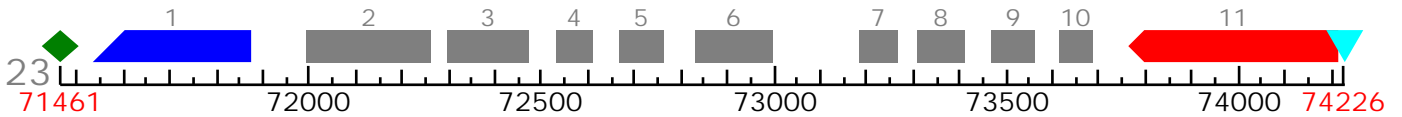
16 +	TSS	48765		-11.33			
16 +	1 CDSf	48850 -	49014	17.93	48850 -	49014	165
16 +	2 CDSi	49056 -	49325	8.14	49056 -	49325	270
16 +	3 CDSi	49394 -	49492	9.95	49394 -	49492	99
16 +	4 CDSl	49542 -	49940	22.08	49542 -	49940	399
16 +	PolA	50199		-1.44			



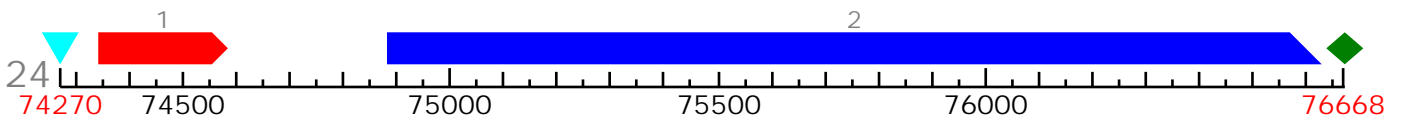
21 +	TSS	66754			-3.93			
21 +	1 CDSf	66833 -	67111	12.24	66833 -	67111	279	
21 +	2 CDSi	67172 -	67257	1.90	67172 -	67255	84	
21 +	3 CDSi	67319 -	67572	3.23	67320 -	67571	252	
21 +	4 CDSi	67656 -	68002	33.43	67658 -	68002	345	
21 +	5 CDSi	68047 -	68121	8.07	68047 -	68121	75	
21 +	6 CDSL	68189 -	68416	14.93	68189 -	68416	228	
21 +	PoLA	68597			-3.95			



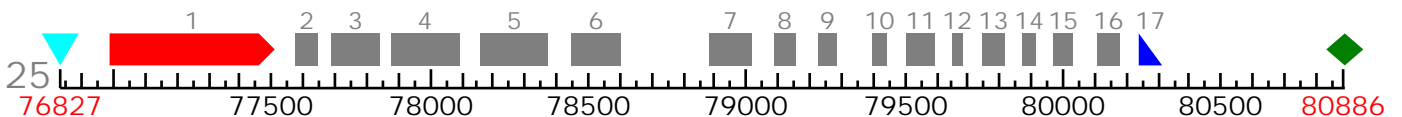
22 -	PoLA	68828			1.06			
22 -	1 CDSo	69545 -	71152	176.11	69545 -	71152	1608	
22 -	TSS	71385			-11.03			



23 -	PoLA	71461			-6.15			
23 -	1 CDSL	71531 -	71872	19.65	71531 -	71872	342	
23 -	2 CDSi	71991 -	72259	14.61	71991 -	72257	267	
23 -	3 CDSi	72294 -	72469	19.44	72295 -	72468	174	
23 -	4 CDSi	72528 -	72607	7.56	72530 -	72607	78	
23 -	5 CDSi	72664 -	72759	10.17	72664 -	72759	96	
23 -	6 CDSi	72827 -	72994	11.42	72827 -	72994	168	
23 -	7 CDSi	73180 -	73263	-0.68	73180 -	73263	84	
23 -	8 CDSi	73305 -	73408	4.78	73305 -	73406	102	
23 -	9 CDSi	73465 -	73559	15.06	73466 -	73558	93	
23 -	10 CDSi	73610 -	73683	7.99	73612 -	73683	72	
23 -	11 CDSf	73760 -	74212	42.80	73760 -	74212	453	
23 -	TSS	74226			-13.33			

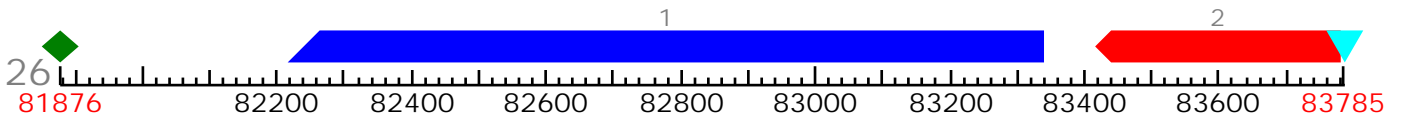


24 +	TSS	74270			-13.73			
24 +	1 CDSf	74341 -	74583	20.81	74341 -	74583	243	
24 +	2 CDSL	74880 -	76625	214.36	74880 -	76625	1746	
24 +	PoLA	76668			-8.84			

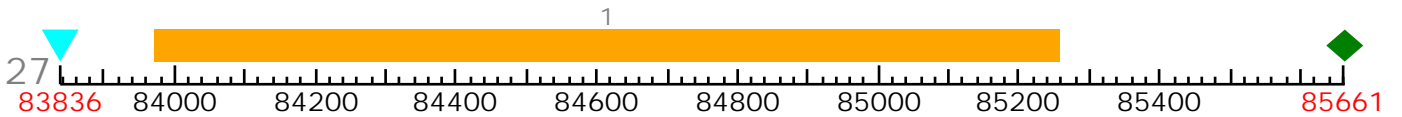


25 +	TSS	76827			-17.43			
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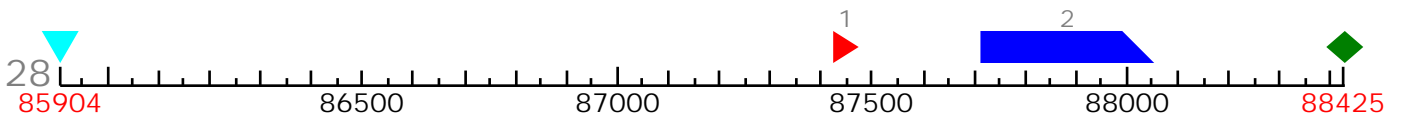
25 +	1	CDSf	76983 -	77505	65.86	76983 -	77504	522
25 +	2	CDSi	77571 -	77642	9.11	77573 -	77641	69
25 +	3	CDSi	77683 -	77836	9.96	77685 -	77834	150
25 +	4	CDSi	77873 -	78088	14.19	77874 -	78086	213
25 +	5	CDSi	78156 -	78368	13.45	78157 -	78366	210
25 +	6	CDSi	78443 -	78598	10.15	78444 -	78596	153
25 +	7	CDSi	78877 -	79012	5.82	78878 -	79012	135
25 +	8	CDSi	79083 -	79151	1.73	79083 -	79151	69
25 +	9	CDSi	79222 -	79281	7.97	79222 -	79281	60
25 +	10	CDSi	79392 -	79439	1.80	79392 -	79439	48
25 +	11	CDSi	79501 -	79592	10.70	79501 -	79590	90
25 +	12	CDSi	79645 -	79678	1.99	79646 -	79678	33
25 +	13	CDSi	79740 -	79811	4.26	79740 -	79811	72
25 +	14	CDSi	79867 -	79911	2.38	79867 -	79911	45
25 +	15	CDSi	79966 -	80027	9.72	79966 -	80025	60
25 +	16	CDSi	80103 -	80175	8.36	80104 -	80175	72
25 +	17	CDSl	80235 -	80309	3.86	80235 -	80309	75
25 +		PoLA	80886		1.06			



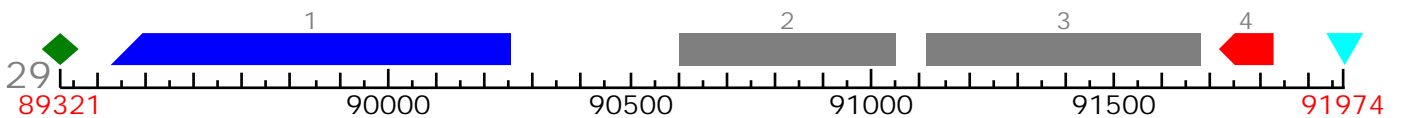
26 -		PoLA	81876		1.06			
26 -	1	CDSl	82214 -	83338	123.51	82214 -	83338	1125
26 -	2	CDSf	83414 -	83779	40.64	83414 -	83779	366
26 -		TSS	83785		-15.23			



27 +		TSS	83836		-10.83			
27 +	1	CDSo	83970 -	85256	139.79	83970 -	85256	1287
27 +		PoLA	85661		1.06			

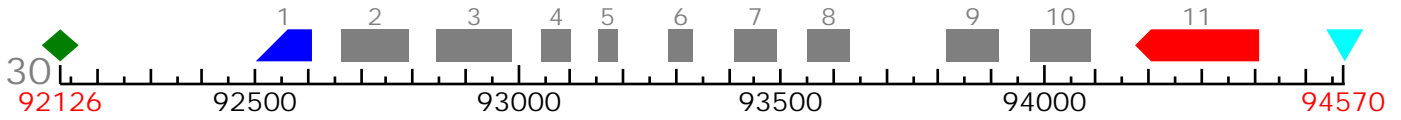


28 +		TSS	85904		-7.03			
28 +	1	CDSf	87421 -	87471	6.47	87421 -	87471	51
28 +	2	CDSl	87710 -	88051	15.83	87710 -	88051	342
28 +		PoLA	88425		-1.95			

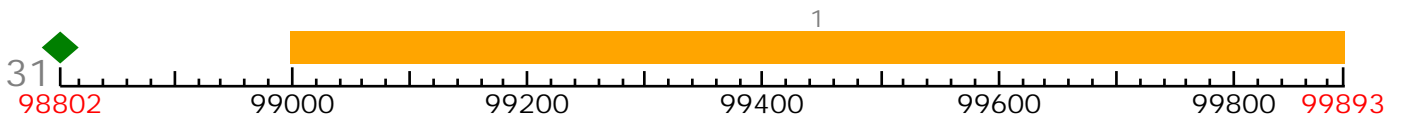


29 +	1							
29 +	2							
29 +	3							
29 +	4							

29 -	Pola	89321			-1.44			
29 -	1 CDSi	89425 -	90252	98.88	89425 -	90252	828	
29 -	2 CDSi	90599 -	91047	53.06	90599 -	91045	447	
29 -	3 CDSi	91110 -	91677	42.48	91111 -	91677	567	
29 -	4 CDSf	91714 -	91827	9.28	91714 -	91827	114	
29 -	TSS	91974						-8.93



30 -	Pola	92126			-1.44			
30 -	1 CDSi	92498 -	92605	0.60	92498 -	92605	108	
30 -	2 CDSi	92661 -	92789	3.43	92661 -	92789	129	
30 -	3 CDSi	92842 -	92985	14.87	92842 -	92985	144	
30 -	4 CDSi	93042 -	93098	9.33	93042 -	93098	57	
30 -	5 CDSi	93149 -	93187	3.07	93149 -	93187	39	
30 -	6 CDSi	93283 -	93330	0.71	93283 -	93330	48	
30 -	7 CDSi	93409 -	93489	-0.77	93409 -	93489	81	
30 -	8 CDSi	93548 -	93629	0.85	93548 -	93628	81	
30 -	9 CDSi	93812 -	93912	5.16	93814 -	93912	99	
30 -	10 CDSi	93971 -	94087	3.69	93971 -	94087	117	
30 -	11 CDSf	94171 -	94407	27.24	94171 -	94407	237	
30 -	TSS	94570						-7.73



31 -	Pola	98802			1.06			
31 -	1 CDSo	98997 -	99893	76.86	98997 -	99893	897	

Predicted protein(s):

>FGENESH:[mRNA] 1 2 exon (s) 67 - 669 528 bp, chain -
ATGGCCTTGGCCACAAGCAGCAGCCTTGCGGCACTCCCTTCCTCCCTCTCTAGAACTCCT
CTGGGAGGAGCCTCCGCTCACAAGTCTCGATCCAGTCGGTCCTTGAGATTCTTGCTGCCA
GTGAGAGCTTCTCGGACAAAGGTCCTGCAGGAGGCGATGGCATCAGCAGCGTTCTGGAC
CAGACCAAGAAGAATATTAGCCGCGAAGATGTGCTCAAGAACCAGGCAGAGAATGAGTCG
GAGAAGAAGTCCGTGTTTGGAGCCGTGCCATCGTCCGGAGCAATGTGGCCGCGCCGGAG
ATCGAGAGGCGGCCAGAGACTGGCGATCGATCGTTCCCCAGCTTGATGGCATTGATGGC
GCTGGCCCAGAGACGATCAATGGCAGACTGGCCATGGTTGGAATTGTGTGGGCATTTGCT
GTGGAGAGAATAACGGGACAAACGGTGTGTTGAGCAGCTCTACACGCCAGGCAACTTTGGC
TTGTTTAACTTCTTGATGGTGGCACAACCTTTTGCATATGCGTCGCTG

>FGENESH: 1 2 exon (s) 67 - 669 176 aa, chain -
MALATSSSLAALPSSLSRTPPLGGASAHKSRSSRSLRFLLPVRASSDKGPAGGDGISSVLD
QTKKNISREDVLDKLNQAENESEKKSVMFVAVPSSGAMWPRPEIERRPETGDRSFPPLMAFDG
AGPETINGRLAMVGIVWAFIVERITGQTVFEQLYTPGNFGLFNFLMVAQLFAYASL

>FGENESH:[mRNA] 2 5 exon (s) 2765 - 4690 1164 bp, chain -
ATGGCCCTAGCCACAAGCAGCAGCCTTGCGGCACTCCCTTCCTCCCTCTCTAAAACCTCCT

CTGGGAGGAGCCTCCGCTCACAAGTCCCGATCTACTCGCTCCTTGGGATTCTTGCTGCCA
GTGAGAGCTTCTCGGACAAAGGTCCTGCAGGAGGCGATGGCATCAGCAGCGTTCTGGAC
CAGACCAAGAAGAATATTAGCCGCGAGGGTGTGCTCAAGAACCAGGCAGAGAATGAGTCG
GAGAAGAAGTCCGTGTTTGGAGCTGTGCCATCGTCCGGAGCAATGTGGCCGAGGCCGGAG
ATCGAGAGGCGGCCAGAGACTGGCGATCGATCGTTCCCCAGCTTGATGGCATTGATGGC
GCTGGCCCAGAGACGATCAATGGCAGACTGGCCATGGTTGGAATTGTGTGGGCATTTGCT
GTGGAGAGAATAACGGGACAAACGGTGTTCGAGCAGCTCTACGCGCCAGGCAACTTTGGC
TTGTTTAACTTCTTGATGGTGGCACAGCTCTTTGCGTATGCATCGCTGGTTCCCATGTTT
AAGGGGGAGAGCCCCGATAGCAGAGCTTTGGGCCATTTAATGCCATGGCGGAGCGCTGG
AATGGGCGGACTGCCATGCTTGGCTTCTCGCTCTGGTGCTCACGGAATCCTTCATCAAG
ACGCCAGTTTTTAAACATGATTCTTGTCTTGC GGATCAATGAATCATCGATCCCAGCTTTA
AGCGACAGGACGTTCTCGGCTGGCGCTCTGCCAGATCTCCTCTCCTCATCGACACCGAC
ACCGCTCGGGACTGGCCTCACCCCTATAAGGAGAGGAGACGCCGCTCGAGGCCACTCCAGC
GACTCAAGCCTCGCGTTCCCTAGCTACTCAGGCCACTCCACCCAAGCGACTCAAGCTACC
ACCAGCTTTTACGACAATCGCCTCGCCAACATTCACCACCCTCCAGACCCTTCCCGGAGT
TTGCGACATCCACACTGCTTGC GTAAAGATAAGGATGAAGCGCGACCAGGCGAAACCTGG
GAACACCAGCACCCAGATTTACCCGGATTCCTAGAGCCCGAACTGGAAGTCTCGTCTAC
ACTAAGGACCACGTCGTCACTCGATCGAAGCAATACCAAGACGAGGAGAACAACATCCGC
TGTGCCTCCTCACGGCGGTGTTGA

>FGENESH: 2 5 exon (s) 2765 - 4690 387 aa, chain -
MALATSSSLAALPSSLSKTPLGGASAHKSRSTRSLGFLLPVRASSDKGPAGGDGISSVLD
QTKKNI SREGVLKNQAENESEKKS VFGAVPSSGAMWPRPEIERRPETGDRSFPSLMAFDG
AGPETINGRLAMVGIVWAF AVERITGQTVFEQLYAPGNFGLFNFLMVAQLFAYASLVPMF
KGESPD SRALGPFNAMAERWNGRTAMLGFLALVLTESFIKTPVFNMILVLRINESSIPAL
SDRTFSAGALPRSPLLIDTDTARDWPHPIRRGDAARGHSSDSSLAFPSYSGHSTQATQAT
TSFYDNRLANIHHPPDPSRSLRHPHCLRKDKDEARPGETWEHQHPDLPGFLEPGTGLSVY
TKDHVVTRSKQYQDEENNIRCASSRRC

>FGENESH: [mRNA] 3 2 exon (s) 5869 - 6603 669 bp, chain -
ATGGCCGTCGCCACAAGCAGCAGCATTGCGGCAATCCCTTCTCGCTCTCTAAAACCTCCT
CTCGGAGGAGCCAAGTCTCGATCAAATCGCTCCTTGGGATTCTTGCTGCCAGTGAGAGCT
TCCTCGGAAAATGGGCGAGGCGATGGGATCAGCAGCGTTCTGGACGAAACCAAGAAGAAT
ATCACCCGCGAGGATGTGCTTAAGAACCAGGCAGAGAACGAGTCGGAGAAGAGGTCCGTG
TTTGGAGCGGTGCCATCGTCCGGAGCATTATGGCCGAGGCCTGAGATTGAGAGGCGGCCA
GAGACGGGTGATCGGTTCGTCGAGCTTGATGGCATTTCGATGGCGCTGGTCCCGAGACA
ATCAATGGCAGACTGGCTATGGTTGGAATCTTATGGGCATTTGCGGTGGAGCGAATGACG
GGACAAACGGTGGCCGAGCAGCTCTACACGCCAGGCAACTTTGGCTTGTTTAACTTCTTG
GCGGTGCGACAGCTCTTTGCTTACGCGTCGCTGGTTCCCATGTTTAAAGGAGAGAGCCCC
GATAGCCGATCATTGGGCCCGTTTAGAGCCATGGCGGAGCGCTGGAATGGGCGGACTGCC
ATGCTTGGCTTCTTGGCTTTGGTGATCACGGAATTCTTCACCAAGACCCCAGTTTTTAAAC
ATGATGTAA

>FGENESH: 3 2 exon (s) 5869 - 6603 222 aa, chain -
MAVATSSSIAAIPSSLSKTPLGGAKSR SNRSLGFLLPVRASSENGR GDGISSVLD ETKKN
ITREDVLKNQAENESEKRSVFGAVPSSGALWPRPEIERRPETGDRSFASLMAFDGAGPET
INGRLAMVGILWAF AVERMTGQTVAEQLYTPGNFGLFNFLAVAQLFAYASLVPMFKGESP
DSRSLGPF RAMAERWNGRTAMLGFLALVITEFFTKTPVFNMM

>FGENESH: [mRNA] 4 3 exon (s) 7506 - 8569 798 bp, chain -
ATGGCCCTCGCCACAAGCAGCAGCATTGCGGTAATTCCTTCTCGCTCTCTAAAACCTCCT
CTCGGAGGAGCCTCCGCCTACAAGTCTCGATCCGGTTCGCTCCTTGGGATTCTTGCCGCCG

GTGAGAGCTTCCTCGGACAATGGGCGAGGCGATGGGATCAGCAGCGTTCTGGACCAGACC
AAGAAGGAGATCACCCGCGAGGATGTGCTCAAGAACCAGGCAGAGAATGAGTCGGAGAAG
AGGTCCGTGTTTGGAGCGGTGCCATCGTCCGGAGCATTGTGGCCTAGGCCTGAGATTGAG
AGGCGGCCAGAGACGGGCGATCGGTTCGTTTCGCGAGCTTGATGGCATTTCGATGGCGCTGGC
CCAGAGACGATCAACGGCAGACTGGCAATGGTTGGAATCTTGTGGGCCTTTGCAGTGGAG
AGAATGACGGGACAAACGGTGGCCGAGCAGCTCTACACGCCAGGCAACTTCGGCTTGTTT
AACTTCTTGGCGGTTCGCACAGCTCTTTGCTTACGCATCGCTGGTTCCCATGTTTAAGGGA
GAGAGCCCCGATAGCCGATCCTTGGGCCCGTTTAGAGCCATGGCAGAGCGCTGGAATGGG
CGGACTGCCATGCTTGGCTTCCTCGCTTTGGTGTCTCACAGAATTCTTCACCAAGACCCCA
GTTTTTAAACATGATCACAATATCTCCTGCTAGACCCATGCTAAGTCCAAAACGTTTGGCT
CCAATCCACACAGCATGCTGTGCTTATACCTATAAGATGGAGGCGAGCAAGAGCATGGAT
GCCGAACAATGGACTTGA

>FGENESH: 4 3 exon (s) 7506 - 8569 265 aa, chain -
MALATSSSIIVIPSSLSKTPLGGASAYKSRSGRSLGFLPPVRASSDNNGRGGDISSVLDQT
KKEITREDVLKNQAENESEKRSVFGAVPSSGALWPRPEIERRPETGDRSFASLMAFDGAG
PETINGRLAMVILWFAVERMTGQTVAEQLYTPGNFGLFNFLAVAQLFAYASLVPMFKG
ESPDSRSLGPFRAMAERWNGRTAMLGFLALVLTFFTKTPVFNMITISPARPMLSPKRLA
PIHTACCAAYTYKMEASKSMDAEQWT

>FGENESH:[mRNA] 5 3 exon (s) 9337 - 11243 1461 bp, chain +
ATGGCTCACGGAGGCAGTGAAGCGGCGATCGCTGCAGCTGGCCACTGGATATTTCCATCC
CGACGAGCGCCGATGGATCGACCAGGCGCCGAAGCCGAAGCAGTCGAAATCCGGGCGATC
TTTGTGGAAATGGATGCGGCTTCGCGAGATTCAGGGATACAGGTGTGGATGAGAGACGGC
GATCTGGAGAGCATTCGACGCAACGATCGAAGGATCGCATAACATTAAGCGAGTGATGGAG
TATCTGGTCAGTCACGAGAAGCAAGGAAGCGTTAACCTCCGAAAACCTCCATGCAGTTGAA
GGGCTGGACGACAATAACCAAGCACGGGTTAAGAAGAAACGCGTGGAACCTATCCGGGCTTC
TTCACAGTCACGGTAAACAACAGGCAAAGGAAGACTTGGTAGCTCTCACCGACGAGGCC
AAGCAGCTCATGGAGGACGAGAGAAGAGCTCGATGGGATCGCGACGAGAGCTCTTGCGTC
CAGATCCTCAAGAAGATACTGATGATGAGCCGGGACAGGAGGATCCGGCGATCGAAGCTC
CACTGCCTACAAGAGTACTACGCGTTTTCCATACGACTACAACACTGGTTTTTCTCGAGAGG
CACCCGGACCACATCCGTCTCGTGGAACCTCCAAGGATTCCTACGTCGAGCTGGTTTTCG
TGGGACGAAGAACTGGCCGTGACGGAACGAGAGAAAGCTGTGGCTCAGGGAAGGACTCCC
AAAGAGCTTGACAATGGGCCTTCGTATCTCATATCCGGAAGGCTTACTCCAAACAGG
GTCCGGCTCGAGCAGCTCGACAATTTCCAGAGGTTGCCATTTCCATCGCCTTATGAGTTC
TCCCAGCGGGCTTTTCGACACTCCAGCGGGGCAGAAGGAGGCCCTCGGGATCTTCCACGAG
CTCCTGAGCTTTACCGTGGAGAAGAGAGCGCTCGTCTCGGATTTACCACCTTGGCTGGC
AGTCTCAACATAACCACGCTACTTCTCCGACTCGTCTCCTGAGCTGCCACCCGGGGATCTTC
TACGTGAGTAAGTGGAAGAACCAGCACTACGTTTTCTGCGAGAGGCATACCGAGGAAAG
AATCTGGTGGCCGAAGAAGTCGATCCCTTGGTAACCATCAGATGGCGCTACTTGGAGCTG
ATGAAGCCCAAGCCAGAGAAGCTACTTGGAGCTCTAGAGACGAGGACTACCTTTACGTA
CCAATCTCGAAGCGTGGGATCACGTCCAACCAAGATAAAGCGAATGCCATGGCTTCTTCA
GCTCCAAACAGACTTCCAAAGTCGTCCGGTAGATCATTGAGTTCTAGGAGGACAAAGGAA
ATCGAGCCAACCGGCAAGCCTACCATATACTCGTTCAAACATGGGAAGTATGTGTGCGTT
TATTATTTTATCACCACCCGGATAACCGATGAACTGGCTATCACGCAAGGGCTTTGGGCA
AGAGGTGCCGGGGTTCGATTAG

>FGENESH: 5 3 exon (s) 9337 - 11243 486 aa, chain +
MAHGGSEAAIAAAGHWIFPSRRAPMDRPGAEAEAVEIRAI FVEMDAASRDSGIQVWMRDG
DLESIRRNDRIAYIKRVMYLVSHKQGSVNLRLKHLHAVEGLDDNTKHGLRRNAWNPFGF
FTVTVNNRQKEDLVALTDEAKQLMEDERRARWDRDESSCVQILKKILMMSRDRRIRRSKL

HCLQEYYAFPYDYN TGFLERHPDHIRLVETPKDSYVELVSWDEELAVTEREKAVAQGRTP
KELGQWAFVISYPEGYTPNRVRLEQLDNFQRLPFPSPYEFSQRAFDTPAGQKEALGIFHE
LLSFTVEKRALVSDFTTLAGSLNIPRYFSDSLLSCHPGIFVYVSKWKNQHVFLEAYR GK
NLVAEEVDPLVTIRWRYLELMKPKPEKHLHSSRDEDYLYVPI SKRGITSNQDKANAMASS
APNRLPKSSGRSLSSRRTKEIEPTGKPTIYSFKHGKYVCVYYFITTRITDELAITQGLWA
RGAGVD

>FGENESH:[mRNA] 6 2 exon (s) 12223 - 14094 1443 bp, chain +
ATGGTGGTTGGCGGCCATCCAACGGCCAGGGAGACGTTCTCCAGAGTGTCCAATGGAGCA
ATCGGGCAGAGAGGAGGCGGTGGAGGAACGCTGCTTTGCATTCCCAGCGACACGCTCGCA
GATGATAAACGGCTGAAGAAACGTTTCGCGCAGGCTGCTCGTCTCGGATAGCACTGGTGAG
TCCCACAACAATGCGAAGCGATCGGCAGCAATGTACTCCACAGCTTTCAACTTCAAGCTC
CCGGGGACCACGAAAACCTTATCCTGGGACCAGCACTACCAACAGCTCTTTGGACCCGCCA
GTGGATTTCATCGGAATGCCGGAGCCGGAGTCGTGTGATCAGTCCAGGCACGAAACATGG
GAGTTTGAGACGCTGGTCCCGTTTAGCTGCGAAACGCCATCGCTGCTGTCGTGGACGTG
ATCTCCACGATCGACTACGATGAAACCGGACAGCTGATAGCTACTGGTGGGCTGGCGAGG
AAGATCAGGATTTGCTCGTACCAGGAGCTAGTGAACGGGATGGGAAGGGAGTGTTCAG
GGGCGCAACGTGAAAAACCTCTTACCACCATTTCGATGCCGGCAAAGCTCAGCAGCCTC
AAGTGGAGGCCGGGGGGCTCCGAGGTGATCGCTTGCGGTGA CTACGATGGCTCGGTCACG
GAGTGGGACGTAGAGCACGGGGTCACTGTGAGTGAAAGATACGAGCACACGGGACGAACA
GTGTGGAGCATCGACTACAGCAGGGACTTCCGGGGCCTGCTAGCGTCGGCGTCGAGCGAC
AGCACCGTGAGGTTTTGGAGCAGGAATGTGGAGCGGAGCGTTGGGATCATCAAGTCCCTT
AAGCGAACTCGATGTGCTGCGTGGAGTTCGGCCGCTCCTCCGGTCCCTGCTGCTACGTT
GCCGTGGCCTGCGCCGACGCGAGTGTGTATCTGTATGATATGCGGAGCCTGGGGAGCCCA
GTCGCGACCCTGCGAGGCCACGAGAGGTCCGTGAGCTACGTGAGATGGCTGGGCGGAGAAC
AGCTTGGTGTCTCTCGTCTCCAGACGGCACGATTTCGACTGTGGGATATCGCCTCGACAGTA
ACTGGTACCGGCGAGAGTTGGCACGCTCGGAACGACGAGCTGCCGATCGCGAGAACTTTT
GGCTGTCACTCCAACACCAGGAACTTTGTTGGACTGTCCGTTGCGAGCTCCGGCGGGCGGC
TCCGGCGGGCTCATCGCGTCCGGGTCCGAGAACAACGAAGTTTTTGTGTACAGCTCTTCC
GTCTCGGAGAGACCCGTCTTCCGGCACAAGTTCAACGATGCGGTTCGTGCTGGATGATAAG
GCCTTCGTGGGGTCGTTTTGCTGGACCAAGCAACAAGATCACTTGTCTTGTATCTCGGCA
AACTCCGAAGGCATTGTGCAGGTTATACGGGCCACAACAACAGCAACAGCGCGACATACA
TGA

>FGENESH: 6 2 exon (s) 12223 - 14094 480 aa, chain +
MVVGGHPTARETF SRVSNGAIGQRGGGGGTL LCI PSDTLADDKRLKKRSRRLLVSDSTGE
SHNNAKRSAAMYSTAFNFKLP GTTKTYPGTSTTNSSLDPPVDSSRMPEPE SC DQSRHETW
EFETLVFPSCETPSLLSSDVI STIDYDETQ LIATGGLARKIRICSYQELVNGMGRECFQ
GRNVKNLFTTICMPAKLSSLKWRP GGSEVIACGDYDGSVTEWDVEHGVTV SERYEHTGRT
VWSIDYSRDFRGLLASASSDSTVRFWSRNVER SVGI I KSLKRNSMCCVEFGRSSGPCCYV
AVACADASVYLYDMRSLGSPVATLRGHERSVSYVRWLGENSLVSSSPDGTIRLWDIASTV
TGTGESWHARND ELP IARTFGCHSNTRNFVGLSVASSGGGSGGLIASGSENNEVFVYSSS
VSERP VFRHKFNDAV LDDKAFVGSVCWTKQDHL SLISANSEGIVQVIRATTTATARHT

>FGENESH:[mRNA] 7 6 exon (s) 14409 - 16995 1821 bp, chain -
ATGGCGATCGTCAGGGTCGTGGGCGTGGTAGGCGCAGGGCAAATGGGGGCTGGAATCGCG
CAGCTCGCGCCCGCCGCGCAGATGGCCGTGGTGTGATGGCGGACTCCGACGGCGCGGCTCTG
ACGAGGGGCTTGCAGAGCATTTCCTCGTCTGCTGGCGAGATTCTGTAAGAAGGGCGTCATC
TCGGAGGATGAAGCGAATGCGACTCTGGCGCGCGTGTGACGACCACTTCTCTGGCTGAC
ATGAGCTCGGCGGATGTGGTGATCGAGGCTGTCTCCGAGCGAGAGAATGTGAAGAAGGGG
ATTTTCTCGGAGCTGGATAGGCTGCTCAAGCCGTCCGGCGATCCTGGGCTCAAACACGAGC

TCCATCTCGATCACAAAGGCTGGCTGCCTCTACGCAACGTCCTCAGCAAGTGATTGGCATG
CATTTTCATGAACCCGCCGCCATTGATGAAGCTCGTGGAGATCGTCCGGGGCCTGGCAACC
GCGGACGAAGTTTTTGTAGCAGACCAAGGAGCTCGCGGAGAGATTCCGGCAAGACGGTGGTG
AGCTCCC GCGACTTCCC GGGCTTCGTCTGCAACCGGATCCTCATGCCGATGATCAACGAG
GCGTTCTACGCGCTGCTCGAGGGCGTGAGCAGCGCGGAGGAGATCGACACGGCCATGAAG
CTCGGGACGAACCAGCCCATGGGGCCGCTGGCGCTCGCGGATTTTCATCGGCCTCGACACT
TGCTTGTTCGATCATGGGCGTCTCCACGCCGGCTGGGGCGACGCCAAGTACCGCCCCCTGC
CCGCTGCTCGCCAGTACGTGGACGCTGGCTGGCTGGGGCGCAAATCCGGCCGGGGAGTC
TACCACTACCTCTCCAAAATCGGTAAGCAAAGGTTAGCGGCGCGCGCATTGGTGCCCCGTG
CTACCGCCATGGGGAGAAAGAAGCTTGGGAGAGTGGCGGGCGAGCGGAGGAAGCGCGCTT
GATCGCGATCAACAGATTATTTCTCGCGAGTTGAGGCCGATGGTGGATGCTCCCGGCGTT
GATCCGCCCAAGACCGGCACCCCCCGGCCGCGGAAGAGGGCGCGCCGCCTCCCCAGTG
AAGAAACGAAGAGGGCCGGCCTCGGAAGTGCGACACCATCGCCGCCGCGCCGCCGCCGCC
GCCGCCAGCCCGCAGCTGGGCACCAATGGTGGCGTTGGTCCAACCCCCGCCAGGAAGGTC
CGGAAGAGGAAGATCGACCCACTGAGCCCCCACAAGTGGACGCGTTCGCTCGTCCGGCCAG
TCGGTCCATGGCGTGCTCGACGGCTCCTTCGACGCCGGCTACATTCTCACCGTCCGGGTG
GGCGAGACGGACACCATCTCCGCGGCGTCTGTTTTGGGCCGGGACTTTGCGTTCCGATC
ACCACCGCCAACGACATCGCTCCAAATGTGAGATTTGCCGGTGAAGCCGCGGAGGTGCT
GCCGCCACTGCTCGGCTTTCCAGCCCAGTCCCGGCCTCCTCGACCACTCCGAGTTCTTCG
CAAGCGGTGGTAATGCCACCGGCACTGGCCGAGAATCCGCTCGACGTCTCCAGCTCCAGG
CACCACACTCCAGTCAGAGATCACGGGCAGCAGCTCGGATTTGCTCCTGTGGTGCCCTCCC
TTGTTTGGTGTCCAAACTCCCACTGCTGGATTCATCGAGGCCGAAAGAGTTGTTTGGTA
GAGCAGCAGCAGCAGCAGCAGCAGCCCCCTTCTGTTGAGCTCGGATGCTCCCTTCAGCTT
GCGAACGGATCGTCTCCCCAGCGGGAGCAGCAGCAGCGGACTCTAGCGGAGGCTTCGATC
GAAGACATGGATCGGGCCTGA

>FGENESH: 7 6 exon (s) 14409 - 16995 606 aa, chain -
MAIVRVVGVVAGQMGAGIAQLAAAAQMAVVMADSDGAALTRGLQSISSSLARFVKKGVI
SEDEANATLARVSTTTSLADMSSADVIEAVSERENVKKGIFSELDRLKPSAILASNTS
SISITRLAASTQRPQQVIGMHFMNPPPLMKLVEIVRGLATADEVFEQTKELAERFGKTVV
SSRDFPGFVVNRILMPMINEAFYALLEGVSSAEI DTAMKLG TNQPMGPLALADFI GLDT
CLSIMGVLHAGLGDAYRCPPLLAQYVDAGWLGRKSGRGVYHYLSKIGKQRLAARALVPV
LPPWGERSLGEWRASGGSALDRDQQIIISREL RPMVDAPGVDPPKTGT PRPPEEGGAASPV
KKRRGRPRKCDTIAAAAAAAAAASPQLGTNGGVGPTPARKVRKRKIDPLSPPQVDASLVGQ
SVHGVLDGSFDAGYILTVRVGETDTILRGVVFPGPLCVPIT TANDIAPNVRFAGGSRGGA
AATARLSSPVPASSTTPSSSQAVVMPPALAE NPLDVSSSRHHTPVRDHGQQLG FAPVVP
LFGVQTPTAGFIEAGKSCLVEQQQQQQQPLPVELGCSLQLANGSSPQREQQQRTLAEASI
EDMDRA

>FGENESH:[mRNA] 8 4 exon (s) 17156 - 18382 1059 bp, chain +
ATGGCGAGCACGATGCGGCCAGCGCCTCCCGTGTGCTTGTGCGGCGATGGCGCGGCTTCG
TCTAGCAGCTGGACATGGGTGGGAAGAAGCCGAATTTTCATTCTCCGCGGTAAGGAGGCCT
CGCATTTTTCGATTTGGCGATCAGAAGGAAGAATCGTGTCTCAAGTGCGTGGCGGCAAAG
GCAGAGACGGAGCTGGACGGTGGGAGCTCGAGTGGAACCACTGTGGAGGAGGCGCCACCG
GCTCCAAGCACAAGGCCTGATGAAAAAATCTCGAGCACGATCTCTCAAGACTCGTCATCT
CCAATTTCTGCTTTGGCTCTATCCCGACAAGGAGGACCTCCCCGACGACAAAGAGATGACA
ATCTTTGAACACTTGGAAGAGCTTCGGGAGCGTTTGCTCTTGTTCGGTTCGGAGCCGTGGGA
GTGGCAATGCTTGGCTGCTTTGCCTTCGCTAAAGATCTCATCATGTACTTGAATCACCA
GCACACGTACAAGGCGTTTCGTTTCTCCA ACTCTCACCCGGCGAGTATTTCTTCACAACT
CTAAAGGTCTCTGGTTACTGCGGACTTCTCATCGCCAGCCAGTCAATTCTGTACGAGATC

ATCGCGTTTGTAGTCCCGGGGCTAACTCTGAGCGAGAGAAAGTTCCTGGGGCCTATTGTT
CTCGGATCGTCCATTCTCTTCTACGCAGGATTGGCGTTCTCCTACTCGGTGTTGACTCCG
GCAGCGCTAAACTTCTTCGTTTCTACGCCGAAGGAGTGGTAGAATCGATCTGGTCGATC
GACCAGTACTTTGAGTTCATCCTCGTGCTCATGTTTAGCACAGGTCTCGCCTTCCAGGTT
CCAGTGATACTAACTTTTACTGGGACAAACCAAGCTTGTCACTGGCGATCAAATGCTATCG
GTGTGGAGATATGTTGTTGTCGGTGCTGTTGTTGCTGCTGCAGTTCTCACGCCCTCTACA
GATCCGCTAACGCAGATCCTTTTGGCCGGTCCCTTGATTGGACTGTACCTGGGTGGGGCA
TCTCTCGTCAAGTTACTCCAAGCTGGAGAGACTTCCTGA

>FGENESH: 8 4 exon (s) 17156 - 18382 352 aa, chain +
MASTMRPAPPVCLCGDGAASSSSWTWVGRSRISFSAVRRPRIFDLAI RRKNRVLKCVAAK
AETELDGGSSSGTTVEEAPPAPSTRPDEKISSTISQDSSSPISSWLYPKEDLPDDKEMT
IFEHLEELRERLLLSVGA VGVAMLGCF AFAKDLIMYLESPA HVQGV RFLQLSPGEYFFTT
LKVSGYCGLLIASPVILYEIIAFVVPGLT LSRKFLGP IVLGSSILFYAGLAFSYSVLT P
AALNFFVSYAEGVVESIWSIDQYFEFILVLMFSTGLAFQVPVIQ LLLGQTKLVTGDQMLS
VWRYVVVGAVVAAAVLTPSTDPLTQILLAGPLIGLYLGGASLVKLLQAGETS

>FGENESH:[mRNA] 9 1 exon (s) 22268 - 22528 261 bp, chain -
ATGGAGTCCGAGATGGACCGAGACGGAGTCCGAGATGGAGTTCGAGATGGACCCGAGATG
GAATCCGAGATGGAGTCTGAGAAGGACCTGAGATGGAGTCCGAGGTTCGAGACCGAGACCA
AGACCGAGACCGAGACCAAGACTGGGACCAAGACCGAGACCGAGACTAAGATCGGGACCG
AGACCGAGACCAAGGCCGAGACCGAGGCCGAGTTCGAGTCCGAGTCCAAGTCCGAGTCCA
AGTTTGTAGTCTGAGAGGGTGA

>FGENESH: 9 1 exon (s) 22268 - 22528 86 aa, chain -
MESEMDRDGVRDGV RDGP EMESEMESEKDLRWSRSPRSPRPRPRLGPRPRPRLRSGP
RPRPRPRPRPSSSPSPSPSLSLRG

>FGENESH:[mRNA] 10 17 exon (s) 27984 - 32821 3714 bp, chain -
ATGGGAGCCGTATCGCTGCTCTTGCTGGCGTGCCCGACGAATCCGAGCGCCCGGAGCAGG
ATTCTGCCCCGCATTTCGTCTCGCCGGGGTAAGATTCTTGTCAGAGCGAAGGCAGGGAGC
AATGCAGGGCATACTCTCGCGGTAGAGCGGCTTCGCAGCGCTCCAGGCGACGGGCAGCC
GATTTTCTGCGGATTTGCCGTCCATCGAGCGACGGGATTCTAGCTGGCTTGGGAGCTTG
CCGAAGATTTTGGGGGTTGGAATCGCTGTTGTCGCTCTGGCTGCCTTGGGAGCTCATCGC
CCGGCGTTTGCTGCTCCTGCTTTTGTGGGAGAGGAGGAAGAGCAGAAGATCACAGCCGCG
GATTTACATTCTAGATTTGTGGAGTGAAGGACGGGTTTCATAGAGAGATGGAGCAGATG
GGACCGATGAGGAAGAGATTGCTTGAGATCTATGGCTTGGACAAGAGGTTTGAGAAGTTC
CGGCAGGGAATCGAAGAGAGGGAATTGATGTACAGGGAAGTTCTTGGTGTCAAGGACATG
CTGAAAGAGATTGAGGAAC TGGCTGGGAAGTCCGAAGCCCGAAGCCTCGAGGTGGAATTT
AGAGTCCGCGAGGCTCTAGTGCAAGCCCGGCGAAAGTTGACGATGGGAGCTCGAAGGTTG
CAAGGAGAGGTTTTGCTAAAGACGAGCTCGCACCTGGCTAAGCTGAGGAAGGAAGAAGCG
TCCCTGATGAAGGAGCTCAACGAGGCTATGGATGGCTTTCCTGGTTTTGAGAAAGAAGTTT
GACGCTGCGGAAACGCAACCAGCAGAGGACGATCTAGGTGGCTCAACGAAGGCCTTCTCT
CCGAAGTCGGAATCGGATGACCAAGTCGATGCTCAGGAATCGCTATTCTTTTCAAAGACC
GAGGAGCTGAGAGCTAAAATTGTGAACGTGAAAGCGGAGCTTGTGGGATCCGAGTACGAG
GGGTGGCTGAGGGCGTGGCACGAAATACCAA ACTTTACTGCCATTTTTGCTGCGGAGCTC
GAGGAGGCTGCCAAGTTCCGGCTGCCCGAACGTCTAGAGTCACGCATAGCGAACGATCTT
AGAGCGTCAGGGAAAGAAATATGGGAGGAAAGTATTTTGCCACTGGCTTTAGACAAACAG
GAGAAAGGCGTAGTGCCAGTCGACAGTACCGTGA AATCTGAGGTGGATGAATTGCTTCGA
AGGCATATCGAGTTTGTGTTCCGATGAAAGAAAAGCAGTGTCGGCTGTTGACGGAAAA
CTAGGATCGATCGAACTTTATTCTGCTCTAGGGGGAAAGCGTTTCAGACGTTCCGGGCCCT
GAAGCCGTGAAGACAATTTTGGGATGGCGGAAGTGGTGCTCGATCAAGAAAGAAGAATTA

AAGCAGCACTTGCTCGACCATCCGGAGGCTGGCAAGAAATATATTCAAGAGCAGCAGGAG
AAATTGCTTTTAGCGAGGGATAGAGTTCTCCAGAACACTTGGTATAATGAGAAATCTCGG
CGGTGGGAGATGTCAGACGCAGCGGCCATGTATGCTGTAGAGAAGAATCTCGTCCATCAC
GTAAGAATTCGGCATGACCTTTCGTGTATCTTTGTGGCCTCAAAGGTGACGATCAAGAG
TACGTTGTCAATGTCGAGGATCTGAACGAAAGGTTGGAAGACGTTGGTGGCTTCGACGCG
TTTTATGCCATGTTAAAGGAGAACAAAATCCCTACAGTGATGGAAAAATGTGGATACCT
TTACGAGAGTGGTCCGCTTTCAGTTGATCAGGCTTCTTTTCGTATGCTGATAGACGCT
GTTTTGTACGTATGGAACCTTGGGCGTTCGTTGCAGCAGCTAGAGACTTATACTTTGAAAGC
CTTGACGCTCTCTTGGGAGAACTGATGGTGCATTCGGTTACCCGGCAATTCTTAAGCTT
CCTCGCCTGGTACGAGAAATGATTGGGTTTGAACCTACCAAAGGGGTCAGAGTTTCTTGAA
CCGACATTTCTTATGAAATGGCAGACGGCAGCCAGGCTAAGTTTGATGCTCGTCAGATC
GCGTTGCCGTTTTGGATGGATCTTCCACTTCGTATCTACGTGGTTGGTGTTCGCTCTTG
TTTGTGCGTAACACGGGTGGCAAAAGCTATTTATCGTTTTATTGGACCTCCTCCACTGCCT
AAGTCTCAGTATGACAAAGCTGTGGAACCTACATATGAAGGTCTACAAAGAGATGACACCT
CTTCTGAAGCAAGTAACCTACAAATCCTATCAAGAGAGTGTTTGATAAGATGAAGAGAATA
CGAAAGCCACCAGTCTCGCTAAACGATTTTGTGGTATTGAGACTTTTAGAGAAGAGGTA
GATGAAGTCGTCAGCTTCTGAGAGATCCGGGAGCTTTCAAAAAATTAGGTGCACGGGCT
CCGCGGGGCGTTATCATTGTAGGAGAAACAGGAACCGGAAAGACGACACTGGCTCGAGCG
ATCGCATCCGAAGCGCGAGTTCCAGTCGTTGAGCTGCAAAGCTTTGACTTGCAAGGCGGA
GGGAATGGTTCGGGCAAAGGCTGCAAATGTTTCGTGAGCTTTTTAAGACGGCCCGACAG
TTTGCACCTATTATCCTCTTCATGGACGACTTTGACGACTTCGTTGGCAAGCGGGGAGAG
ACCATGCATTTAGACACACAGGAGCTGGAGACTCTGATAAATCAAATGCTCGTTGAGCTT
GATGGGTTTTGAAACACAGGAAGGCGTGGTTGTACTTGCTACAACCTAGCCATCCTGAGAGG
ATAGATGAAGCTCTGCGTAGACCGGGGCGAATGGATAGGACAATTAATTTGCTTCCGCCC
AACAGAACTCAGCGTGAGCAAATGCTTCGTCTGATTGCTCGGAACACCATGTTTCCCAT
GTGGTTGACTGGGTAAATTGGGCAGAGGTAGCAGAGAAGACAGAAGGCCTTACTTATGTT
GACCTTGAGCCTATTCCTGTTAATTTGCAACAATGCGCTACCCACTGGAAAACCAAAGAC
GAGGAAGAGCTTTTTAGTTATCTGTGCATATTAGATAAATATAACAAAATAGTACCAGAA
TGGATTAGGAAGACACCTCTCCTCAAGAAATGGGATCAGAGCGTGATTGATTGGCTCGGC
CTCCGTGTTACGAAGGAGGATTTCGAAATGACTGTTTCGGTATATGGACGTGCGAGGCAGA
TCAAAGCCAGGAATCGAGTTCACGATCCTCTTTATCCGTGGACGAGAGAAACGAAGTAT
CCTCACGCGGTATGGGCTGCTGCTCGAGGCTTGCTTGCGCGTTTGCTTCCCAACTTTGAT
ATTGTCGAATACATATGGCTAGACGAAACATCGTGGGAGATTGCGGCGGACATGGTCATG
GAGTATGGATGGGCTTTGGATGACAGTCCGATGGTGTACCGTAGCAAAGGGGAGGGCCCA
ATGGATATGGGCTTGACAGGAGATGACGGTGATAGAGAGAAAGGTCACGAAGCTTCTCACT
GTTGCTTGTGACCGAGCCAGCCAAATTTCTGGCACGAAACAAACAAGTGCTTGAAGCCTTG
GTTGAGCAGCTAGTTGTGCATGAAAACATCACGCAGGAGTTCATGGAGAAGACTCTCAAG
GAGAAAGGAGCAACTTTTCGAGGGGGAGCCATTTACACTACAGGATTTGGATTCTTCCTTA
CAGGAACAGCCTACAAATGGCACAGGGAGGTTAATGGGAGCTTTAGTGAATTGA

>FGENESH: 10 17 exon (s) 27984 - 32821 1237 aa, chain -
MGAVSLLLLLACPTNPSARSRI PAPHSSRRGKILVRAKAGSNAGHTLAVERLRSAPRRRAA
DFPADLPSIERRDSSWLGLAKILGVGIAVVALAALGAHRPAFAAPAFVGEEEEQKITAA
DLHSRFVEWKDGFHREMEQMGPMPKRLLLEIYGLDKRFKFRQGI EERELMYREVLGVKDM
LKEIEELAGKSEARSLEVEFRVREALVQARRKLTMGARRLQGEVLLKTS SHLAKLRKEEA
SLMKELNEAMDGFPLRKKFDAAETQPAEDDLGGSTKAFSPKSESDDQVDAQESLFFSKT
EELRAKIVNVKAELVGSEYEGWLRWHEIPNFTAIFAAELEEEAAKFRLPERLESRIANDL
RASGKEIWEESILPLALDKQEKGVPVDSTVKSEVDELLRRHIEFAGSDERKAVSAVDGK
LGSIELYSALGGSVSDVPGPEAVKTI LGWRKWCSIKKEELKQHLLDHPEAGKKYIQEQQE

KLLLARDRVLQNTWYNEKSRRWEMSDAAAMYAVEKNLVHHVIRHDLRVI FVGLKGDDQE
YVVNVEDLNERLEDVGGFDFYAMLKENKIPTVMEKMWIPLREWSAFQLIRLPFVMLIDA
VLYVWNLGVVAAARDLYFESLDALLGELMVRFGYPAILKLPRLVREMIGFELPKGSEFLE
PTFLMKWQTAAQAKFDARQIALPFWMDLPLRIYVGVPLLFVVTRVAKAIYRFIGPPPLP
KSQYDKAVELHMKVYKEMTPLLKQVTTNPIKRVFDKMKRIRKPPVSLNDFVGIETFREEV
DEVVSFLRDPGAFKKLGARAPRGVIVGETGTGKTTLARAIASEARVPVVELQSFDLQGG
GEWVGQKAANVRELFKTARQFAPIILFMDDFDDFVVGKRGETMHLDTQELETLINQMLVEL
DGFETQEGVVVLATTSHPERIDEALRRPGRMDRTIKLLPPNRTQREQMLRLIARNTMFPH
VVDWVNWAEVAEKTEGLTYVDLEPIPVNLQQCATHWKTKDEEELFSYLCILDKYNKIVPE
WIRKTPLLKKWDQSVIDWLGLRVTKEDFEMTVRYMDVVRGRSKPGIEFHDPLYPWTRETKY
PHAVWAAARGLLARLLPNFDIVEYIWLDETSWEIAADMVMEYGWALDDSPMVYRSKGE GP
MDMGLQEMTVIERKVTKLLTVACDRASQILARNKQVLEALVEQLVVHENITQEFMEKTLK
EKGATFEGEPFTLQDL DSSLQEQPTNGTGRLMGALVN

>FGENESH: [mRNA] 11 2 exon (s) 33215 - 35059 1410 bp, chain +
ATGACGGGCGTGGATTCCGTGGGCGTGAATTGGGGCACAGTCACGTCTCACCGCCTCCCG
GACAAGATGATCGTCAAGCTGCTCCAGGAAAGCCGGATTTCCAAGGTGAAGCTCTTCGAC
GCGGATCCCAGCGTGATCCGGGCCCTTCGCAGGGACCGATTTGGAGCTCATGGTTGCGGTT
CCAAACGATCTCCTCGAGGACATGGCGTTTAGCGAGAAGGCCGCGCGGAGATTTGTGCGA
AGAAACATCACTAAGTTCTTATCCCACCAAGATGGCGTCAATATCAGGTACATTGCGGTG
GGAAACGAACCTTTTCTCAAAGCTTACAACGGATCATAACGAGGACGTGACCATCCCGGCC
ATCCGAAACATGCAACAGGCGATCGAACAGGCCGGGATCCAACACAAGGTGACGCTGGTG
GTACCACTCAACGCAGACATTCTCACGAATTCGGCAACTCAGGCAAACCATCGCAAGGA
GCCATCCGCCCCGACATCCGGAGGCTGATGCGAACGATCCTCGAGTTCCTGGACAAGCAC
AAAGCTCCCTTCGTATCAACATGTATCCCTTCCTCAGCTTGCAACAAGACTCTCACTTC
CCAAGCGACTTCGCCTTCTTCGACGGCAGCGCGCACGTCCTGTCCGACGGCAGAAACTTC
TACTCAAACGTTTTTCGACGCGAGCTACGACTTGCTCGTCTCGGCGCTGGCGAGAGAAGGT
TTCCAGACATGGAGATCGTCGTGGGAGAGGTCGGCTGGCCAACCGATGGAGATATCTAT
GCAAACATCCCAAACGCGCAGCGGTTCAACCAGCAGCTCATCCGGCACGTAACCAGCAAC
CGAGGCACACCACTCCGGCCGGGGATCCCGATCGAGATATACATCTTCGGCCTCGTCGAC
GAGGACCGGAAGAGTGTTCTTCCGGGCAACTTTGAGCGGCACTGGGGGCTTTACCGCTAC
GATGGCAAGCCGAAGTACTCGCTGGACGTGTCCGGCCGCGGTGGAAACGGTCTGAGCAGC
CCGATCAACCTCATGAGCGTCTCCGGGGTGACTTACCTCCCGTCGCGCTGGTGCCTTCTC
AATCCGGAAGTGGACGATCTCTCAAAGCTTCCGGCGACGATAAGCTACGCTTGCAGCTAT
GCCGACTGTAGCACGCTCGCTTACGGGGGATCTTGCAACCACATTGGACAAACAGGGAAT
GCGTCGTATGCTTTCAACAGCTTCTACCAGATGAACAACCAGCGTACCGAGAGCTGCCAC
TTTGGAGGCCTGGGGATGATCACGGAGACTGATCCTTCCAGTGGGAACTGCCAGTTTCGG
GTGGAGATCACGCCTTGGTCCGCTGCTAGCACTGTGTGGAGGGGTGGTGCTGCTGTCTC
GTGGTTTCCTTGTTGGTAGCTTTGTCGTAA

>FGENESH: 11 2 exon (s) 33215 - 35059 469 aa, chain +
MTGVDSVGVNWGTVTSHRLPDKMIVKLLQESRISKVKLFDADPSVIRAFAGTDLELMVAV
PNDLLEDMAFSEKAARRFVRRNITKFLSHQDGVNIRYIAVGNPFLKAYNGSYEDVTIPA
IRNMQQAIEQAGIQHKVTLVPLNADILTNISGNSGKPSQGAIRPDIRRLMRTILEFLDKH
KAPFVINMYPFLSLQQDSHFPSDFAFFDGSAAHVLSDGRNFYSNVFDASYDLLVSALAREG
FPDMEIVVGEVWPTDGDIIYANIPNAQRFNQQLIRHVTSNRGTPLRPGIPIEYIFGLVD
EDRKSVPNGFERHWGLYRYDGKPKYSLDVSGRGGNGLSSPINLMSVSGVTYLPSRWCVL
NPEVDDL SKLPATISYACSYADCSTLAYGGSCNHIGQTGNASYAFNSFYQMNNQRTE SCH
FGGLGMITETDPSSGNCQFRVEITPWSAASTVWRGGA AVLVSLLVALS

>FGENESH: [mRNA] 12 6 exon (s) 35757 - 37065 621 bp, chain -

ATGGAGGACGAGAGCGCGGAGGGCAGCGATCAAGGCGCCAGTTCTTCCGATGAGGAAGTG
ATTTTGCCTGAGCTTGAACCAGAACCAGAAAGTGGATCTTCCAGGGAGGAAGTAATGCTT
CACACCGAGGGGACGCCACGAGCGAGTCGTCTGAGCGAACTCGATCAGCCGAGCCAACCA
GCAAACCGGCTAGGGACTTACGGATCCAGATCTCACAGGCGACGAATGGCGGCCTTGAAG
CCGATGGAGAACAAGAGAGATCACCCAGCGGCCTCCATGATCGCTCAGATGGCCAAAGCG
GGATCCACTGGGAGCCTCGCGTCTCATCCCGACCCCAACCTCGCGGAGGACCTGCAGGAT
AAGATGGAACACCGCTTTGACATCGACGAGATCCAGGTGAAGAACGAACAGCTCGCGATC
TGGGCCATCGAGAACGGCTTCTCGCTCTTCTCCACTCGTCTCAAGGCCCCAGTCTTTTGA
AGGCTCCTGGTAGCGGTTTCGCTGCTTCCAGAGCTTTCCAACCGCGGAGAGC
TTGCTCTTGGCCAAAAGCGGAGAATGCCTTGGCAAAGCATTGTCACCACCGTCGCGATG
GATAAAAATCATGACAATTAG

>FGENESH: 12 6 exon (s) 35757 - 37065 206 aa, chain -
MEDESAEGSDQGASSSDEEVILRELEPEPESESSREEVMLHTEGTPRASRLSELQPSQP
ANRLGTYGSRSHRRRMAALKPMENKRDHPAASMIQMAKAGSTGSLASHPDPNLAEDLQD
KMEHRFDIDEIQVKNEQLAIWAIENGFSLFSTRLLKAPVFRLLLVAVRCFLLLQSFPTAES
LLLAKSGECLGKSI VTTVMAMDKNHDN

>FGENESH:[mRNA] 13 2 exon (s) 37784 - 39157 1299 bp, chain +
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AGCAGCAGCAGTAAACCTCACAAGGCCAACGATGCGGGATGGGAGGCGATCCGGTCCGGTG
GAAGCGCGCGACGGGAACATCAATCTCTCCACTTCAAGCTCCTCCAGCGATTGGGCAGC
GGCGACATCGGCAGCGTCTATCTATCGGAATTGCGGGGCTTTCGCTGCCTGTTTGCATG
AAGGTGATGGACAAGACCGCTCTGGCAGCCAGGAACAAGCTCCTGAGAGCTGCCACCGAG
AGGTCCATCCTGGAGAAGCTCGATCATCCCTTCTCCCAACGCTCTACGCGCACTTCGAC
ACGGCGAATTTTTCTGTCCTGATTATGGAGTACTGCCCGGGAGGAGATCTCCACACGCTG
CGCCAGCGGCAGCTCACAAGCGATTTCGACAACGAAGCAGTGAGGTTCTACGCAGCAGAG
ATCTTGCTCGCGCTCGAGTACCTCCACATGATGGGCGTCGTCTACCGGGATTTGAAGCCC
GAGAATGTGCTCGTCCGCCACGACGGCCACATCATGCTCTCGGACTTCGACCTCTCCCTG
ATCTGCGATGTGAGCCCTACGGTGATCCAATCGCCACCTCCAGGAACAGCAGCGAGAAGA
AGAGCCCCCTCTTTCTCCTCGTCTCCTCGTCTCCTCAACCAGCAAATTAGGGCGCCTC
GGCGGGGGCGCATCGCCGTCGTGCATCCTGCCAGCGTGTGTGCTCCCTGCACGGTGGAC
CGCCGATGCCCCCAGCGGGTCAACTAAGGTCAACACGGGTCAACCCCTCCCGGAGCTA
GTCGCCGAGCCACTGGCGCGCGCTCCATGTCTGTTCTGGGCACGCACGAGTACCTGGCG
CCCGAGATAATCTCCGGCTATGGCCACGGCAGCGCGGTGGACTGGTGGACGCTGGGCATT
TTCTCTTCGAGATGTTCCACGGGAGGACGCCCTTCAAGGGGGGCGACAACGAGAGCACG
CTGGTGAATGTGCTGACCAAGCCGCTCGAATTCGGGGGCGCCCGGAGGGCGTGGAGCTC
GGCGAGGACGCCAGGAGCTTGATCCGGGGCCTCCTCGCCAAGGATCCCGCCAAGCGCATT
GCCTCCGCCAGGGGCGCCGTGGAGATCAAGCAGCACCCCTTCTTCGCGGGCACGAATTGG
GCGCTGGTTTCGCTGCGCCGCCCCGCCCCGAGGTCCCCAAGGCGCTCCTCTGGCGGAAGAAG
AACACGGGATCCAAGAGCGACGACGTTGAATACTTCTAG

>FGENESH: 13 2 exon (s) 37784 - 39157 432 aa, chain +
MGDDNEEDRQSVVSRSSSSCRSSSSKPHKANDAGWEAIRSVEARDGNINLSHFLLQRLGS
GDIGSVYLSELRGFRCLFAMKVMKDTALAARNKLLRAATERSILEKLDHPFLPTLYAHFD
TANFSLIMEYCPGGDLHTLRQRQLTKRFDNEAVRFYAAEILLALEYLHMMGVVYRDLKP
ENVLVRHDGHIMLSDFDLSLICDVSPVTIQSPPPGTAARRRAPSFSSSSSSSSSTSKLGR
GGGASPSCILPACVAPCTVDRPMPAGQLRSTRVNPLPELVAEPTGARSMSFVGTHEYLA
PEIISGYGHGSAVDWWTGLIFLFEMFHGRTPFKGGDNESTLVNVLTKEPFGGAAEGVEL
GEDARSLIRGLLAKDPAKRIASARGAVEIKQHPFFAGTNWALVRCAPPEVPAKLLWRKK
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>FGENESH:[mRNA] 14 10 exon (s) 39265 - 45184 3978 bp, chain -
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CTCGCTCAGCAGCCGGGCCGATTCAACATTGTTCTCCAGAATGCCGGCATTTCCTCTATG
CACACCGCCGTCACACTACTATGGTAACGTATCTTCCCTCGACCGCACCAACATTGGGCCT
TCGGCAATCAACCTGGTCGGAACTGCCGAGATAATCCAGCAGACATGATGACCACCAC
GACTGCACCGCTCACTCGGTCACTACGATCCATCCTCTAACACGGTACGCCCCGTTTTTC
ATATACTCGGACACCTGGTGTAGTTCGGGCCAGTTCCTTCCCAATGGAACCTCTCATGCAA
ACCGGGGGGAGTTCGACGGTGGTAGCATCATCCGCTACTTCACTCCCTGCTCCAGCGGT
TCCTGGTGCAACTGGATGGAGTCGAGCACCAACTTGCAATCCTCAAGGTGGTACGCGAGC
AACCAGATCCTCCCCGACGGACGAATTATCGTTGTTGGCGGCCGCGGAGTCTACAACACTAC
GAGTTCAGCCGACTGGCGGCCAGTTCATCTCCAGTTCCTCAAGGATACGGCCGACTTC
CAGGATGACAACTTGTATCCATACCTCCACCTCCTCCCAAGCAACCTTCTCTACATCTTT
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ACCATCCCAGGCGAGCCGAGGAACCTCCCTGTTTACAGGAAGCTCCGTCATGCTCGCTCTC
GACACCGCCAACAGCTACTCAAAGGCCGAAGTCTCGTCTGCGGTGGAGCAAACCAGGCC
TCGTTCAAAAACCTCGGACGCTCAATACGGTGCCTCGCAGACCTGCGGCCGGATGGAAGTC
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ACTTTCGAGATCCAGGCTCCGTCCACCATCCCCGAGTTTATCACTCCACCGCCAACCTT
CTTCCCGACGGCCGAGTTCGTTGCTGGGAGTAACACCCGCTACACGTATCAGTACACT
GGCCCATTTCCGACCGAGCTCCGAGTGGAACCTTCTCTCCGGCATACTTGGACGCTACC
AATGACTGGCTGAGGCCGAGGATCGCGAAGAACCCTTACCATCACCTACGGCATGCCT
TTCAGCGTCGACGTTGCGATCCCCGAAAGCTGGTCGGGAACATCCAGCTTACGCTGCTG
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CAGGCAGTATGGGTCTGAGCATTGAAAGCTTGTGTTGGTAAGTGGAGTGTGACGAATAAA
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CTCGGCATTTTCATTCCAGATGCCACGCCTACACTGCCGGATTCCGAGATGAGCGAGGCG
CAAGTAACTGCCGCTTCCAAGAGCTCCACAGGCTGCGCTACGGATTTCTCCAAGGTGGAC
TACGCCGAGGTGACGAGCGTTTGCAAGGGACCCAGTATCACCAGGAGGCGTGCTGTGGC
GCGTTCAAGAAGATGGCTTGCAAGTACACGACCCAAGTGAACGATTTCTCCACCACTTGC
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GGGCGATGCAACAGTGGCAGTAGCCTAATGGGTGAGCGCATTCTTCCATGGCGCCAGCTA
CTGGAGAGCGCTCTAGAATCGCATCTCAGCTCCAGCACAGCAGATTTTGTGAGCTGAGC
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GCTGTACTGTCTGTGAAGATTATGTGCAGCGCTTTTTGGTTTGTACTACTTCACTGAT
AGCTGGGAACAATTTTCGCATTACGGTGACATCGAAGTTATAAGCCACACGGAAGACGAT
CCGTTAAAGAAAGAGATAAGAGAGAAGTCATGGTTTAGCAGCTCTTTGCAAACCTCGAAAA
CAATTTACGTGGCCACATCCAGGCCAGCCAAAAGAGTCTCATCCAGAAGAGGTTCCGGCTC
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CGTGCAATGCCGTCGCTCCAAGTCGCCAAGGAGTTCGCCGATGGATTGTTCTTCGTGGAT
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AATCCAATCGCCTCGAGAGACGTAACCATCGACGAGAAGCTCCGGATCTGGGCGAGGGTC
TTTCTCCCCAAAGGTAAGAACGAAAAGCTTCCAGTAGTGCTCTACTTCCATGGCGGCCGA

TTCGTGTCCTTCACCGCGAATACCTTGGAGTTCATGTCCTCTGCGAGAGCATCTCCAAG
AAACTGGGAGCTCTCGTGGTCTCTGTCAATTACCGCCTAGCTCCCGAGAACCGGCTCCCG
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GGGCTCGACGTGCTGCGCGATCGCGCGCTGGAATTCGTGGAGGTGATGCGCGAATGTGGG
ATGGATCCGGAGCTTTTGTGCTCGAGGCCGCGGATCACGCCTTCTATGTTGCTCCAGGA
TCCCGGGAAGTGGCACAATCTTGGACAAACTATCGCTAGCCCTCAATCCGAGGATGTCA
CCAGCTGCAAGGAAACAAGCTCGTCCTCTGGAATCGTCCGGATCCGGCAATCCTCCAGCG
GATACGCGACGCACAGAAGAGCGTAGCCCTTGTGACCACATCGTCGCTCAGCATCCCCT
CCGATTGATTCACTCGCCCCCTCTCCAGCTTCGCGGGGCAAGTCATGCACACCCCGAGCT
TGCAATCGTGCGGAACCTCCACCCCTTCTCGAGCGCCTTGGACAGGATCGTCTCGTCCT
CGGGCACTCTCAATGTGTGGATCTTCCCTCGTGCTCCATCTCCACCTCAAACACCCCTCG
GCCCCGCGCACTGGAGCCTCGCGCCGCGCATCCTCGCCCTGCCAGCGCCGAATTTCCC
CAAATCTCTCACCTCGCGCCCGGACGAGGCACATTCAGCCACACCCAGAGTCGCCATTG
CCACAGCTCTGTTTTTAG

>FGENESH: 14 10 exon (s) 39265 - 45184 1325 aa, chain -
MNNRRARTVLALLSCCFCLSLAQQPGRFNIVLQNAGISSMHTAVTHYGNVIFLDRTNIGP
SAINLVGNCRDNPADMMTTHDCTAHSV IYD PSSNTVRPVFIYS DTWCSSGQFLPNGTLMQ
TGGSSDGGSIIRYFTPCSSGSWCNWMESSTNLQSSRWYASNQILPDGRIIVVGGRGVNY
EFQPTGGQFYLQFLKDTADFQDDNLYPYLHLLPSNLLYIFANRDSILLNYFTNTVVRKFP
TIPGEPRNYPCSGSSVMLALDTANSYSKAEVLVCGGANQASFKNSDAQYGASQTCGRMEV
TSNSPYWMSYMPFRNMGMVLLPTAKVLIINGAQNQSQGYLLASNPILNPLLYDPDKK
TFEIQAPSTIPRVYHSTANLLPDGRVLVAGSNTRYTYQYTGPFPEL RVETFSPAYLDAT
NDWLRPRIAKNPFTITYGMPFSVDVAIPGKLVGNIQLTLLSSPFTTHSFSQQRQLKLPV
AASVLSYANTYYVASTAPPSSVVAPPSYMLFALHNGIP SQAVVWLSIESLFGKWSVTNK
FISSFPHLYHRRCDLFARSIVSLRAWPWLPRPKSSSSSWRLSSQSLYTVSIGSCDGGLCN
LGFIFIPDAHAYTAGFEMSEAQVTAASKSSTGCATDFSKVDYAEVTSVCKGPQYHQEACCG
AFKKMACKYTTQVNDFSTTCPVEFMAYLNYAGNYPNGV FVGR CNSGSSLMGERILPWRQL
LESALESHSQLQHSRFCQLSLVILEILAILARFSQEFFVLAVLSCEDYVQRFLVCYYFTD
SWEQFRIHGDI EVISHTEDDPLKKEIREKSWFSSSLQTRKQFTWPHPGQPKESHPEEVR
ESTQPPVDTF CVVTLHPVERRAMP SLQVAKEFPDGLFFVDRSFARKSMPKSLCVEADPSG
NPIASRDVTIDEKLR IWARVFLPKGKNEKLPVVLYFHGGGFVSFTANTLEFHVLCESISK
KLGALVSVNYRLAPENRLPAAYDDGFAALKWLAQE QGRKDPWIAAHADLSKILVMGDS
AGGNLAHVAMRAAAEDLGELQIKGRVLIQPFFGGIARLPSETNLQSPTSLLSTDMCDRF
WELALPVGASRNHPYCRVFAPDLKAQLRELDLPSTLVVAGGLDVLDRDALEFVEVMRECG
MDPELLLLLEAADHAFYVAPGSREVAQFLDKLSLALNPRMSPAARKQARPLESSGSGNPPA
DTRRTEERSPCRPHRRSASPPIDSLAPSPASRGKSCTPRACNRAEPPPLPRAPWTGSSRP
RALSMCGSSPRAPSPQTPSAPRTGASRRASSPCPAPNFPQISHLAPGRGTFQPHPE SPL
PQLCF

>FGENESH: [mRNA] 15 8 exon (s) 46663 - 48636 1554 bp, chain -
ATGGCGAATTTATCTATATTCCTCTGTGTGTTTCTTGCCATTGCTATTGCTTGCTGCTGT
GGCAAAGTGC GTTAGCATCTCACGATCACACTGGAAAGAAGAAGCCAGGGATGGGGAC
CGGGATTGGTCGCCCAAGCATTACCACCATCACACAAGGCTCCAAGGCTCCAAGGTT

AGATCTCCTCCTCTGTTTGAAGATGAATCTCCTCCGCCACCCCATCATGCTCCAAAGGCT
CCGAAGGCTCCAAAGGTTAGATCTCCTCCTCCGTTTGAAGATGAATCTCCTCTGCCACCC
CATCATGCTCCAAAGCCTCCGAAAGCTCCAAAGGCTCCAAAGGCTCCAAAGGTTAGATCT
CCTCCGCCAGCCAAGGCTCCTCCTCCCCCTTCTGTACAGCTACCACGGTTCGCCGCCACCA
CCCAGCTCGTACCAGCTCACTGGCAAAGAGTTTAAAGTCAAGAAGTATGGAGCTGTCCGGC
GATGGAAAGCACGATGATGCCAGGCCTTCTTAGACGCTTACAATGCAGCATGCCAAGCC
GGCGACAATGCCGTTATCTTGGTTCATCGACGTCGGCGGGCTACTACCTCAGCCCAATC
TCGTTTGGAGAGTGTACCAGCGTCACAATGAAGGTGGATGGAACTCTGCATGCCATCCCA
AGGAGTGCCTGGCTGTCCAAGTTTTCTCCGAGAAAAGCTGGCTCCTGTTCACTAAGGTG
ACGGACTTCACACTGACTGGCGGAACTTTCAACGGCAACGGCCAAGATTGGTGGGCTCAT
TCCTGTAAGAAAGACAAAAGCCAGCACTGCACCGATGCTCCCACGGCTGTGAGGTTTTGAG
GACAGCAAGAACATCAAGGTGGAAGGCATCACCATAACCAACAGTCCCCAAATCCACATT
ACGTTTTTCGGACTCTCAAGCCATCCAGGCAACAGACGTGGTGATAAACTCTCCAGAAAGC
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GACATCTCTGCCGGTGACGACTGCGTGTGATTGTTTTCTGGGAGCTCCAACATCCAGGTT
TTGGGCGGGCGATGCGGCCCTGGTACGGCATCAGCATCGGAAGCCTTGGCAAGGGCGGG
TCTTACGCCACCGTTTTCCAACGTTCAAGTCTCAGGTGTCAAGATCGACGCGGCCACAAAT
GGCGTACGGATCAAGACATGGCAGGGTGGCAAAGGTTACGTGAGCAATGTGATATTTGAA
AATATCAGCATGGACAACGTGAAGAACCCGATCATTATCGATCAAAACTACTGCGATGGC
GGCTGTGGCAAGAAGCGGGGGTCTCTCTAACCAATCCAGGGAGTTACGTACTCGAATATC
GTGGGCACTTCGGCATCTCCGGACGGAATCAACTTGCACTGCAGCTCAAGCGGCGCATGC
ACGAACATCCACTTCAGCAATGTCAAGCTGACCCTGGGCAGCTCTGGAAAGGCGGCTGGA
GCGGTTTTGCGAGAATGTTCAAGGCTACACCTCAGATTGCAGAAAGTTCAAGTTAG

>FGENESH: 15 8 exon (s) 46663 - 48636 517 aa, chain -
MANLSIFLCVFLAIAIACCCGQSALASHDHTGKKKPRDGRDWSPKHSPPSHKAPKAPKV
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GDNAVILVPSTSA GYYLSPISFGECTSVTMKVDGTLHAI PRSAWLSKFSSEKSWLLFTKV
TDFTLTGGTFNGNGQDWWAH SCKKDKSQHCTDAPTAVRFEDSKNIKVEGITITNSPQIHI
TFSDSQAIQATDVVINSPESSPNTDGIHVSGSTNVVVRDADISAGDDCVSIVSGSSNIQV
LGGRCGPGHGISIGSLGKGGSYATVSNVQVSGVKIDAATNGVRIKTWQGGKGYVSNVIFE
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>FGENESH: [mRNA] 16 4 exon (s) 48850 - 49940 933 bp, chain +
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GCCACTAGAGCTCTCGCGAGATCGGAGCCTGTTTCTACTGTGGAGGAGATCCATGCGCGC
GTTTTCCAGGTGGAGGCGCTGCTGGATTTGATAAAATGGGACAGCAGTGGCTTGGCTGTG
GCGATTGCGCAGGATGTTGACACTGGGGCGATTTTGATGCAGGGATTTGTTAATCGGGAC
GCTGTCTCGGCCACGATTGCGTCCAAGCGAGCGACGTATTTTAGTCGAAGTCGTGATCT
CTTTGGACCAAAGGAGAGACGTCATCCAATTTTATTGATGTTGTGGATGTCTATCTCGAC
TGTGATAGAGATTGATTATTTACTTGGGAAAGCCTGACGGGCCGACTTGTACACACAGGA
GCTGATACGTGCTACTTTACTCGTGTCTGCTGATATCCTCCAGAACAAGCCTCTGATCGGA
GAGAATGGATTGGCAACTTCTACCTTGTACGATTTGGAAAGAGTTATTCAACAGCGGAAG
TCAGAGCCTGATGGGAAAAAGCCGTCGTGGACGAAGCGGCTTTTGCAGGACCAGAAGCTG
CTTTGCTCCAAGATAAGGTGCGCTCTGCTTTTCATGCCTCTCGCGCTTACTAGAACTTT
GGCAGGGAGGAGGCGGGTGTGAGCTGTGCAAGACAGTGGAAAGAAAACGAAGGCAGGAAAAGG
ACTGTATCAGAAATGGCCGACGTCTTGTACCATTGATGGTGTGCTTGCAGCGCAAGAC

GTGAAGATGGCAGAAGTTATGGAAGTCTTGAGAGCGAGATTTTCTCAGTCAGGCATTGAG
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>FGENESH: 16 4 exon (s) 48850 - 49940 310 aa, chain +
MQQQCGKEMPAISRNPFGFSRRFPFPAQVCLSRRFSGAASRAATRALARSEPVSTVEEIHAR
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LWTKGETSSNFIDVVDVYLDCCRDSIIYLKPGDPTCHTGADTCYFTRAADILQNKPLIG
ENGLATSTLYDLERVIQQRKSEPDGKKPSWTKRLLQDQKLLCSKIRCALLSCLSRRLTRNF
GREEAGELCKTVEENEGRKRTVSEMADVLYHSMVLLAAQDVKMAEVMEVLRARFSQSGIE
EKSSRGRSSS

>FGENESH:[mRNA] 17 3 exon (s) 51340 - 51864 267 bp, chain -
ATGGCCACAACCTGGAGAAATTA AAAAGACATCCAAGCTGCTTGTGAGGGTCAACAAGAGGC
TCAAGCATGTTAATGTTCCAGACTACATTTGCTGGAAGGGTGCATACAGAGCTCCGGAAG
CTTTCTTGCACCCTTCTGCCGAAACTCAAGGGAGTTTCTTTTCAGTCTGGACAAGGTGGT
GGCTCGATTCAAACCTATCTGTGGACATGTTCTCCTCAGCCAGAAGGCTCTCAGTCCTGTCGT
GAGCTTAGACATGAATGGATGGAATGA

>FGENESH: 17 3 exon (s) 51340 - 51864 88 aa, chain -
MATTGEIKKTSKLLVRVTRGSSMLMFPDYIAGRVHTELRLKLSCTLLPETQGSFFQSGQGG
GSIQ TICGHVPQPEGSQSCREL RHEWME

>FGENESH:[mRNA] 18 9 exon (s) 58137 - 60149 1182 bp, chain +
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GTGCTGCATTGTTACTGCGCCCGTGGAGAGGAGGATCCGAATTTTCAACGGAGCTACTGG
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CGTAAATCTGCATATAGAGCTCCAGAGTATCTGAAACCTCACGCAGAGTCACCCTCAATA
TTATCCTCGGAGCATGGCGATTCAAGTGACGATGTTGAGCAACTCTCCTCAAAGTATTCG
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GACCGTCCAGACATGTTCTCCTCGGCCAGAAGGCGCTCACTCCTGCCGTGAGCTTGGACATG
AGCGGATGGAAAGAAGTTCTGCGAAGCTATCTAGAGAATCCAACGAATGGCCCCGTCAAG
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CCCATGAAGTTTGAGGATGGAATGTTCAAGTTATCACCAAGAGCGAGTTTAAGTCCTAAA
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GCTCAGCTGCGTGCTGCCACCGCTGAGAACGTCATGAAAACAGCACAAAGCCTCTCTCCG
ACAAAACGTGTTTCTCCTCCTCCGCTGCGCAGAACGTCCTTGTGGATATGGGGCGTGCT
TCTCAACAGGTTCTCGTCTCCGGGACCACTGGACGTGGAGCGCCCGGAGTAGATCAAAG
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>FGENESH: 18 9 exon (s) 58137 - 60149 393 aa, chain +
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MLEGAYEHIVLVQYLQVHQGRKSAYRAPEYLPKPHAESPSILSSEHGDSDDVEQLSSKYS
ILPETQGSFFQSDIDLNDLLDRPDMFLGQKALTPAVSLDMSGWKEVLRSYLENPTNGPVK
PEDETLEQRTTRDAFLEQASPMKFE DGMFKLSPRASLSPKAIMEVLSPRGLGRQPQTHFE
AQLRAATAENVMKTAQSLSPKRVSSPPPAQNVLVDMGRASQQVLVSGTTGRGAPASRSK
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>FGENESH:[mRNA] 19 6 exon (s) 61935 - 63427 1236 bp, chain +

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TACGGTTTTCGATCTCAGCCACGTTCCCTCCAGCAAGCCCAGTGAATGCTCCTTTCTC
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ACAACGAGGCCACCACTATTGCGGCACTTGGTTGTATGCAGTTTGGGAGTATTGACGTGC
TACATTGTTACTACCCACGGAGAGGAAGATCCAAATTTTCAAAGGAGCTACTGGATAC
TGGAAGGTGCTTACAAACACATTGTTCTTGTTCACTACCTTCAAGTTCAACAGCTCGAAG
CTTTTCTTTTCCAGGATCTTGAATCGGCATACAAAGCTTTAGAGCATCCGGAAGCTTTC
TCGCACGCAATGGATTTCGCTCTGTTGAGTTCTGTTCGGAACCTCAACAAGGTCCAAGCTAT
CAGCAGGGGAGTTTGTTCAGCCCGGACAAGATGGTGGTATTCTGGAAGATTGTATTGAT
CTTAACGACCTTTTAGACAGTCCAGACAAGTTCTTCGGCAAGAAGGCCCTCACTCCTGCT
GTGAGCTTGGACATGAGCGGATGGAATGAACTTCTGCGAAGCTATCGAGAAAATCCAACC
ACTGGCCCTGTCAAGCAGGAGGATGAACTTCAGAGCAGTGTACTACGAATGCATTGTTA
GGACAAGTCTTGCCCATGAAGTTTGAGGATGGAATGTTCAAGGAATCACCTGGAGCGAGT
CTGAGTCCCAAAGCGATCATGGAAGTCTTATCTCCTCGGGGTCTGGGTCGCCAACCTCAA
ACACATGTTCGAGGCTCAGCTGCGTGCTGCCGCGACCAATAATGCCATGAAATCCCTCTCT
CCGCGCTGGCAAGAGATTATTTCTCTCTCGGCCTGCGCAAAACGTCCATGAGGATATG
GGGTGCGCTTCTCAACAGGTACAAGTTTCTCTTGCTGCTGCGCCTGCCACTAAAGTCCTT
GAGCACAGGAATTCGACACAGGGAGCGCACTGGTGA

>FGENESH: 19 6 exon (s) 61935 - 63427 411 aa, chain +
MATVRGMPQQDFDMRQIIQEACVRWLKPPEVCKILRNYQSYGFDLSHVPPSKPASECSFL
LASIVTWTDLPKLLGGSLLLFDRKAVKYFRKDGHNWRKKKGGKAVREAHKRLKVCLLFLG
TTRPPLLRHLVVCVSLGVLTCYIVTTPTERKIQIFKGATGYWKVLTNTLFLFTTFKFNSSK
LFLFQDLESAYKALEHPEAFSHAMDSPLLSSVGTQQGPSYQQGSLFQPGQDGGILEDCID
LNDLLDSPDKFLGKKALTPAVSLDMSGWNELLRSYRENPTTGPVKQEDETSEQCTTNALL
GQVLPKMFEDGMFKESPGASLSPKAIMEVLSRGLGRQPQTHVEAQLRAAATNNAMKSL
PRWQEI I ISSPRPAQNVHEDMGCASQQVQVSLAAAPATKVLEHRNSTQGAHW

>FGENESH:[mRNA] 20 1 exon (s) 63853 - 64062 210 bp, chain -
ATGGCTGAGAAGGACTTGTGCCACTTATGCTTACCACGGACGAAGCAAAGAGTCTGGATC
GAATGCCAGGAGAAAGGAGAAGCTAACTTTCCTCAGCTCTGCAACTCTACAATGCAAC
TCGTGGACTGATCCAGCTTCACTGCAAGATGGAGTATTGATGCACGAGAAGATCGTCCAT
TGTGGACGTGGTGGTGCACAAAAGCTTTGA

>FGENESH: 20 1 exon (s) 63853 - 64062 69 aa, chain -
MAEKDLCHLCLPRTKQRVWIECQEKGEANFPHSSATLQCNSWTDPASLQDGVLMHEKIVH
CGRGGAQKL

>FGENESH:[mRNA] 21 6 exon (s) 66833 - 68416 1269 bp, chain +
ATGAGGCAGATCATCCAGGAAGCTTGCCTCCGGTGGCTCAAACCACACGAAGTTTTCGAC
ATACTTCGCAATTATCAGAGCTACGGTTTTCGATCTCAACTCCGTTCTCCCAACCGGCC
GCCAGTGAGTGCTCCTTGCTCCTTGCCTTGTGTACACTGACTGGCTTGCCATGCTACTA
GGTGGATCCTTGTCTTGTGTTGATCGCAAGGCTGTGAGGTGCTTTTCGGAAGGATGGTAC
AACTGGAAGAAAGAAGGCCAGGCTCACGAGAGGCTCAAGTCTGGAAGCATCGACGTGCTG
CATTGTTACTACGCCGTGGAGAAGAGGATCCAAATTTTCAAAGGAGCTACTGGGTGCTG
GAAGGTGCTTATGAACACATTGTTCTTGTCCACTACCTTCAAGTACACCAGGTCGGTTGC
GGTGTCTTTCTTTTCTAGCTTTCTTGTGGCTCGAAGCATTCTTTTCCAGGGTTCGTGAA
TCTGCTTATGGAGCATCTCCAGAGCATCCGGAACCTTTCTCGCACTCGGAGCATGGCGAT
TCAAGTGACCATGTGCAACAGATGGAGCAACTCTTTTCAAAGGATTGCTTCTGTTCGAA

ACTCAGTCCGGGCAAGGTGACATGTTCCCTCGGCCATCAGCCGCTCAGTCCTGCCGTGAGC
TTGGACATGAGCGGATGGAAAGAAGTTCTGCGAAGCTATCGAGAGAATCCAACGAATGGC
CCAGTCAAGCAAGAGGATTCAGATGCTTTAGAGCAGCGTACTACCGTGGATGCATCGCCG
GGACAAGTCAAGTTTGACGATGGAATAATGTTCAAGTTATCACCTGAAGCGATTCCAAGT
CCCAAGGCGATCATGGAAGTCTCTCTCAACCGGGTCTGGGTGCGCCAGCCTCACACACTT
CTCGAGGCCAGCTGCGTGCTGCCACCGCCGAGAACGCCATGAAAACAGCACAAAGCCTC
TCTCTGCGCTGGCGGGAAAGTGTFTTTCTCTCGCCCGCCTGCGCAGAACGTCTTTGTGGAT
ATGGGGCGCTCTTCTCGACAGGAAGAGAGCGACATCAAGAGCCTAGCTAGTTTTGGACGA
TGGGCGCTGGCAAATTTGGTAACGACGACGATGCAGGTGCGCCACTCGAGGCCGCGCCC
TCGGTCTCGAGCTCCGTTTGGGCAGCCATGGACGTTGACAAGGACAGAGAAGAAACCTCC
AACCTCCCTACGCCAATGGAGCTTGAGATGAGTGCCCAGTTCCAACGCTTCAGCATTACA
GACCTTTAA

>FGENESH: 21 6 exon (s) 66833 - 68416 422 aa, chain +

MRQIIQEACVRWLKPHEVCDILRNYQSYGFDLNSVPPNRPASECSLLLLALCHTDWLAMLL
GGSLFLFDRKAVRCFRKDGHNWKKKEGQAHERLKSIDSIDLHLCYYARGEEDPNFQRSYWVL
EGAYEHIVLVHYLQVHQVGCVFVFLFLAFLWLEAFLFQGRESAYGASPEHPEPFSSHSEHGD
SSDHVEQMEQLFSKDSLSETQSGQGMFLGHQPLSPAVSLDMSGWKEVLSYRENPTNG
PVKQEDSDALEQRTTVDASPGQVKFDDGIMFKLSPEAIPSPKAIMEVLSQPGLGRQPHTL
LEAQLRAATAENAMKTAQSLSLRWRESVFSRPPAQNVLVDMGRSSRQEESDIKSLASFGR
WALAKFGNDDDAGAPLEAAPSVSSSVWAAMDVDKDREETSNIPTPMELEMSAQFQRF'SIT
DL

>FGENESH:[mRNA] 22 1 exon (s) 69545 - 71152 1608 bp, chain -

ATGGCCTGTCCGGGAAGAAGAACTTCCCTCTGGTTCCCTCTCCGTCGTCGTCTTGATCTCT
TCTTCCACCAGAGCTCAACCCGGGCGATTTCGACGTCATTGCGCAGAACGCCGGCGTTCGCT
AGCATGCACACGGTCGTCACGCACTTCAGCAACGCGATCTTCCCTGGACAGAACCAACATC
GGCCCCTCGCAGATCAATCTCGCCGCAGGAGGATGCAGAGACAACCCCGACGATCGAACC
TTGAAGCACGACTGCACCGCGCACTCGGTTCATGTTTCGACTACTTCTCCGGGGCCAGCAGA
GCTCTGTTCGATATACTCGGACACTTGGTGCAGCTCAGGTCAGTTCTTGCCGAACGGGACG
CTTCTCCAGACGGGGGGCGACTTCGATGGTTTTCTTCAAAGTCAGGTACATGACGCCGTGT
CCGAACGGGGGCACCTGCGACTGGCAGGAATCAAAAACCGAGTTTTTGCATTCCGGAAGG
TGGTATGCCAGCAATCAGCTCTTGCCAGACGGCCGCGTGATCGTTGTAGGCGGAAGAAGC
GCTTCTCCTACGAGTTTCATCCCGGACAGAGGAGCCGGGCAGTTTGAGCTGCCGTTTCTC
AAGGAGACGAACGATCCAACCTTTCAACAACCTGTATCCCTTCCCTGCATCTGCTGCCGGAC
AACAACCTGTTTCGTCTTCGCCAACCGGGACTCCATTCTCCTCAACTATTTACCAACACT
GTGCTTCGGAGATATCCAACGCTGCCTGGTGAGCCCCGGAACCTATCCATCCGCCGGAAGC
TCGGTCATGCTTCCCTTGACAGCGCAAACAGCTTCTCCAATGCCGAAATTCTCGTTTGC
GGAGGAAGCAACAAGGACGCCTACGCGTATCCAGCTGGTCAGCTTCCGGCCTCTCAGACC
TGCGGTAGAATGGTAGCGACGTCAGGCGATCCAAATTGGAACATACTCAACATGCCTACG
CGAAGAAACATGGGTGACATGGTTCTGCTTCCAACCGGCCAAGTCCTCATCATCAACGGA
GCGCAAAGTGGATCTCAAGGATGGGGATACGCGTCCAGTCCCTGCCTCAACCCTGTCATA
TTCGATCCGGTCAGCTCAAAGTTCGAAACTCAAGCAGCCAGTACCATTCCGAGAATGTAT
CACTCCACCGCAAACCTTCTTCCAGACGGCCGAGTCCTTGTAGCAGGCAGCAACACGCAC
GAGTACTACACTTTTACGGGAGCGTTTTCCAACGGAGTTGAGAGTAGAAGCTTTCTCTCCG
GCATATCTAGACCCTGCAAACGACTGGCAGAGACCGAAGTTAGTTAACTATCCAGGAGTT
ATCAACTATGGAATGCCATTTCTCGGTGGACGCTCTCCTTACCGGGCAACTTGACTGGAGAT
ATCGAGTTGACGCTTTTGTAGTGCTCCGTTTACCACGCACTCCTTCTCTCAAGGGCAGAGG
CAGCTCAAACCTAGCGGTTTTCCACACCATACGAGCAAACGGGAACACCTTTACTGTGAAA
AGCTCGGCACCGCCAAGCGCCGTGATCGCTCCACCATCGTTCTACATGCTCTTTCCCCTA

CACAATGGAATCCCAGGCACAGCGACATGGGTGATGGTAACATACTAG

>FGENESH: 22 1 exon (s) 69545 - 71152 535 aa, chain -

MACPGRRNFLWFLSVVVLISSTRAQPGRFDVIAQNAGVASMHTVVTHFSNAIFLDR TNI
GPSQINLAAGGCRDNPDDR TLKHDCTAHSVMFDYFSGASRALSIYSDTWCSSGQFLPNGT
LLQTGGDFDGF FKVRYMTPCPNGGTCDWQESKTEFLHSGRWYASNQLLPDGRVIVVGGRS
AFSYEFIPDRGAGQFELPFLKETNDPTFN NLYPFLHLLPDNNLFVVFANRDSILLNYFTNT
VLRRYPTLPGEPRNYPSAGSSVMLPLDSANSFSNAEILVCGGSNKDAYAYPAGQLPASQT
CGRMVATSGDPNWNILNMPTRRNMGDMVLLPTGQVLI INGAQSGSQGWGYASSPCLNPVI
FDPVSSKFETQAASTIPRMYHSTANLLPDGRVLVAGSN THEYYTFTGAFPTELRVEAFSP
AYLDPANDWQRPKLVNYPGVINYGMPFSVDVSLPGNLTGDIELTLLSAPFTTHSFSQGOR
QLKLAVSTPLRANGNTFTVKSSAPPSAVIAPPSFYMLFPLHNGIPGTATWVMVTY

>FGENESH:[mRNA] 23 11 exon (s) 71531 - 74212 1941 bp, chain -

ATGGTGCGCAAGATATTGCGCTCGCGGCTCCTCCGCCGGCTCGCCAAGCAGACGGTCCGGC
CTTAAGCGCGTGCCGGAGCCTCTCCAAGAATCAATTAAGGGATATCTTGCAGGTATGGTG
CTGGAAATCAGCCGCATTCTTGGA TTTTCTCACGATTTCTCTCCTCCAGACTACTCCAAT
CACCAAATTCGGCAGCATGTCTTTAACTACACGCTCATGCTCAGCAGCAAGAGCGAGGAG
CCGCCACTGCCGTCACTCCTGCTTTTCGAGCCCTCGGCGAAAGTCCTGGCTGCTGTGGAG
GATTACTTCTCAAATAAAGGACCCTTCGCTCCAGTTCCAAAGAAATATCGCACGGCTCGA
CTCAAGCCAAGGTACGATGAGAAGCAGGTTGCTGCCTACGTTGCTGCGAAAATGCCAGCG
GTCTACTCGGTCATCCACACTGTCTTGAGCGAGGTTGCTCGGCGGCTGCCTGATTTTAAA
CCAGAGAATGTTTTGGACTATGGCTCTGGACCAGGAACTTCCATTTGGGCAATGTCTCAA
GTATGGCCGAAA ACTGTTAAGCTAGTGAACATGGTAGAGACTTCTCCTTCAATGCTTGCG
GCATCCAAGAAGATCCTCGAAGATTTGGAGGATCCACCGGTTATGCACAACCATAAGACC
CTGCGAATTCTATCAAAAAAGACACGACACTCGGGTCACGACATTGTGATAGCCGTAAGC
GATTCTTGTCACGCGATTGGAGAGCTCCCGACCGTTGAAGAACA AATCACTACTGCCCGG
CAACTGTGGGCACTAACTCGAGACATTCTTAACTTTCGAAGACGGCGGAAGTTCCTGACT
GGCTCAACTTCCACTGACACTCCCATGATCGGCACCTCGGAGGAAGATGGCAATAAAAAGA
AACTTAGACGAGCAGCTTGTAGTACACAGCGAGGAAGAGGTTCGAAATACCCGGTGGTGGT
GCTCATGTGATTGCACCGTGTCCACATGATGGTGTCTGTCCAATGGATGGCACAACCGTA
TTTTGCCACTTTGTT CAGCGTCTTGAACGAACGTTCACTCAAAGAATGGCTAAGAAACAC
TCACGAACAATGCTGCGTGGCTATGAAGATGAGAAGTACAGTTATGTGGTCTTTCGCCGC
GGGCACCGTCCAAGGGTGGATTGGCCACTAGATCATGTGGAGCTGCAGCTGGATAAAGAC
GAGCCAGTAGAAAACGACCTACTTGTAGACTATGAGGAAGACGAGGATGAAGAAGAGGAA
GAGTACTTAGAGGATGAAAACGACGAAGATAGAGAGACCAGAGACGACGATGAAGGTGGT
GAGAACTCAGACATCGAAACTAAAATGGAGGAAGAACCAGGCGAGGACGAGAACGAAGAC
CAAATCGAAGAACAAGAGGGTGACGACGACGAATGCAAGGAGACGGCGCAAACATGAGC
AGTGGCTGGGGCCGGGTGATTTTCAAGCCATTCCGGCGAGGCAAACACGTACCTTGGAC
GTTTGCCGCTCGACGTCGCCGGACGGCTCGTCCGGAAGCTTTGATCGTCTCACCGTGACA
CGCGCCAAGCACC GGTTCTT CACAAGGAAGCGAAAAGACACCCGAGACAACCGCATA
CGTTATCGCGAGAAAGGATCCATTTCGTATGAATGAGAAGTGGAAAGTCACGTGAAGCTTCA
GCACCGACGGGCCGGATT CAGAAAAGAGCGAAAAGAAAGCTGCAGAGAGGAAAAGTGAAGTC
TCTGAGAAAAGCGTTAGATCTGGATGGAGCTTTGTGTGCACTGCAGTCAAAGCCGGGGTG
AGCAAAGCTCTCTGCGCCAGAGACTTCAAGACAAAGCAATGGATCTCTCACTTTAAGCCC
GACCAAGCAAGCAAACAACACTACGAAAGCGACTATGGAAA ACTCTACGAAGTGGCAG
CAAGCGTACCTTCTCGTGTA A

>FGENESH: 23 11 exon (s) 71531 - 74212 646 aa, chain -

MVRKILRSRLLRRLAKQTVGLKRVPEPLQESIKGYLAGMVLEISRILGF SHDFSPDYSN
HQIRQHVFN YTLMLSSKSEEPPTAVTPAFEPSAKVLAAVEDYFSNKGPFPAPVPKKYRTAR

LKPRYDEKQVAAYVAAKMPAVYSVIHTVLSEVARRLPDFKPENVLVDYGS GPGTSIWAMSO
VWPKTVKLVNMVETSPSMLAASKKILEDLEDPPVMHNHKT LRILSKKTRHSGHDIVIAVS
DSCHAI GELPTVEEQITTARQLWALTRDILKLRRRRKFLTGSTSTDTPMIGTSEEDGNKR
NLDEQLVVHSEEEVEIPGGGAHV IAPCPHDGVC PMDGTTFVCHFVQRLERTFTQORMAKKH
SRTMLRGYEDEKYSYVVLRRGHRPRVDWPLDHVELQLDKDEPVENDLLVDYEEDEDEEEE
EYLEDENEDRETRDDDEGGENS DIETKMEEEPGEDENEDQIEEQEGDDDECKETAANMS
SGWGRVIFKPFRRGKHVTL DVCRSTSPDGSSGSFDRLTVTRAKHRVLHKEAKKTPETTAY
RYREKGSIRMNEKWK SREASAPTGRIQKERKKAERKSEVSEKSVRS GWSFVCTAVKAGV
SKALCARDFKTKQWISHFKPDQASKTTLRKRLWKNSTKWQQAYLLV

>FGENESH: [mRNA] 24 2 exon (s) 74341 - 76625 1989 bp, chain +
ATGGCTTGGCGCTCGGAGATCTCGCGCCGAGCTCGCGAGCTGCGAATCCTTTTCTGCCAG
ACCTCTCCTGGCAGCGAGACGACCAGGTGGGCAGTTTTCCAGCTCCAATCAATCGTTTCT
AGAGCTAGGTTTGCAGGGATTACATCCTCAAGAACTACAAGCAGCTCAAGACGCTCAATC
CCACGCTGCCGATACTTCTCAGGGAATGTAGCGGGATCCAACCACGACTGTGGATTTCGAT
ACCCTTGGAAATGGCTAGATCATGGACGAGGCACAAGCTCTTGGATCTGGCACTGGATTGC
GATGGCTTTGCGCGCGCGCTCCGAGCCTCGAGGGACGCAATCGAGGTAGCCGCCCTCCAT
CGCCAAATCCTCCACAGCCACACTGCTGCGATGACAGATTCTCGCCAATCTCGTCGTC
CAGATGTATGGCAAGTGTGGCGATGTGGAATCCGCTAGGCTCGCTTTCGATTCCATGGAG
TGCCCGAATCTCTACTCGTGGGCGATCCTCCTGGGCGTCTATGCCCGCAATGCGCACCTT
CGCGATGCCAAGGAAACCTTCGATCGGATGCCCCAGCGCAACGAAGTCGCGTGGAATTCC
CTGCTCACTATGTTTGAGGAGCAGCGGATGATCGACCCAGTGC GCGAGATATTCGATCGG
ATGCCCAGCACCACGGTGGTGTCTGTTGCTTTCGATTGTTCTGTCGAAATGCCCAGACTGGG
CATCTGGGCAAAGCCAAAGCGGTGTTTGATCGGATGCCCCGAGCGGAACGTAGTGGCATGG
ACGGCTATGGTGTCTCGAGTTTGCCTACGCCGATTTCGATCGATCTAGCCAGCGAGACGTTT
GATCGAATGCCCGGATGGGATTTGATCGCTTGGACTGCCATGGTCACTGCCGTTGCCGCT
AATGGGCACTTGGGAAGAGCATTGATCTCTACGACAGGATGCCCCGAGAGAGGAATCCCA
TCCCACAACGCGATGATCATTGCGTGCCTCAAAATGGTCTCGCACGGGAGTCGCAGAAG
ATCTTCGACGAGATGGGCGATCGAAACATCGTGTCTGTTGGAACCAATCCTCTCGGTTTGC
GCGACCGAGGAGGAGCTCGGCTCGGTGGAGGCGGTCTTTCGATCCATGCCCGAGTGGAGC
GTGATCAGCTGGATCGTCTCTTGGGAGCTTACGCGAGCGCCGGAAGGATCCCGCAAGTG
GAGGAGCTCTTCCAATCCATGCCGGAGCGCGATCTCGTAGCATGGAACGCGATGATCTCC
AGCTATGGCCGCCATGGCTACGTCGAGCGATCGAAAAACACCTTCTCCAGGATGCCCGAG
CATGATTTGATCTCCTGGAACACTACTGCTCACGGCCTTCTCGGCGAACAGCCACCCGAGA
GAGGCCCAGGCGGTGTTTGATTCCATGCCCGAGAGGACGACCGTGTCTGTTGGGCGGCGATG
GTGGCGATGAGGTCCCAGCAGGGTCACTCGATTCGGCGAGGGAGCTCTTCGATTTCGATG
CCGGATCGATCGCTGGCGTCTTGAACCGGATGCTGGCGGGCTACTCGCAGAATGGCCAC
TCCAAGCCGGCGATGGAGCTCTTCGCGCTCATGAATCTGGATGGATCCAGCCAGCGCG
GCCACATTCGTAGAGATCTTGGGCGGTGCCGCGACACAGGCAAGGCGGAGCTGAGCTAC
GGCTACTTTCGCTCCATGGTGGGCGATTTCTCCCTGGATCCCGTGCCAGGCACTACTGC
TGCGTCTGTTGACGCGCTCGCCAAGGCCGGGCACCTCCGCGAGGCCGAGGAGATCATCAAG
GGCGTGCCGGGGCTGGAGAGCGCTGGGATCGCGTGGCGGAGCCTGCTGGACGGGTGTAGA
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GGCGCCGGCGCCTCGTACGCGCTCGTGACGGACGTGTTGCGCTCTTCGTCTTCTCCCAA
GAACCCTAA

>FGENESH: 24 2 exon (s) 74341 - 76625 662 aa, chain +
MAWRSEISRARELRILFCQTS PGSETTRWAVFQLQSIVSRARFAGITSSRTTSSRRSI
PRCRYFSGNVAGSNHDCGFDTLGMARSWTRHKLLDLALDCDGFARALRASRDAIEVAALH
RQILHSPHCCDDRFLANLVVQMYGKCGDVESARLAFDSMECPNLYSWAILLGVYARNAHL

RDAKETFDRMPQRNEVAWNSLLTMFEEQRMIDPVREIFDRMPSTTVVSWSSIIVRANAQTG
HLGKAKAVFDRMPERNVVAWTAMVSEFAYADSIDLASETFDRMPGWDLIAWTAMVTAVAA
NGHLGRAFDLYDRMPERGI PSHNAMI IACAQNGLARES QKIFDEMGRNIVSWNSILSVC
ATEEELGSVEAVFRSMPEWSVI SWIVLLGAYASAGRIPQVEELFQSM PERDLVAVNAMIS
SYGRHGYVERSKNTFSRMP EHDLI SWNSLLTAFSANSHPREAQAVFDSMPERTTVSWAAM
VAMRSQQGHLDSARELFDSMPDRSLASWNAML AGYSQNGHSKPAMELFALMNL DGSQPSA
ATFVEILGACRDTGKAELSYGYFASMVGDFSLDPVPRHYCCVVDALAKAGHLREAE E I IK
GVPGLE SAGIAWRSLLDGC RTHQDLQRGSDAARMAIQFDPGAGASYALVTDVLRSSSSSQ
EP

>FGENESH:[mRNA] 25 17 exon (s) 76983 - 80309 2100 bp, chain +

ATGGCGGAGCACAAAGATAATCTTTGTGGAGCCGCCGGCAGGCTGCGAGGAGCGGCGGCGC
AGTAAGCGTATGATGGCTTGCCCGAGCGGTACACAGGTACTGCTGCTCGGAGATCCCGGAA
ACCCACGCAAGGCCGTGAGGAAGAGCCCCAAGAAGATTGGAGCCGGGTGCGCGCCGTCG
CCTACCAAGATCCGGAATTCGCCAGATCAAGAACAGCTGGGCCGGTGACGAGGAAGATC
AAGAGGAGGA ACTTGCGGAGATCTACGAGATCACACCGGCTTGTGAGCTCCCGAAAGAG
GAAGAAGAGGATGAAGACGAGGATGACGAGGAGGATGACTATGAGGAGGTGGACGATGTC
AAATGTGGGAATTGTGATCGAGCTAATGATCCACAGAGGTTCTACTGTGCGATGGTTGC
GATCGTGGCTATCACATGTA CTGTCTCTCCAATCCTTGTGCGGTTCCCAAGGGTGAC
TGGTTTTGCCC GATTGCTCCAAGGATCGACAGCAAGTCAAAGTGTTC CATGGTGCAA
AGGAAGCTCATCGATTTCTTCGGGATCGAGAAGGTGGAGGAAGAACCAACCAAAGTTCTT
GCGCTCGACAGAAGTGAGGCGACGACGACACAGTGGCTCTCTGGTGATTTACAAGAAAAG
CAGGAAGCTGCTGCCATACATGCCATCCAAGGATCCATCGCAGAGGCTGGAGCAAATGGC
ATCACTGGCGTCAGCCTTGATGACTTCCGGTCTAGCTCCAAGGCGTGCGAACAGAGCCGT
GCTAGAGAAAGGAGGAATGCAGGTGTGGGAACGCTCCCTCGTTTCTCTGTCTCAATGATC
TTCACGAGCTCTCTAACACTCCAGGTGATTGGCAAAGAAGATAAGGCCACTTACGAGCTT
TGCAAGGCAATGTGCCTCCGAGGCGAGCATCCTCCTCTCATGGTGACCAGAGATCCCCGT
CAAGGGTTCGTGCTGGAAGCAAACAACCATATAAAAGACATGACTTTGATCGCGGAGTAC
ACCGGCGATGTAGATTTTCATGTGCAACCGAGAGGACGACGAAGGTGATAGCATCATGGGA
CTCCTTTTTCCCGGAGGACGCTTCGCAGGAGCTCGTGATCTGTCCAGACAAACGTGGAAC
ATTGCCAGATTCATATCCGGGATCAATAACCACACCCCCGACGGCAGAAAGAAGCAGAAC
TTACGTTGTATCCGCTTCGACATCGATGGTGAAGTTCACGCTCTCTTGGTTTTCGATCCGG
GACATCGCAAAGGAGAGAGGCTCTACTACGACTACAATGCGTACCAGAAAGAATAACCA
ACGGAACACTTCGAGTGTGGTCTAAAGGGAATTTCTCCTTCGCGGAGTGGTCCAGAAGAT
CCGCGGAGCTTTTTGGTGTGTCATTCTCGGCGCGGATAGAGGATCGAGGCTGATACTGATC
TCCGGCGCGATGGGGGCGTCTGTTGATCCAGGGATTCCTTAAGTCAACGGCCATGACCATA
GTCTCGGAGATCGGGGACAAGACGTTCTTCGTGGCCGCGTTGATGGCTATGAGACATCCT
CGCGGTGTAGTTCTAACTGGAGCGCTCTTAGCTCTTGTGGTGATGACTATTTTTTCTGCA
GTGTTTGGCTGGGCAGCGCAAATCTTATATCTCGCAAGCTGACACACAACGGTGCCACG
TTTTCTTTCTTTGTTTTCGGCCTCCGGTGCCTATGGGATGCAATCTCCAATGAGGAAGGG
GAGTCCGAGCTCGCGGAAGTCGAAGCAAAGCTTGGGAGGACTGACGATATAAAGAAGAAA
AAGAAGCAAACAAGCGAGCGTTTTTTTTGTCCCCGTTCTCATCGAGGCTTTTTCTGTTAACT
TTCCTCGGTGAATGGGGCGACCGGAGTCAGATAGCTACGATAGGATTGGCTGCCAGGAG
AACGTAGTGGGAGTAGCAGTCGGTGGCTTCTGGGCCATGCCTTGTGCACGAGTGCTGCT
GTTTGGGGAGGGAAGCATCTAGCTTCAAGCATCTCCGAAAGATCGGTTGCGCTTTGTGGT
GGCATTTTTGTTCTTGCTCTTTGGAGCGCATTCTTGTTTAACGTTTTCCAAGTGGCTTGA

>FGENESH: 25 17 exon (s) 76983 - 80309 699 aa, chain +

MAEHKIIIFVEPPAGCEERRRSKRMMACPSGHRYCCSEIPETPRKAVRKSPKKIGAGSPPS
PTKIRNSPRSRTAGPVTRKIKRRNLAEIYEITPACELPKEEEEDEDEDEDEDDYEEVDDV

KCGNCDRANDPQRFLLCDGCDRGYHMYCLSPILVAVPKGDWFCPHCSKDRQQVKVFPMVQ
RKLIDFFGIEKVEEPTKVLALDRSEATTTQWLSGDLQEKQEAAAIHAIQGSIAEAGANG
ITGVSLDDFRSSSKACEQSRARERNAGVGTLPFRFSVSMIFTSSTLTLQVIGKEDKATYEL
CKAMCLRGEHPPLMVTRDPRQGFVVEANNHIKDMTLIAEYTGVDVDFMCNREDDEGDSIMG
LLFPEDASQELVICPDKRGNIARFISGINNHTPDGRKKQNLRCIRFDIDGEVHALLVSIR
DIAKGERLYDYDYNAYQKEYPTEHFECGLKGISPSRSGPEDPRSFWSSFSARDRGSRLILI
SGAMGASLIQGLFKSTAMTIVSEIGDKTFFVAALMAMRHPRGVVLTGALLALVMTIFSA
VFGWAAPNLISRKLTHNGATFLFFVFLRSLWDAISNEEGESELAEVEAKLGRTDDIKKK
KKQQASVFLSPVLIEAFSLTFLGEWGRSQIATIGLAAQENVVGVAVGGFLGHALCTSAA
VWGGKHLASSISERSVALCGGILFLLFGAHSLEFNGFQVA

>FGENESH:[mRNA] 26 2 exon (s) 82214 - 83779 1491 bp, chain -
ATGGCGCTGAGCGAGTTCTTCATCCAGAGGCAACGAAGAGGACGATTTCTAGGCGACCC
ATGAGCGATCGCCTCGATTTACCAGGCCAGATCCCTAGGGTATGTAAATTCTGGCAACAG
GGGCGATGTAGCAAGGGTGCTGTCTGTGGATTCTGTCACGGTGAAGCTGATTCCGGGGAG
AGTGCTCCTCTCGCACTGGAGAGGCCTAGCAGGAAGCGGAGTGTGCGCCGCCGGATCCC
AGTAGCAGCGCCAGCGGCAGCCGCCCGTGTGAAGAAGAACAACATGGATCAAAGAGGGT
CTGGCAGACAAGGCGAGGGTCATTGGGTTTGATCAAACGAAAGGGCCCGAGATCATCAAG
ACAAGAAGATCATCGTCGATCCAGCAGCTCTTCCGCCCTCAAAGCTCAAGAGATCT
TCGTCGACAGAGGCACTGATATTGGGATCAAAGAAGCCGGCAAGGAAACCAGGAACTTCG
CCTTCTCCTCACACCAAAGGGCTTGTGCGTATTGGCTGGAGGGTTCGTGTAGATATGGG
GAGAGGTGTAAGTTCCTCCACGCTGCTACCACCGTACCAGGATTGGCGCTCCTCACCACG
CTCAAAGAGCACAAGGAGAGCATCACGGGAATAGCTATGGTTCAGACTCGGCAGTGCTC
TTTACTGGTGCTACCGATGGAATCTCAGGGCCTGGGATTGCAACTCGGGGACCGTGTCA
GATACTCTGAGGCTAGAGGGCCCGGTGGAGGCACTGGCCAGTGGTTTTGGCTGGATTTTC
GCCGGTGCTGGCCACGAAGTCTGGCCTGGAACGTCAAGTTCTCGCAGCAGACACTACAA
GCTCGAGCACCGGAAACGTGAACGCTCTAGCAGTTGGCAAAGGCTTGCTGGTGGCGGGG
CTTGGCTCGGGAGAAGTTTGC GCGTGGGAGTTTGGCAGTGGAGAGCTCAAATCTACAGGG
ACGTTGAGCAAACATCCCAGCGCTGTCACGGCACTCACTGTGGCTGGAGGTTCGCTCTAC
TCGGGCTCCAGGGACGGATCCATCAGAGTTTGCAGAGGCCGAGACTGGGAAGAGCTGTGCA
ACCATCGTCAAGGCTCACGCTGGCGAGCTAACGGGCCTGCTGTGCTGGGAGTCCTTCTC
CTGTCTTGCTCGCTCGATAGCTTCATCAAGGTGTGGGCCGCGACTCCGGCTGGAATTTG
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GGGATGTGTGGGAGCGTCGATAGCGATGGCAAGCCCGTGCTCGTTTTGCTCGTACCGAGAC
TCAACAGTGAAGGTTTACGGGCTACCATTGTTTCGAGGAAAGAGGCGCCTTGTCTCAAGC
GCGGAAGTTATCAGCCTTCTCCGCGGCTGCTGGTAACAATCTAGTCTTCTCGGGCGAC
AAGCAAGGCGCTGTGAAAGTCTGGAAGTGGAGCAAGGATTTGATTAAGTAG

>FGENESH: 26 2 exon (s) 82214 - 83779 496 aa, chain -
MALSEVLHPEATKRTISRRPMSDRLDFTGQIPRVCKFWQQGRCSKGAVCGFVHGEADSGE
SAPLALERPSRKRSVAAADPSSSASGSRPVLKKNWIKGLADKARVIGFDQTKGPEIIK
NKKIIVDPAALPPPKLKRSSSTEALILGSKKPARKPGTSPSPHTQRACAYWLEGSCRYG
ERCKFLHAATTVTGLALLTTLKEHKESITGIAMVPDSAVLFTGATDGLRAWDCNSGTVS
DTLRLEGPVEALASGFGWIFAGAGHEVLAWNPKFSQOTLQARAPGNVNALAVGKGLLVAG
LGSGEVCAWEFGSGELKSTGTLKHPASVTALTAVAGGRVYSGSRDGSIRVCEAETGKSCA
TIVKAHAGELTGLLCWESFLLSCSLDSFIKVAATPAGTLENYFTFPEGEEEEIVGRSGVT
GMCGSVSDSGKPVLCVSYRSTVKVYGLPLFEERGALFSSAEVISLSSAAAGNNLVFSGD
KQGAVKVWKWSKDLIK

>FGENESH:[mRNA] 27 1 exon (s) 83970 - 85256 1287 bp, chain +
ATGCTGGTGATTTGGAAGAAATCTCAGAATGCGGACGCTCTAGCCTCCTCGCTCTGGAGG

CGAGAATGCGGCAATCCGTGGGTAATCCAGCGGCGCTTCATGGCCAGGGAGAGGAAGAGG
AAGAGGATCCGGCAAGTGAGCTTCGACGTGATGATCAGCCGGGAGAAGCACGTCAGGCAG
GCGCTGTGGCTCAAGGATCTCCTCGTCACGAGGCCCGGCCACACCATCTCGATGATAGAT
TTCCGGGAGGAGGTGAAGAATCTGGGGATGCGCGTGAGGAGGCTCTACTACCTCCTCGAG
TACTACGACACGCTCTTCCAGACGCGGGTGGACAGAGCCAAGGTAGAGTGGATAGAGCTC
GGGAAGATGGCCGGAGGATTGTGGAGCTGGAGAGGAGGCTCATGGCCGAGTACGAGCCG
TGTCTAGTGGAGAACTTGCGAAAGCTGCTGATGATGAGCGAGGGCGAGAAGATCTGCCTC
AAGAGGATCGCGCTGCTGCGAGAGCCACTGGGACTTCCTCACGACTTCGAGCAGAACCTG
GTACACAAGTATCCGCAGTACTTCGACGTGGTGTGATCGCCAAGGACAAGAAGTACAGGGAT
TTGCAGCCGTTTCTCAAGCTCACGAGCTGGGATCCACTGCTGGCCATCTCTCGCCGAGAA
GCCGATGCCGAGGAGAGCGAGAGAGATCCACACTCGTTCCGGATGAGGTTCCCGGGGGTC
AAGTTCGTGCGGGGGAGGGACGCGCAGTTCCTCAAGAGCTTCAGATGCTCGAGTTCCTG
TCGCCGTATGATCCAAACCACGGCTACCCGAAGCTCTCCCGGAGGCTGTCAAGCGCGCG
GTGGCGGTGATACACGAGTTCCTGTGCCTCACGCAGGAGTCCAAGGCGCTGGTCGACTCC
ATCGCCGAGATCCGGCGAGAGACTGGGATTCCAAAGAAGATTGGCGAGCTCATTTGCCGG
CACCCGGGGATCTTCTACTTGTCTGGAAGGGAGCGCTGGCGAGGCATCCACATATGGAG
GTGGTCTATCTCAAGGAAGCTTACAGCAAGCCATACGAGGGGGAGAGGCTGAAAGCTGCG
AGGCTGCTGAGGAAAGGGCCCTGGTGCAAGTGAAAGAAGCCATGGCTCTCACGATGTGG
CACGCAGATCTGGCCTACGATAAGAGGCATGGCACGGATTGTTTCTTGGAGGGCCGCCAG
TTCCCGATGATAACTTACGATGCGTTTGAGAGTACCTTCAGTCCGAGCTGTACAGGGAG
CAGAAGATCAAGTACGAGAACCTCTAG

>FGENESH: 27 1 exon (s) 83970 - 85256 428 aa, chain +
MLVIWKKSQNADALASSLWRRECGNPWVIQRRFMARERKRKRIRQVSFDVMISREKHVRQ
ALWLKDLLVTRPGHTISMIDFREEVKNLGMVRRLYYLLEYDITLQTRVDRAKVEWIEL
GEDGRRIVELERRLMAEYEPCLVENLRKLLMMSEGEKICLKRIALLREPLGLPHDFEQNL
VHKYPQYFDVVIKDKKYRDLQPFLLKLSWDPLLAISSREADAEESERDPHSFRMRFPV
KFVRRDAQFLKSFQMLEFPSPYDPNHGYPKLSREAVKRAVAVIHEFLCLTQESKALVDS
IAEIRRETGIPKKIGELICRHPGIFYLSWKGALARHPHMEVVYLKEAYS SKPYEGERLKAA
RLLRKGPLVQVKEAMALTMWHADLAYDKRHGTDCFLEGRQFP MITYDAFESTFQSELYRE
QKIKYENL

>FGENESH: [mRNA] 28 2 exon (s) 87421 - 88051 393 bp, chain +
ATGGTGTTCGTCCCCTGTCCAAATTCGCAATCTAAGGACATTCCATATTTATTGGTGGAG
TACCATGTCTCGCTTAGGCCACCGGTATGCCGAAATAGCGCCAGACTTCGTTTGGCT
CCGTTTTGCGTGCTGGTCTTGGCATTAGGATGCTGGTTGCTCCAGGACTGTTCCAAGTCG
CTCCGGGCTCCTGTCCCTTCGCTCCTTGGGCTTTATGCTCGAGAGTTGCTCCGTGGTTTA
GTTCCGTCACTCCTTGGCTCCATGCTTGGGAGTTTGGCACCGTTCCTTTGTTAGTGGCC
CAAGGCCCTGAACCTCGGGTTCCTATGGACACGTGGCATGGACACGTGGCATGTGACACG
TGGCATCTGTACAGTGGCACAAGAGGGTTTAG

>FGENESH: 28 2 exon (s) 87421 - 88051 130 aa, chain +
MVVFPVPCNSQSKDIPYLLVEYPCPRVRPPVCRNSARLRLAPFCVLVLAALGCWLLQDCSKS
LRAPVPSLLGLYARELLRGLVPSLLGSMLGSLAPFLCSVAQGPEPRVPMDTWHGHVACDT
WHL SRGTRV

>FGENESH: [mRNA] 29 4 exon (s) 89425 - 91827 1959 bp, chain -
ATGGCACGGAGGAAAATGCTCGCCAGTGTGAGTGACAATCTATCATTCAGGAAGAAGGT
TCTATCATCCGCTCCGGAGAAGCGAGCGAAGGTTTACTCCTCTCGAAGTCGGGCGAGTT
CCGGGTGAGAGAAGCACGAACAGGGGAGCTTTCTGTTTCCGACTTGGATTTCGAGGGGATG
TTGTGCGCCACCATCGCGCTTCTCTTAGCTCTCGCGCTGTATGGCACCTCGGGCCAGGGA
TGCAAGCCGGGAACTGTGGGCAGCTAGAGATCCACCGCCGTTCTCTTGCGAAGACTCT

CCATTCTTTCTCAGCTGTGAGGACGACAAGGTCCGCATAAGCAATGAAAGCTACACTATC
GTTGCATTCTTGGCCCCTTTGTGGTGGTTCGACCGCTTGC GGCCGCCTCCTTGC GCGGCT
CGTACTTGGCCGATCGATACTTCTGCGGGATTTCGAGTGATTGGAGAATGGCGCGACGGC
CTTGGCTGCTACATAACGTCTCCACCCCAGGGGACGAGTCTAGATATCACGCCGTGATC
CAGTTCGATGGTCCAGACGATTCTTGAACCCGAACCTCTTGCAGCTGCACCTGGCCACC
GTCGTCAACTGCTCCCGGTCCGCTAGTCTAAGTTCTCCGAGCTTGGGCAGTGGGCGCACG
AGCAAGACTGGAGCGATTGTTGGTGGCTCCGTGGGTGGTGGCTTGGGTGTCTTGGTCTTG
CTGGGATGCGTGTGCTGCGTTGCGAGGCGGCGGCGGCTCGCAGCGAAGCAGCGAGGATTG
ATTCTGGGCGATGATCCAAAGCAGCCGCCGCCGAGCTTCTCTCCAAGAGTGGCCGGATT
GTCTACAGCAACAACAGCGGGAGCTATGGCACTAGCAACAGTTACGGTAGCAGCGTGAGC
GTTACTGTGGAGAATGGCGATGGTGGGAGCAATAGCAGCCGGTTTAGCTACAGGGAGCTC
CAGGAGGCGACCAACAATTTCTCCGAGGATGGCCGGCTCGGAGATGGAGGGTTTGGGACT
GTTTACAAGGGGAAGCTCCGGGATGGCCGGCTGGTGGCCGTCAAGAAGCTCAATCCTTGG
AATGCCCAGGGGAAGTACCAGTTTGACAACGAGGTTACCATCCTCTCTCGGGTAACTCAT
CCCCACCTCGTCCGGCTCTACGGCTGCTGCATCGAGCAGGAGCTCCTCCTCGTCTACGAG
TTCGTGGCCATGGAACCTTAGCCGACCACCTCTACGACAACCCGCGGACTACCTCGGC
TGGGACGCCCGCCTCACTGTCGCGGTCCAGTGCGCCGAGGCCCTCGCCTTCTCCACACA
AACGTCTGCTACCACCGCGACGTGAAGTCCACAAACATCCTCCTGGACGAGCGGTACCAC
TGCAAAGTGGGCGACTTTGGCCTCTCCCGCCTCGTCCCATCGCTGGAGCTCACGCACATC
ACCACCGGCCACAGGGAACCTCCCGGCTACTTGGATCCAGACTACCACCAGAGCTACCAG
CTCACGGACAAGAGCGACGTCTACAGCCTCGGGGTGGTGTGCTCATGGAGCTCGTGTGCTCG
CAGCGGGCGGTGGACATGGCCAGGGAGAGGAAGGAGATCAACCTGGCGGCGCTGGCGGTG
TCGCGGATCCAGTGC GCGGAGCTGGACAAGCTGGTGGATCCGCGGCTTGGGGCGGGGGAA
GATAGCGTGC GGCAGAGGATGGTGGAGTGC GTGGCGGAGCTCGGGTTT GAGTGCCTGGCA
ACGGAGAAGGAGGACAGGCCATGCATGAAGGATGTGGCAGCGAGGCTTCGTGCGATCGAG
GAGGAGGGGAAGCAGCGCTACCTGGAGCAGATGGTGGCGATCAGGAAGGTGGAAGTGGTC
GATGATGATAAGAAACATACTAGGAGCTCGCCACGTCTGTGCAAATGCAATGGCCTAGC
AATAGCACGTCACCAAACGATAGCTCCAGCAGCATGTAA

>FGENESH: 29 4 exon (s) 89425 - 91827 652 aa, chain -

MARRKMLASVSDNLSFQEEGSI IRSGEASEGLTPLEVGRVPPERSTNRGAFCFRLGFEGM
LCATIALLLLALALYGTSGQGCKPGNCGQLEIPPPFSCEDSPFFLSCEDDKVRISNESYTI
VAFLGPFVVDRLRPPPCAARTCRIDTSCGIRVIGEWDRDGLGCYITSPPPGDESRYHAVI
QFDGPDSDSCNPPLLQLHLATVVNCSRSASLSSPSLGSGRTSKTGAIVGGSVGGGLGLVVL
LGCVCCVARRRRLAAKQRGLILGDDPKQPPPQLLSKSGRIVYSNNSGSYGTSSNSYSSVS
VTVENGDGGSNSSRF SYRELQEATNNSFSEDGRLGDGGFGTVYKGLRDRGLVAVKKLNPW
NAQOKYQFDNEVTILSRVTHPHLVRLYGCCIEQELLLVYEFVAHGTLADHLYDNPRDYLG
WDARLTVAVQCAEALAF LHTNV CYHRDVKSTNILLDERYHCKVGD FGLSRLVPSLELTHI
TTAPQGT PGYLD PDYHQSYQLTDKSDVYSLGVVLMELVSSQRAVDMARERKEINLAALAV
SRIQCGELDKLVD PRLGAGEDSVRQRMVECV AELGF ECLATEKEDRPCM KDVAARLRAIE
EEGKQRYLEQMVAIRKVEVVD DDKKHTRSPTSVQM QWPSN STSPNDSSSSM

>FGENESH:[mRNA] 30 11 exon (s) 92498 - 94407 1143 bp, chain -

ATGAAGAAGAGGCCGTCGATATTTACCGATGGAAGTGGAGGATCTCCGTGCTCGCCTTG
TTATTCTTCTTAGCGCTGTGCGGTCTCAGATTTCCATCTTCCCCGGGCACAATGCCGATG
CCCGCGGCCAGCATTCTGTGCCACCGTGCCTGAGAAGATCGGTGCGCCGAGGATCGCTCTC
TTGTTTCTAGCTCGCAATCGTTTAGCTGTTGAAGAAGTTTGGGACCTTTTCTTCAAGGGT
GCTCAAGAACACTTGTATAGCATCTATATTCACGCTCGGCCTGGATTTGTCTACGATGCC
ACAAACACCGAGTCTTCTTTCTTCTGGAACCGGCAGATCAACAATAGTGT CATGGTGGAG
TGGGGT GAGGCGAGTATGATCGATGCTGAGCGTATTTTACTCCATAGAGCTCTACAGGAT

GCTTCTCTTTCTCATTGTTTTGTTTTACTGTCCGATAGTTTTATCGAAAGCAAGAACACACGC
TATAACTTTTCGCATGTTTCCGACTGTTACACATGAGAAATGGAGGAAAGGATCACAGTGG
TTCATGCTCCTGAGAAAGCACGCAGAGATTGTTGTTGGGGACTCTAGGATACTGCTGAAA
TTCTACGAGCATTGCAAGAGGTTCTCGCAACTCAAGCAAAAAGCGGTCCCAAATGATCAG
CATAAGCGGGATATGCAACCACAAGCTGGAAGGAAATATGGAATGACTACTTCGGAAAAC
GACTGCGTTCCGGATGAGCATTACATCCAGACCTTGTGGCGATCAAAACAGTGGAAAAC
GAGATCGAGAGGAGAACGCTGACTTACACACTCTGGAAGGCATCTGACAGACGCGAGAAC
GATCGTTGGCATCCGTTACCTTCAACACGGCAGACGTCTCCGCACAGACAATCAAAGAC
ATTAAGGGAATTCACAGCGTCAAGTATGAAACGGAAGGCCGGACGGAATGGTGTAGCTGC
AATGGCATTCCCAGAGCCTGCTTTTTGTTTCGCTAGAAAGTTTTTCGAGAGGAGCAGTGTGC
AAGCTCCTGCACAATAACGAGACTGACTTTTTTGGATTTCGCGGCCGGGTGAGACCGCCGAA
GGAATAATAACATCACGGCAATGGTTACTGGCGTAGAACAGGCAAGGAGTTTGAGCCTG
TGA

>FGENESH: 30 11 exon (s) 92498 - 94407 380 aa, chain -
MKKRPSIFHRWKWRISVLALLFFLALCGLRFPSSPGTMPMPAASIRATVPEKIGAPRIAL
LFLARNRLAVEEVWDLFFKGAQEHLYSIYIHARPGFVYDATNTESFFWNRQINNSVMVE
WGEASMIDAERILLHRALQDASLSHFVLLSDSFIESKNTRYNFRMFPTVTHEKWRKGSQW
FMLLRKHAEIVVGDSRILLKFYEHCKRFSQLKQKAVPNDQHKRDMQPQAGRKYGMTTSEN
DCVPDEHYIQTLIAIKTVENEIERRTLTYTLWKASDRRENDRWHPVTFNTADVSAQTIKD
IKGIHSVKEYETEGRTEWCSCNGIPRACFLFARKF SRGAVSKLLHNNETDFFGFAGETA
GTNNITAMVTGVEQARSLSL

>FGENESH: [mRNA] 31 1 exon (s) 98997 - 99893 897 bp, chain -
ATGGATACAAAGAGCCAAGGTCCAAAGTGGCTGCCAATGCTGATTTCTTGGCTCGCATC
ACGCGGCCCGAGAATCAACTGGGCCTGAAGTGCCTGTGCTCTCGCACCTTCAAGAACTTC
TGCACTCGCTGCGAGGACGTCGTCTGCGATGCGTGCCATGACGACAACCACCACGAAATC
GTCAAGATCCTCAAATCCTCGCGGCAGATGTCCATCAGGGTCGATGAGATCAAACACCTC
CTGGACGTGAGCGACGTGCAGTGGTACTACTGCAACTTCAAGTTCGGCGTTTACATCGAC
CGCCAACGTCCAACCAGCAGAACCCGCGAGGGAAAGGCCCAAATCTGCATCTCGTGTGGC
CGGAGGCACTCCACCGGCAAGGAAAAGCACCAGGACGCCCAGGAGATCGCGGATCTGGAA
AACGGGAAGTTCAAGTTTTGCAGCATCGGGTGCAAGCTGAGATACATTGTGCAGCATCCG
GGCGAGGGCTACACCCTTACGCTCGACTCGAGGTCTGCATCGAGCAGCGGTTTTTCGAGGA
CAAGCATTGCCAGTTTCTGAGATGAGATCAGACGACGCTGGGATGGAGATCTCGGAGGAG
ATTGTTGGTCTCAGCCTCAGCCTCAGCCTCGCCACTGGTGGAAAGAGAAAAGGTGGCAGG
GGGAGGTTGTCAAAGTCCTGCGGGAAAGCTTGCCAAGCTGAGGGATAGCGCAAATGTG
GAAGGAATTGAGCTGGGCATTGCTCCTCCGCCATTGAGGAATCATTATGCAAGGCAGGAA
GTTGTGACAAGTTTTACTTCCGAAGATCTTTCTTTTGTGCAACTTTCAGCCCTCTGGTGAA
ACGTATGAGGTAAGTACTGATCTATTTCCAGCATTAAAAGGAAATGGAATAACTTGTAA

>FGENESH: 31 1 exon (s) 98997 - 99893 298 aa, chain -
MDTKSQGPKWLPMLISLARITRPENQLGLKCVCSRTFKNFCTRCEDEVVCDACHDDNHHEI
VKILKSSRQMSIRVDEIKHLLDVSVDVQWYYCNFKFGVYIDRPTSNOQNPQGAQICISCG
RRHSTGKEKHRTPEEADLENGKFKFCSIGCKLRYIVQHPGEGYTLTLDSRSASSSSGFRG
QALPVSEMRSDDAGMEISEEIVGLSLSLSLATGGKRKGRGEVVKSPAGKLAKLRDSANV
EGIELGIAPPPLRNHYARQEVVTSFTSEDLSFVQLQPSGETYEVLDLFPALKGNGITC