

Gene: LEPRE1 - Sequence: NG\_008123.1  
 Transcript: NM\_001146289.1 - Protein: NP\_077002.2  
 Date : February 11, 2015

1<sup>st</sup> line: Base numbering. Full stops for intronic +/- 5, 10, 15...  
 2<sup>nd</sup> line: Base sequence. lower case Introns, upper case Exons  
 3<sup>rd</sup> line: Amino acid sequence. Printed on FIRST base of codon  
 4<sup>th</sup> line: Amino acid numbering. Numbered on 1<sup>st</sup> and increments of 10

Exon 1 | Start: 5001 | End: 5578 | Length: 577

```

. . . . .
ggcctgcagctggcggcgctccttgccctttcaaggaccccctcggtccgccccgggcggg

. . . . .
cggcgtcctccatgacagcgcccttatcctcccccactccctgggctgtgcgagtaggaaga

. . . . .
gcctgcgcataaaggcgctgggcggagcttccttcttctgtctactgggcgtcagtt

. . . . .
cgactgagcaaggcctgagctcggaggcggggctccggctgacgcgccgggattcgctga

. . . . .
gggccggtgggggatccgggctgactgaaaggaaaagaggcgggtgcaagcctcgtgggc

|-109      |-99      |-89      |-79      |-69      |-59
ATGCGCCGCCCGGCTTGGAAGGTGGGGCTTCGCCGGGGCGGGCCTTCGCCGGGGGTAG

|-49      |-39      |-29      |-19      |-9       |1
GACTCCGGCCTTGGTGGCGGGTGGCTGGCGGTTCGTTAGGTCTGAGGGAGCGATGGCGG
                                     M A V
                                     |1

|11      |21      |31      |41      |51      |61
TACGCGCGTTGAAGCTGCTGACCACACTGCTGGCTGTCGTGGCCGCTGCCTCCCAAGCCG
R A L K L L T T L L A V V A A A S Q A E
                        |11                        |21

|71      |81      |91      |101     |111     |121
AGGTCGAGTCCGAGGCAGGATGGGGCATGGTGACGCCTGATCTGCTCTTCGCCGAGGGGA
V E S E A G W G M V T P D L L F A E G T

```

|31 |41  
 |131 |141 |151 |161 |171 |181  
 CCGCAGCCTACGCGCGGGGACTGGCCCCGGGTGGTCCTGAGCATGGAACGGGCGCTGC  
 A A Y A R G D W P G V V L S M E R A L R  
 |51 |61  
 |191 |201 |211 |221 |231 |241  
 GCTCCCGGGCAGCCCTCCGCGCCCTTCGCCTGCGCTGCCGCACCCAGTGTGCCGCCGACT  
 S R A A L R A L R L R C R T Q C A A D F  
 |71 |81  
 |251 |261 |271 |281 |291 |301  
 TCCCGTGGGAGCTGGACCCCGACTGGTCCCCAGCCCGCCAGGCCTCGGGCGCCCGCG  
 P W E L D P D W S P S P A Q A S G A A A  
 |91 |101  
 |311 |321 |331 |341 |351 |361  
 CCCTGCGCGACCTGAGCTTCTTCGGGGGCCTTCTGCGTCGCGCTGCCTGCCTGCGCCGCT  
 L R D L S F F G G L L R R A A C L R R C  
 |111 |121  
 |371 |381 |391 |401 |411 |421  
 GCCTCGGGCCGCCGCGCCCACTCGCTCAGCGAAGAGATGGAGCTGGAGTTCGCCAAGC  
 L G P P A A H S L S E E M E L E F R K R  
 |131 |141  
 |431 |441 |451 |461 . . . .  
 GGAGCCCTACAACCTACCTGCAGGTGCGCTACTTCAAGgtgcagacctgcctggaaccag  
 S P Y N Y L Q V A Y F K  
 |151  
 . . . . .  
 gcggccggggtccttctggggagaggagtgttgaggggacctgaggagcttgggggatc  
 . . . . .  
 ggggaagtgtccgcaggaggaggaaagtggcctcctggctggggagctctcctcggagcc  
 . . . . .  
 ggggagagctgctccctggcaggagaccttctcgcccagttcgcatgggcagatgctaa  
 . . . . .  
 ccccaaaggtccagcctgggggttagggcacaggccaagcaaaactcatggccattttgtt  
 . . . . .  
 ccctgggaaatctcctggaaggaattaaagcggcagtt

Exon 2 | Start: 9610 | End: 9762 | Length: 152

```
. . . . .
agcactccccatacaatatgacctttgttttaaaatggaacattgctacttcctgtaatc

. . . . .
tggggaaccacctaaatctgacttgggaaagagctacaaatctgccagggcactatgctc

. . . . .
ctaactctgtcgtgggtagttcctgcaataggtgtgcttcctggggctggcaggggctggg

. . . . .
cacgctgagtggagggtcagggaggcagggatttcctgtttatgtggactgctcatgtg

. . . . .
gacacaaacgttcagagattggatgtgagcattatccaccttctcatgcttcattcttag

      |471      |481      |491      |501      |511      |521
ATCAACAAGTTGGAGAAAGCTGTTGCTGCAGCACACACCTTCTTCGTGGGCAATCCTGAG
I  N  K  L  E  K  A  V  A  A  A  H  T  F  F  V  G  N  P  E
                        |161                        |171

      |531      |541      |551      |561      |571      |581
CACATGGAAATGCAGCAGAACCTAGACTATTACCAAACCATGTCTGGAGTGAAGGAGGCC
H  M  E  M  Q  Q  N  L  D  Y  Y  Q  T  M  S  G  V  K  E  A
                        |181                        |191

      |591      |601      |611      . . . . .
GACTTCAAGGATCTTGAGACTCAACCCCATATGgtgaaaaaaactttatccccttctttc
D  F  K  D  L  E  T  Q  P  H  M
                        |201

. . . . .
tttctttctttttaaatatttttagagacagagtcttgctctgtcaccaggctggagt

. . . . .
gcagtggcttgatcatagctcactgtaacctcaaattcccggactcaagagaccctctag

. . . . .
tctcggcctcctgagtagttgggactacaggcatgcattcttttgttttttttaaatga
```

. . . . .  
cattactaaggttggttttctaattacattacagaagtaatgaatgttcattgtataacat  
  
. . . . .  
tgtagaaatgtaggtaagtataaaaataaaaagt

Exon 3 | Start: 12695 | End: 12884 | Length: 189  
BE AWARE: This section overlaps with the following exon

. . . . .  
acccaggaggtggaggttgagtgagctgagattgtgccactgcagtcagcctgggcaa  
  
. . . . .  
cagagtgagactctgtctcaaaaaagaaaaagagctaaatgtttttaattccaga  
  
. . . . .  
gctaaatatgttaagaccattacaaaaggccttcattttatagtgtaccaggtc  
  
. . . . .  
acccctttccatccataacctgaggaacaggaaattaggaccctgtgaaggtggctgag  
  
. . . . .  
ggcaaggagagagggttcctcctctgtggcctgcatttgagtgcctccttctccagtag

621	631	641	651	661	671
CAAGAATTCGACTGGGAGTGCGACTCTACTCAGAGGAACAGCCACAGGAAGCTGTGCC					
Q E F R L G V R L Y S E E Q P Q E A V P					
	211			221	

681	691	701	711	721	731
CACCTAGAGGCGGCGCTGCAAGAATACTTTGTGGCCTATGAGGAGTGCCGTGCCCTCTGC					
H L E A A L Q E Y F V A Y E E C R A L C					
	231			241	

741	751	761	771	781	791
GAAGGGCCCTATGACTACGATGGCTACAACCTTGAGTACAACGCTGACCTCTTCCAG					
E G P Y D Y D G Y N Y L E Y N A D L F Q					
	251			261	

801	. . . . .
GCCATCACAGgtgctgaggttcagagccagaccttcagccaggcctcctgggactctaa	
A I T D	

. . . . .  
 ggtcaccatctgataataataaatggggactcttcaccctcattcctcaatttattaaatc  
 . . . . .  
 tgagaagctgatgaaaaattgcttccatttgaatttggtcatcttaaccagaatttgagt  
 . . . . .  
 tctaaagagtgcctcatagttattccttctgtttgattcctttcagatcattacatcca  
 . . . . .  
 ggtcctcaactgtaagcagaactgtgtcacggagcttgcttcccaccaagtcgagagaa  
 . .  
 gccctttgaa

Exon 4 | Start: 13102 | End: 13233 | Length: 131

. . . . .  
 ccgtgccctctgcgaagggccctatgactacgatggctacaactaccttgagtacaacgc  
 . . . . .  
 tgacctcttccaggccatcacaggtgcgtgcagttcagagccagacctcagccaggcct  
 . . . . .  
 cctgggactctaaggtcacctctgataataataaatggggactcttcaccctcattcctc  
 . . . . .  
 aatttattaaatctgagaagctgatgaaaaattgcttccatttgaatttggtcatcttaa  
 . . . . .  
 ccagaatttgagttctaaagagtgcctcatagttattccttctgtttgattcctttcag

811	821	831	841	851	861
ATCATTACATCCAGGTCCTCAACTGTAAGCAGAACTGTGTACGGAGCTTGCTTCCACCC					
H Y I Q V L N C K Q N C V T E L A S H P					
271			281		

871	881	891	901	911	921
CAAGTCGAGAGAAGCCCTTTGAAGACTTCCTCCCATCGCATTATAATTATCTGCAGTTTG					
S R E K P F E D F L P S H Y N Y L Q F A					

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|291                                     |301

|931
CCTACTATAACAgtaaggcctactttccttcctctttctctgctggctaactaagaagct
Y Y N I
|311

. . . . .
aaaggcaaggtgggcagggattacagccacttacttcctcaaggtgtttggcttatttca

. . . . .
gtagctatgggaggcaccatgcccaagtgatccctgggtagtttggtataaacaactggcc

. . . . .
taggaagccaataccagcaacccaaaaagctgggggaggagacttaggacctcatctct

. . . . .
tgtcccttctataacttgtaatctattttggcttttgaattaaagttaatagcaaaataa

. . . . .
gggtatgccaca

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Exon 5 | Start: 14163 | End: 14302 | Length: 139

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. . . . .
attatttgtgaatcttaaaagatgtgggcatgcagagaattctgattcttttctgtttca

. . . . .
ttgttaggcagccctgaggacattgaccacctcaccttaaaattaatcacacattctatg

. . . . .
tgtattacttaactcctgcccctgaaatcaggccatcatgttaagtagcaggcaccagct

. . . . .
tgtcatgctgccattgcctcaagctttgtggagactgaacactaagtggtcacctgtgct

. . . . .
aggattttatcctttccttttgactctttcctctcagccattcttctttccactttgcag

|941      |951      |961      |971      |981      |991
TTGGGAATTATACACAGGCTGTTGAATGTGCCAAGACCTATCTTCTCTTCTTCCCAATG
G N Y T Q A V E C A K T Y L L F F P N D

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		321			331
1001	1011	1021	1031	1041	1051
ACGAGGTGATGAACCAAAATTTGGCCTATTATGCAGCTATGCTTGGAGAAGAACACACCA					
E V M N Q N L A Y Y A A M L G E E H T R					
		341			351
1061	1071	. . . . .			
GATCCATCGGCCCCGTGAGgtgagagacttccttctgttatgacagctgccagctgaac					
S I G P R E					
. . . . .					
tcagacctgagggcggaagagtggggtagcagaggggagtaggcgctgtgcgtgcagggc					
. . . . .					
aggggccagatgtcagtggttggggccagatgtgagttcagtcactcggcttggtattcag					
. . . . .					
aggagaaggagcacagggaggagtggtggggagtacacaggagcctcaattagcgttat					
. . . . .					
ctgggcccagaagtctattctctgagtcgccgagaactgcgcggtgagcatattctttcc					
. . . . .					
cctcttggcaccctaactt					

Exon 6 | Start: 16448 | End: 16537 | Length: 89  
 BE AWARE: This section overlaps with the following exon

. . . . .
gaatcatcagattatctgtcctagagactaatgggggttgggatgggggaggagcagggc
. . . . .
ttttcccttaaggaaagcctggttattccagtacctcagagggtactgttgcttggtcca
. . . . .
ggcagaggacacagaaattagacttttgtctcaaactggggaacagacagagagcattgg
. . . . .
tagggagaggaggcctcaggtcacatgggagcatcagtggtggggtgccaggagggggaac

```

. . . . .
tcccagaggttaaaagacagggctgagttctgggggatttgtttgctttttaccctcag

|1081      |1091      |1101      |1111      |1121      |1131
AGTGCCAAGGAGTACCGACAGCGAAGCCTACTGAAAAAGAACTGCTTTTCTTCGCTTAT
S A K E Y R Q R S L L E K E L L F F A Y
|361                                |371

|1141      |1151      |1161      . . . . .
GATGTTTTTGGGAATCCCTTTGTGGATCCGgtgagctagggtacaggagccggaagggag
D V F G I P F V D P
|381

. . . . .
cggggaaagagtgagcaggagagatgaatggggaggagggggaactgtgcgattctgag

. . . . .
agaaaacttgctggaggctgagcctagcctgggatctgtgcaaggcagggatgagagaca

. . . . .
gatgaaaggggaactgggcagctagaagggacttagatgtggaacctcccattttgt

. . . . .
ctcctgaaaggaagaggggtgataagctggattactcctgtgggccttattttatgcattg

. . . . .
agacacctggaagattaagtagatcatctt

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Exon 7 | Start: 16868 | End: 16920 | Length: 52  
BE AWARE: This section overlaps with the following exon

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. . . . .
cggggaaagagtgagcaggagagatgaatggggaggagggggaactgtgcgattctgag

. . . . .
agaaaacttgctggaggctgagcctagcctgggatctgtgcaaggcagggatgagagaca

. . . . .
gatgaaaggggaactgggcagctagaagggacttagatgtggaacctcccattttgt

. . . . .
ctcctgaaaggaagaggggtgataagctggattactcctgtgggccttattttatgcattg

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. . . . .  
agacacctggaagattaagtagatcatcttacctttttcatttcttcctgacctacttag

|1171 |1181 |1191 |1201 |1211 |1221 .  
GATTCATGGA CTCCAGAAGAAGTGATTCCCAAGAGATTGCAAGAGAAACAGAAgtgagga  
D S W T P E E V I P K R L Q E K Q K  
|391 |401

. . . . .  
ccttgaagaaactgcatgggttgatcagtcctgatgaagcacttgaggcttcctgagccca

. . . . .  
ggcagatgtgaactcctggcaaggggtgggcaggtccagtttgggaagtcgggggtggagc

. . . . .  
ccagggctggccctggaatgcagtcctcagagcggctgtgctcataggtcagaacgggaa

. . . . .  
acagccgtacgcacatctcccaggagattgggaaccttatgaaggaaatcgagacccttggtg

. . . . .  
gaagagaagaccaaggagtcactggatgtgagcagactgaccgggaaggtga

Exon 8 | Start: 17095 | End: 17216 | Length: 121

. . . . .  
atztatgcattgagacacctggaagattaagtagatcatcttacctttttcatttcttc

. . . . .  
ctgacctacttaggattcatggactccagaagaagtgattccaagagattgcaagagaa

. . . . .  
acagaagtgaggacctgaagaaactgcatgggttgatcagtcctgatgaagcacttgagg

. . . . .  
cttcctgagcccaggcagatgtgaactcctggcaaggggtgggcaggtccagtttgggaa

. . . . .  
gtcgggggtggagcccagggtggccctggaatgcagtcctcagagcggctgtgctcatag

|1231 |1241 |1251 |1261 |1271 |1281

GTCAGAACGGGAAACAGCCGTACGCATCTCCCAGGAGATTGGGAACCTTATGAAGGAAAT  
S E R E T A V R I S Q E I G N L M K E I  
|411 |421

|1291 |1301 |1311 |1321 |1331 |1341  
CGAGACCCTTGTGGAAGAGAAGACCAAGGAGTCACTGGATGTGAGCAGACTGACCCGGGA  
E T L V E E K T K E S L D V S R L T R E  
|431 |441

. . . . .  
AGgtgagaggacagaaatagggcatgtctggctgttgtcagggagccaggcaggtcacc  
G

. . . . .  
ccacatttgccaggcagcgctccacccagcattgcagagctcacatgagccagccacc

. . . . .  
cttagggtgcaagttcagtggaacatccttcctaactcaccagcgggactttcagctggaa

. . . . .  
agagcactgagaatcagcctttggctcagaaatcagactccaggatgtagtggtgcacac

. . . . .  
ccgtaatcccagctacttggcaggctgaggcaggaggatcgcttgagcccaggagtttga

.  
at

Exon 9 | Start: 19421 | End: 19548 | Length: 127  
BE AWARE: This section overlaps with the following exon

. . . . .  
gttcttcctcgttcccagactcatgttttaggattgtgtttctgatgtttcctcaagagt

. . . . .  
gtgtcatggccaaaagccagcagctatttggcatggagctgggactgggaatctcatc

. . . . .  
tttcagctctatgttctgtcctctggactattctacctttgaaaatgacctagcgggaga

. . . . .

ttttgctggtgaaaaggaaacagctggaatttctatttgtgacgaggaggcaatatccaa  
 . . . . .  
 tggagagtctttggtctagctgctgctagatttagctagagttttgtcattgctttgcag  
 |1351 |1361 |1371 |1381 |1391 |1401  
 GTGGCCCCCTGCTGTATGAAGGCATCAGTCTCACCATGAACTCCAACTCCTGAATGGTT  
 G P L L Y E G I S L T M N S K L L N G S  
 |451 |461  
 |1411 |1421 |1431 |1441 |1451 |1461  
 CCCAGCGGGTGGTGTATGGACGGCGTAATCTCTGACCACGAGTGTGAGGAGCTGCAGAGAC  
 Q R V V M D G V I S D H E C Q E L Q R L  
 |471 |481  
 |1471 . . . . .  
 TGACCAATgtaagggaagcccagtgactgcaccttcccccaagggtccagcatccccca  
 T N  
 |491  
 . . . . .  
 ccaagtgcccttgggtggtagccttcgccttcctcttctggccacagttgaccacctc  
 . . . . .  
 ttctcaagccctcagctgccctggctaacatcaccttgtgttttgggccttgtaggtggc  
 . . . . .  
 agcaacctcaggagatggctaccggggtcagacctccccacatactccaatgaaaagtt  
 . . . . .  
 ctatggtgtcactgtcttcaaagccctcaaggtaagatcaacactgggcattctagagtg  
 . . .  
 tggagaaa

Exon 10 | Start: 19716 | End: 19811 | Length: 95

. . . . .  
 tgcaggtggccccctgctgtatgaaggcatcagtcaccatgaactccaaactcctgaa  
 . . . . .  
 tggttcccagcgggtggtgatggacggcgtaatctctgaccacgagtgtcaggagctgca

```

. . . . .
gagactgaccaatgtaagggaagcccagtgactgcaccttccccaagggtccagcatcc

. . . . .
ccccaccaagtgcccttgggtggtagccttcgccttccttcttctggccacagttgacc

. . . . .
acctcttctcaagccctcagctgccctggctaacatcaccttggttttgggcctttag

      |1481      |1491      |1501      |1511      |1521      |1531
GTGGCAGCAACCTCAGGAGATGGCTACCGGGTCAGACCTCCCCACATACTCCCAATGAA
V A A T S G D G Y R G Q T S P H T P N E
                        |501                        |511

      |1541      |1551      |1561      . . . . .
AAGTTCTATGGTGTCACTGTCTTCAAAGCCCTCAAGgtaagatcaacactgggcattcta
K F Y G V T V F K A L K
                        |521

. . . . .
gagtgtggagaaaggggtggggaagggggaagctcaggctttgaggaagagttggggctg

. . . . .
gtggcaggaaaggtgaagagggtccacctgccaacattcttgttccaggaagcgaggat

. . . . .
gagttatgttgctgaggttcacttttgaatcctgttagaccgagtgtaatcaaaacaaa

. . . . .
gtgagcaggataagactgttcgcaaagctatgagaatgctttctttagaaaggctgatt

. . . . .
ctagagggtgtgcttctgtgcaggatgcacagtgt

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Exon 11 | Start: 21749 | End: 21899 | Length: 150

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. . . . .
acgggggtggctggccgggctgaggggctcctcacttcccagtaggggcgggcgggcagag

. . . . .
gcgcccctcacctcccgacgcaaactccatttttttaaagccaccagatctcgtgaga

```

. . . . .  
 cttattcagttattatgagaacagcacgggaaagatccacccccattattcagtcattctcc  
  
 . . . . .  
 caccaggtcccttccacaacacatgggaattatgggaactacaagataagatttgggtag  
  
 . . . . .  
 ggacacagagccaaaccatatcagtcgttgagggcagctgaccatctgtctccttggcag  
  
 |1571 |1581 |1591 |1601 |1611 |1621  
 CTGGGGCAAGAAGGCAAAGTTCCTCTGCAGAGTGCCACCTGTACTACAACGTGACGGAG  
 L G Q E G K V P L Q S A H L Y Y N V T E  
 |531 |541  
  
 |1631 |1641 |1651 |1661 |1671 |1681  
 AAGGTGCGGCGCATCATGGAGTCTTCTTCCGCTGGATACGCCCCTCTACTTTTCTTCTAC  
 K V R R I M E S Y F R L D T P L Y F S Y  
 |551 |561  
  
 |1691 |1701 |1711 . . . . .  
 TCTCATCTGGTGTGCCGCACTGCCATCGAAGgtgggcctcattaccctgcagcaccgcg  
 S H L V C R T A I E E  
 |571  
  
 . . . . .  
 ccccgcatgctgtacctcagctctgtgctggatgctgaagacacagagagaacaggatgc  
  
 . . . . .  
 ggtcccttttcttcagttggggaaccaatgtaaatacatgggtggcatcccagtgatg  
  
 . . . . .  
 catgccacagtagcatggaggaagttatagtcacctacctggggatcaagaaggcttcc  
  
 . . . . .  
 cagagggaaatggggtgcagccagaaagggggccacccgtcacttgtcacacaacgcact  
  
 . . . . .  
 ttaatggggaagctgggtgctaaccattcat

Exon 12 | Start: 23768 | End: 23885 | Length: 117  
 BE AWARE: This section overlaps with the following exon

Exon 13 | Start: 24287 | End: 24362 | Length: 75  
BE AWARE: This section overlaps with the following exon

. . . . .  
 tggggctagctgttcccagagtccaatcctttatccccaacccgctggataagaagata  
 . . . . .  
 ggcaaagagggaatcatatcgtggtgtgacaagaacggtagtgtagtgggcacagggga  
 . . . . .  
 ctctaaggcgagggtggagagtggaaaggtggagtttgtacggcatcagtataggttctt  
 . . . . .  
 aaaggtttccctcccacacaaagccaccctcctgctgctggttgagagcacctggaggtg  
 . . . . .  
 aaggctcaggggaaaggaggcaggggaagggccatgatgagatgtctctgcctttccag  
 |1841 |1851 |1861 |1871 |1881 |1891  
 CGCCATCCTTTACCTAAATGGGGACTTCGATGGCGGAACTTTTATTTCACTGAACTGGA  
 A I L Y L N G D F D G G N F Y F T E L D  
 |621 |631  
 |1901 |1911 . . . . .  
 TGCCAAGACCGTGACGgtgagtgctcccttgtccttgtccctgggagataaaaagtctgt  
 A K T V T  
 . . . . .  
 tttctacagctgatgttcccaaagtgacgtggacaaaaataaccaactgggcttccagct  
 . . . . .  
 gggcggtacccttcccccatccagaggggctttgagacgtgtccatcactcctctaacca  
 . . . . .  
 gtcaccctttctctttagttctggtcttagggaagccatactgaagagctgccctcggtc  
 . . . . .  
 gtgagccctaataagagcccatgtctcttctgagagtggattacagtctttgtcctgtgcaa  
 . . . . .  
 cccccctccctttctg

Exon 14 | Start: 24673 | End: 24813 | Length: 140  
 BE AWARE: This section overlaps with the following exon

. . . . .  
ccttgctccttggtccctgggagataaaaagtctgttttctacagctgatgttcccaaagtg

. . . . .  
cagtggaacaaaaataaccaactgggcttcccagtgggcggtacccttcccccatccagag

. . . . .  
gggctttgagacgtgtccatcactcctctaaccagtcaccctttctcttagttctggtc

. . . . .  
ttagggaagccatactgaagagctgccctcggctcgtgagccctaataagcccagctctct

. . . . .  
tctgagagtggattacagtctttgtcctgtgcaacccccctccctttctgtcccccttag

          |1921      |1931      |1941      |1951      |1961      |1971  
GCAGAGGTGCAGCCTCAGTGTGGAAGAGCCGTGGGATTCTTTCAGGCACTGAAAACCCA  
A E V Q P Q C G R A V G F S S G T E N P  
          |641                                  |651

          |1981      |1991      |2001      |2011      |2021      |2031  
CATGGAGTGAAGGCTGTCACCAGGGGGCAGCGCTGTGCCATCGCCCTGTGGTTCACCCTG  
H G V K A V T R G Q R C A I A L W F T L  
          |661                                  |671

          |2041      |2051      . . . . .  
GACCCTCGACACAGCGAGCGGgtgagagcagctcgagcgggtgagagcagctgggtgctgt  
D P R H S E R  
          |681

. . . . .  
ggtgaccggttcccagagcgcccttgggttgcctttctcttccccaaatcccattgccag

. . . . .  
tggctgagacacgaaaggagcacttgggacaccagctccaacgccctgtcattatgggtca

. . . . .  
cattgccttgctcctccctgggcctgctgtgaacgggatccaggtggggaaagaggtcaag

. . . . .  
acagggagcgaatgctgagttcttgggtccctccttgggccccacttcagctgtccttttc

. . . . .



cagagagtaggacctgctggg

Exon 15 | Start: 25233 | End: 25750 | Length: 517

. . . . .  
cacttgggacaccagctccaacgccctgtcattatgggtcacattgccttgtcctccctgg

. . . . .  
gcctgctgtgaacgggatccaggtggggaaagaggtcaagacaggagcgatgctgagtt

. . . . .  
cttgggtccctccttggggcccacttcagctgtccttttccagagagtaggacctgctgg

. . . . .  
gaaggagatgagcctggggccattaaggaaccttccttgtcccctgggaagtagcagctg

. . . . .  
agagatagcgagtgtctggagcggaggcctctctgaatgggcaggggtttgtccttgag

2061	2071	2081	2091	2101	2111
GACAGGGTGCAGGCAGATGACCTGGTGAAGATGCTCTTCAGCCCAGAAGAGATGGACCTC					
D R V Q A D D L V K M L F S P E E M D L					
691				701	

2121	2131	2141	2151	2161	2171
TCCCAGGAGCAGCCCCCTGGATGCCAGCAGGGCCCCCGAACCTGCACAAGAGTCTCTC					
S Q E Q P L D A Q Q G P P E P A Q E S L					
711				721	

2181	2191	2201	2211	+11	+21
TCAGGCAGTGAATCGAAGCCCAAGGATGAGCTATGACAGCGTCCAGGTCAGACGGATGGG					
S G S E S K P K D E L *					
731					

+31	+41	+51	+61	+71	+81
TGACTAGACCCATGGAGAGGAACCTTCTGCACTCTGAGCTGGCCAGCCCCTCGGGGCTG					

+91	+101	+111	+121	+131	+141
CAGAGCAGTGAGCCTACATCTGCCACTCAGCCGAGGGGACCCTGCTCAGAGCCTTCTACA					

+151	+161	+171	+181	+191	+201
TGGTGCTACTGCTCTTGGAGTGGACATGACCAGACACCGACCCCCTGGATCTGGCTGAG					

+211	+221	+231	+241	+251	+261
GGCTCAGGACACAGGCCAGCCACCCAGGGCCTCCACAGGCCGCTGCATGACAGCGA					
+271	+281	+291	+301	+311	+321
TACAGTACTTAAGTGTCTGTGTAGACAACCAAGAATAAATGATTCATGGTTTTTTTAC					
+331	+341	+351	+361	.	.
TTGTTTTGTTTCAGACAATGGAAATTGCCCATTCTGTCCcagaggtctcacttgataaaa					
.	.	.	.	.	.
attgctctaggcaggaccagtggtggcaggtgtgggacgagaagtcctggcttggcacctgg					
.	.	.	.	.	.
ctcaaccacttgctgtgcagccacaggccagacacttaaccttcagcacctcggggttgt					
.	.	.	.	.	.
catctgtataatggggatcatagtcctcctctgctcaccttctggggcagctgtatggc					
.	.	.	.	.	.
ccagatgcaatatcggatgtgacaacacttttgtaaacggtaaagctctgggtgaatggt					
.	.	.	.	.	.
tgggattattgttaatcctcttctggcagggagcggcg					

LRG Parser: Version: 0.2, Version Date: 11/02/2015  
 Reader: Version: 0.2, Version Date: 11/02/2015  
 Writer: Version: 0.2, Version Date: 11/02/2015  
 Control: Version: 0.2, Version Date: 11/02/2015