Human and mouse RB1 promoters found in Transcriptional Regulatory Element Database

(https://cb.utdallas.edu/cgi-bin/TRED/tred.cgi?process=searchPromForm)

Gene Information

Accession Number 7507

Names RB1, RB

Species human, Homo sapiens

Chromosome Location 13q14.2

Strand -

Promoters 10832; Quality: 2: known - stated explicitly in GenBank records

10833; Quality: 2: known - stated explicitly in GenBank records

10834; Quality: 2: known - stated explicitly in GenBank records

Annotations GenBank Nucleotide: BC039060 GenBank Nucleotide: BC040540 GenBank Nucleotide: L41870

GenBank Nucleotide: M15400 GenBank Nucleotide: M19701 GenBank Nucleotide: M28419

GenBank Nucleotide: M33647 GenBank Nucleotide: NM_000321 GeneCards: GC13P046675

GeneCards: GC13P046877 UniGene: Hs.408528 LocusLink: 5925

View on UCSC Genome Browser for hg15: Go

Gene Information

Accession Number 40145

Names Rb1, Rb, pRb, Rb-1

Species mouse, Mus musculus

Chromosome Location 14 41.0 cM

Strand .

Promoters 56310; Quality: 3.1: refseq,predicted - associated with Refseq, TSS is predicted

135969; Quality: 3.2: refseq - associated with Refseq, take Refseq start as TSS

Annotations GenBank Nucleotide: M26391 GenBank Nucleotide: NM_009029 UniGene: Mm.304

LocusLink: 19645

View on UCSC Genome Browser for mm3: Go

Human and mouse RB2 promoters found in Transcriptional Regulatory Element Database

(https://cb.utdallas.edu/cgi-bin/TRED/tred.cgi?process=searchPromForm)

Gene Information

Accession Number 10654

Names RBL2, Rb2, P130

Species human, Homo sapiens

Chromosome Location 16q12.2

Strand -

Promoters 15181; Quality: 2: known - stated explicitly in GenBank records

116990; Quality: 3.2: refseq - associated with Refseq, take Refseq start as TSS

Annotations GenBank Nucleotide: BC034490 GenBank Nucleotide: NM_005611 GenBank Nucleotide: S67171

GenBank Nucleotide: X74594 GenBank Nucleotide: X76061 GeneCards: GC16P053246

UniGene: Hs.283604 LocusLink: 5934
View on UCSC Genome Browser for hg15: Go

Gene Information

Accession Number 58768

Names Rbl2, Rb2, p130

Species mouse, Mus musculus

Chromosome Location 8 40.99 cM

Strand +

Promoters 79826; Quality: 2: known - stated explicitly in GenBank records

134196; Quality: 3.2: refseq - associated with Refseq, take Refseq start as TSS

Annotations GenBank Nucleotide: <u>BC020528</u> GenBank Nucleotide: <u>NM_011250</u> GenBank Nucleotide: <u>U36799</u>

GenBank Nucleotide: U47333 GenBank Nucleotide: U50850 GenBank Nucleotide: Z68184

UniGene: Mm.28027 LocusLink: 19651

View on UCSC Genome Browser for mm3 : Go

Human and mouse p107 promoters found in Transcriptional Regulatory Element Database

(https://cb.utdallas.edu/cgi-bin/TRED/tred.cgi?process=searchPromForm)

Gene Information

Accession Number 18692

Names p107, retinoblastoma related protein, RBL1, Homo sapiens retinoblastoma-like 1, PRB1, CP107, MGC40006

Species human, Homo sapiens

Chromosome Location 20q11.2

Strand -

Promoters 112853; Quality: 1: known,curated - experimentally verified and stated explicitly in GenBank records

26910 ; Quality: 3.1: refseq,predicted - associated with Refseq, TSS is predicted 112541 ; Quality: 3.2: refseq - associated with Refseq, take Refseq start as TSS 115006 ; Quality: 3.2: refseq - associated with Refseq, take Refseq start as TSS

Annotations GenBank Nucleotide: <u>BC032247</u> GenBank Nucleotide: <u>L14812</u> GenBank Nucleotide: <u>M74547</u>

GenBank Nucleotide: NM_002895 GenBank Nucleotide: NM_183404 GeneCards: GC20M035354

GeneCards: GC20M036311 UniGene: Hs.87 LocusLink: 5933

View on UCSC Genome Browser for hg15: Go

Gene Information

Accession Number 47580

Names Rbl1

Species mouse, Mus musculus

Chromosome Location

Strand -

Promoters 65671; Quality: 4: withRNA - associated with other mRNAs

Annotations GenBank Nucleotide: AK012418 GenBank Nucleotide: AK033402 GenBank Nucleotide: BC023853

GenBank Nucleotide: <u>U27177</u> GenBank Nucleotide: <u>U27178</u> GenBank Nucleotide: <u>U33320</u>

UniGene: Mm.2994 LocusLink: 19650
View on UCSC Genome Browser for mm3: Go

Potential transcription factor binding sites found on -700 + 299 region of human RB1 promoter found in ALIBABA2 software (https://www.generegulation.com)

AliBaba2.1 predicts the following sites in your sequence

Sequence RB1chr1347814547-700..299humanHomosapiens

```
ctgacagacttctattcagcagctactgctcccctgaaaatcttcctcagacgtttccac
Segments:
______
                  ggtgcttcccgttcttacaccactacaatcctttattacactactatccgttcattcccc
Segments:
2.3.1.0
                     ====Sp1===
                             =C/EBPalp=
1.1.3.0
        74
        118 127
seq( 120.. 179)
                  acagetecetecetteettteeetaaceagtgateecaaaaggeeageaagtgtetaaea
Segments:
2.3.1.0
        118 127
2.3.1.0
        128 137
                                           ====NF-1==
seq( 180.. 239)
                  Segments:
seq( 240..
                  tgttttggccgactttgcaaaacggattgggcgggatgagaggtggggggcgcccaa
Segments:
                             ===C/EBP==
1.1.3.0
         254 263
2.3.1.0
         267
            277
                                       =====gp1====
2.3.1.0
        278
            289
seq( 300.. 359)
                  ggagggagagtgccccccccccaggggtgcactagccagatattccctgcggggcccga
Segments:
2.3.1.0
        313 322
                            ====Sp1===
        349 358
seq( 360.. 419)
                  Segments:
        366 375
                      ===GATA-1=
                  tgtatagccccgttaagtgcaccccggcctggagggggtggttctgggtagaagcacgtc
Segments:
2.3.1.0
        439 448
2.3.1.0
         450
            462
                                          =====Sp1====
        479 488
seq( 480..
                  cgggccgcgcggatgcctcctggaaggcgcctggacccacgccaggtttcccagtttaa
Segments:
1.6.1.0
            488
                  AP-2alph=
         479
2.3.1.0
         480
            489
                  ====Sp1===
                             ====Sp1===
_____
seq( 540.. 599)
                  tteeteatqaettageqteecagecegeqeacegaceaqegeeceaqtteeceacagacg
Segments:
2.3.1.0
        558 567
                                ====Sp1===
2.3.1.0
        582
            591
                                                    ===Sp1===
2.3.1.0
         599 613
```

Potential transcription factor binding sites found on -700 + 299 region of human RB1 promoter found in ALIBABA2 software

(https://www.generegulation.com)

```
seq( 600.. 659)
                  ccggcgggcccgggagcctcgcggacgtgacgccgcggggggaagtgacgttttcccgcg
Segments:
2.3.1.0
         599 613
                  =====Sp1=====
1.6.1.0
         608
             617
                         =AP-2alph=
1.6.1.0
         630
             641
                                            ==AP-2alphaA
2.3.1.0
         631 645
                                             =====Sp1=====
2.3.1.0
         640
             649
9.9.51
         644
             653
1.3.2.3
         649
             658
seq( 660.. 719)
                  gttggacgcgcgctcagttgccgggcggggggggcgcgtccggtttttctcaggggac
Segments:
2.3.1.0
         680 694
                                   =====Sp1=====
            693
2.3.2.3
         684
                                       ====WT1===
         687 696
                                         ====Sp1===
__________
seg( 720.. 779)
                  Segments:
2.3.1.0
         739 749
                                   ====YY1===
2.3.1.0
         753
seq( 780..
                  gcgtcgtcctccccggcgctcctccacagctcgctggctcccgccgcggaaaggcgtcat
Segments:
2.3.1.0
         787
             796
                        ====YY1===
2.3.1.0
         797
             806
                                 ====Sp1===
         802
            811
1.1.3.0
                                     =C/EBPbeta
2.3.1.0
         817 826
seg( 840.. 899)
                  Segments:
2.3.1.0
            879
         866
                                        =====Sp1=====
2.3.1.0
         872
             881
            889
2.3.1.0
         880
                                                    ====Sp1===
                  ggcaccgccgccgccccctcctgaggaggacccagagcaggacagcggcccggagga
Segments:
2.3.1.0
         904 913
         911 922
                            ====Sp1====
seq( 960.. 1019)
                  cctgcctctcgtcaggtgagcgagcagagccgccgtcgcc
Segments:
40 segments in this sequence identified as potential binding sites
40 segments in complete file identified as potential binding sites
```

Potential transcription factor binding sites found on -700 + 299 region of mouse RB1 promoter found in ALIBABA2 software (https://www.generegulation.com)

AliBaba2.1 predicts the following sites in your sequence

Sequence Rb1chr1463649271-700..299-mouseMusmusculus

```
ctctctqqaatqqtacatcttccaqqqtcttttqaacttqcaqttatctattttttaaqc
Segments:
9.9.539
        57
60.. 119)
                 caatctggtctaataactctggcttcttcaaagccacaccatttctagtccagctgtgca
Segments:
9.9.539
        57
seg( 120.. 179)
                 gaaacttcagatgaaaacagctgcattgaaaatagaggcactcccttcacccccaccta
Segments:
9.9.428
        120 129
                 ===ISGF-3=
seq( 180.. 239)
                 aaggtgtatttaaattatcttgtgggattaacttatttagagatggtataatttaaaata
Segments:
3.1.2.1
        227 236
seq( 240.. 299)
                 ggggatatttaaggtagcatcagctagcatttaagaaaatcactttttctaaactccata
Segments:
        255 264
9.9.29
seg( 300.. 359)
                 ctttttgaaaagaaatctggtcttgttaggaaacaaatttctattttgtcctcaatttag
Segments:
1.1.3.0
        327 336
                                      ===C/EBP==
        359 368
3.5.3.0
seg( 360.. 419)
                 tttcagttttactagtttgatagttatctcaataacaaaagcaatagacagcttccccca
Segments:
3.5.3.0
        359 368
                 ==ICSBP==
        394 403
                                           =C/EBPalp=
seq( 420.. 479)
                 Segments:
9.9.29
        441 450
                                 ====AP-1==
        467 476
seq( 480.. 539)
                 taccatacttctaggtcttttgctagtgagttcaagttagaattagtgacagaatcatag
Segments:
seq( 540.. 599)
                 gaattttcagagatcctgcttcgagatttcttaaagctgcagacactgcactattggttt
Segments:
1.1.3.0
        599 608
seq( 600.. 659)
                 tgtttttttgtaccggttgaaactatacattcaaattgctatgttcctattttctataat
Segments:
1.1.3.0
        599 608
                 C/EBPalp=
                =====Hb===
2.3.2.2
        600 609
3.1.2.2
        627 636
                                      ===Oct-1==
_______
seq( 660.. 719)
                 agtttgtctattttaaaataaactagttgttcagagccttactggtgtgatatgatctct
Segments:
   720.. 779)
                 gagttaagtgttttctgcatctgagctttctcctcacatcttttccattctgatgaccga
```

Potential transcription factor binding sites found on -700 + 299 region of mouse RB1 promoter found in ALIBABA2 software (https://www.generegulation.com)

```
Segments:
9.9.29
      768 777
seg( 780.. 839)
            Segments:
tctgttctcttgtgtctccttttttatgaaatgaatttgtctaaaaagctgtatgctttg
Segments:
1.1.3.0
      863 872
seg( 900.. 959)
            tgaggccctcccagaaacaggaaaaaggagacactaaaaacttgaaagcaacgtatacag
Segments:
     901 912 ====Sp1====
2.3.1.0
seg( 960.. 1019)
            cagggaatagaaagactgggaagagacagtaggcggctgt
Segments:
2.3.1.0
      986 995
                           ====Sp1===
16 segments in this sequence identified as potential binding sites
```

16 segments in complete file identified as potential binding sites

Potential transcription factor binding sites found on -700 + 299 region of human RB2/P130 promoter found in ALIBABA2 software (https://www.generegulation.com)

AliBaba2.1 predicts the following sites in your sequence

Sequence RBL2chr1653206207-700..299humanHomosapiens

```
_______
             atgttatecetgagageaattggggaggteaggaatettatageetetggetgeaageet
Segments:
9.9.539
      45
cctaaatcataatttctaatcttgtggctaatttgttagttctacaaaggcagactgatc
    60.. 119)
Segments:
______
seq( 120.. 179)
             cccaggcaagaatggggtttgtttttggaaaggactgttacaatctttgtttcaaagtga
Segments:
seg( 180.. 239)
             aattagaaattaaattcctcctgtagttagttaggtcttcgcccaggaatgaacaagggc
Segments:
2.3.1.0
      214 228
                                   =====Sp1=====
__________
seq( 240.. 299)
             agctcggaagtgagaagcgtggagtcatttaggtcagatcccttgcactgtcataacttt
Segments:
seq( 300.. 359)
             ctcactgttaggatttttgcaaaggcagtttcgtgaacgtacagagacaggcccttgcta
Segments:
      312 322
1.1.3.0
                     =C/EBPalpha
seq( 360.. 419)
             ttatccctattttttagataaggatatccaggcgatgaggaagttttacttctgggaaca
Segments:
4.3.2.0
      377 386
______
seg( 420.. 479)
             gcctggatacgaaaccttcacacgtcagtgtctttttggacattttctcgtcagtacagcc
Segments:
1.1.1.6
      437 446
                        =CREBomega
      437 446
                        ====CREB==
_______
seq( 480.. 539)
             ctgttgaatgttctcacggtggggaggtacgtgtttaaaatgcggggaaggtgcttttat
Segments:
2.3.1.0
      497 506
                        ====Sp1===
2.3.3.0
      517 526
                                    ====MIG1==
      524 533
4.1.1.0
                                         =NF-kappa=
_______
seq( 540.. 599)
             ttcacccctggtgaaactaggggagctaatttttttaaacatgatttttggcccccttga
Segments:
seq( 600..
             accgccggcctggactacgtttcccagcagcccgtgctcaagactacgggtgcctgcagg
Segments:
2.3.1.0
      606 615
                 ====Sp1===
      651 660
seq( 660.. 719)
             Segments:
1.6.1.0
      651 660
2.3.1.0
      675
         684
                       ====Sp1===
2.3.1.0
      688
         701
                               =====Sp1=====
      695
         704
2.3.1.0
      701
         714
      707 716
2.3.1.0
                                           ====Sp1===
```

Potential transcription factor binding sites found on -700 + 299 region of human RB2/P130 promoter found in ALIBABA2 software (https://www.generegulation.com)

```
Segments:
2.3.1.0
          735
             748
                                  =====Sp1=====
          746
              755
                                            ====Sp1===
2.3.1.0
          767
             776
          774 785
seq( 780.. 839)
                    tgcgctatgccgtcgggaggtgaccagtcgccaccgccccgcctcccctccggcggcg
Segments:
2.3.1.0
         774 785
2.3.1.0
          811
              825
                                                 =====Sp1=====
2.3.2.3
          813
              822
                                                   ====WT1===
          814
              823
                                                    ==Krox-20=
2.3.1.0
          817
              831
          831 841
seg( 840.. 899)
                    gcagcctcggatgaggaggaggacgacggcgaggcggaagacgccgccgcctgcc
Segments:
2.3.1.0
          831 841
          854
              864
                                 ====Sp1===
          870
              880
                                                ====Sp1===
          886
              895
                                                               ====Sp1===
seq( 900..
                    gagtcgcccaccctcagatccagcagcggttcgacgagctgtqcagccgcctcaacatg
Segments:
2.3.1.0
          905 915
seq( 960.. 1019)
                    gacgaggcggggcggggccgaggcctgggacagctaccgca
Segments:
2.3.1.0
          963 977
                       =====Sp1=====
          966 975
2.3.2.1
                         ===Egr-1==
2.3.1.0
          972
              983
                               ====Sp1====
32 segments in this sequence identified as potential binding sites
32 segments in complete file identified as potential binding sites
```

Potential transcription factor binding sites found on -700 + 299 region of mouse RB2/P130 promoter found in ALIBABA2 software (https://www.generegulation.com)

AliBaba2.1 predicts the following sites in your sequence

Sequence Rb12chr890406236-700..299mouseMusmusculus

```
agggttgagggttgagggttttttattttgtttttgttttggtgaagtgagatcaattctt
Segments:
2.3.2.2
       18
          27
                           ====Hb===
1.1.3.0
       21
          30
                             =C/EBPalp=
_______
               agctcaatatacctttgccattgatagcgttgacataggagtgtcacttgaggaatcctc
Segments:
seg( 120.. 179)
               Segments:
2.1.1.4
       129 138
                     ====ER===
2.1.2.1
       130 139
                      =RAR-alph=
2.1.2.10
       130 139
                      ====COUP==
       151 163
2.3.1.0
2.3.1.0
       160 173
seq( 180.. 239)
               attaagaaagtagctgataaagcaacggggagctaagtcagtaagcagcgtcctgcttta
Segments:
seg( 240.. 299)
               acctccqtcaatqatqaactqtaaaqactaaaatqaaataaqccctttcctctccqagtt
Segments:
seq( 300.. 359)
               Segments:
2.2.1.1
       312 321
                       ===GATA-1=
       338 347
2.3.1.0
                                         ====Sp1===
_____
seg( 360.. 419)
               ttactttggaccttttagctttactatctgaggacctctaggtgaggatgtgtaaagg
Segments:
9.9.45
       365 374
                  ===ARP-1==
______
seg( 420.. 479)
               gcttatatactaaatcctgtcgatatttcttggtctttttctcttcaaacgagccttctg
Segments:
1.1.1.5
       453 462
seq( 480.. 539)
               aatggtctcactattgagagatgctttttaaaacggtagaggacgtgtccattcacccct
Segments:
1.1.5.2
       521 530
                                           ===EmBP-1=
       522 531
                                            ====GBF1==
seg( 540.. 599)
               aaatgatgcacagctcgttttttgctttcttcttccatgactttttggtctccctgagatc
Segments:
1.1.3.0
       557 566
2.1.2.3
       577 586
                                         =REV-ErbA=
seq( 600.. 659)
               ccggccgagactacatttcccagcaggccgtgctcagacctacgggtgcccgcatgggac
Segments:
______
seq( 660.. 719)
               tgaggaactttgggggcggcacagtagcaggacaggctgctgacgggccggcgcttcgcg
Segments:
2.3.1.0
       669 681
                     ====Sp1====
2.3.1.0
       702 713
                                            ====Sp1====
```

Potential transcription factor binding sites found on -700 + 299 region of mouse RB2/P130 promoter found in ALIBABA2 software (https://www.generegulation.com)

```
gtttgaatggctgcgggccctgagcgcatctgaagagccgcggcctcggggtgc
Segments:
2.3.1.0
       732 745
                           =====Sp1=====
      738 747
                               ====Sp1===
seq( 780.. 839)
                 gccatggcatctggaggcaaccagtcgccaccgcctcctccaqctgctgcagccagctcg
Segments:
2.3.1.0
        808 819
3.5.1.2
        820 829
                                                 ===Adf-1==
seq( 840.. 899)
                 gaggaagaggaggatggcgacgccgcggatcgcgcgcagcccgcggggtccccgagc
Segments:
2.3.1.0
        840 854 =====Sp1====
        855 864
                             ===Adf-1==
______
seg( 900.. 959)
                 catcagatccagcagcggttcgaggagctgtgcagccgcctcaacatggacgaggcggcg
Segments:
2.3.1.0
        951 960
                                                          ====Sp1==
seq( 960.. 1019)
                 cgcgccgaggcctggagcagctaccgcagcatgagcgaga
Segments:
2.3.1.0
        951 960 =
24 segments in this sequence identified as potential binding sites
24 segments in complete file identified as potential binding sites
```

Potential transcription factor binding sites found on -700 + 299 region of human P107 promoter found in ALIBABA2 software (https://www.generegulation.com)

AliBaba2.1 predicts the following sites in your sequence

Sequence p107chr2036362838-700..299-humanHomosapiens

```
aqtcacqtqaaacaqccataqqttccctqcctccaqaccctattctcctqcctcatttac
Segments:
2.3.1.0
        24
                                  ====Sp1===
1.2.1.0
        43
           52
                                                ====E1===
_______
                tgcagtcttctctgcctgcctcttttagcgactagcatgagatgaggattcgtcttctaa
Segments:
seg( 120.. 179)
                tatecgteaccaatectteccetetgteatttagegaaccaeteactgggeactaggaet
Segments:
2.3.1.0
        133 143
                          ====Sp1===
______
seq( 180.. 239)
                ttggggagagtcccaagaggcccctcttcgtccaggggctactttttctcttccagcct
Segments:
9.9.590
        184 193
                   =NF-kappaB
       196 205
                            ====Sp1===
seq( 240.. 299)
                ccatctcctaactcaaggggtacagctcagattatgtttggcgcccagggacagtgacaa
Segments:
seg( 300.. 359)
                acccagggcccgtggatagaggaggcatctcactacgctgcacgaggccacctcgcagta
Segments:
2.3.1.0
        302 311
                  ====Sp1===
        315 324
2.3.1.0
_______
seg( 360.. 419)
                Segments:
2.3.1.0
        363 377
                  =====Sp1=====
2.3.1.0
       369 378
                       ====Sp1===
3.5.1.2
                             ====RAP1==
        377 386
2.3.1.0
        402 416
        413 422
seq( 420.. 479)
                ggetteateteecaagagatggaetaeaceteecageaggetetgegegegggetgagga
Segments:
2.3.1.0
        413 422
3.5.2.0
        421 430
                 ===Erg-1==
        462 473
seq( 480.. 539)
                tecetecgetetttttetgteeegeeggetgggeeeeeegegaeeageeaagggeeaagg
Segments:
2.3.1.0
        480 489
                ====Sp1===
2.3.1.0
        500
           509
                               ====Sp1===
                                       ===Sp1===
2.3.1.0
        511 520
1.3.1.2
        516
           525
9.9.539
        523
           532
seq( 540.. 599)
                acaggtettteagaatetgaggtacatettettateacattteeggggagggaetgetag
Segments:
        582 593
seq( 600.. 659)
                gagctccggaggaaaaacggactttttttgaggagaaaagcggaggcagacggtggatga
```

Potential transcription factor binding sites found on -700 + 299 region of human P107 promoter found in ALIBABA2 software

(https://www.generegulation.com)

```
Segments:
2.3.1.0
        637 646
caacacgtcccgcagctgcagattttcgcgcgcttttggcgcaggttgttgtgggtagcgc
Segments:
2.3.1.0
        663 672
______
seq( 720.. 779)
                gcctgggaggagaaagtcgggggccgtggcgcgcagcccgcggggcctgaagggat
Segments:
2.3.1.0
        720 731
2.3.1.0
        742 751
                                 ====Sp1===
2.3.1.0
        762 771
                                                 ====Sp1===
seg( 780.. 839)
                qttcgaggacaagcccacgctgagggggggggggtggtcgccgcagccggggaggcgct
Segments:
2.3.1.0
        802 813
        826 839
seq( 840.. 899)
                acaqqccctqtqccaqqaqctqaacctqqacqaqqqqaqcqcqqaqccctqqacqa
Segments:
2.3.1.0
        840 849
        871 880
2.3.1.0
______
seq( 900..
                ctttactgccatccgaggcaactacagcctagaggtgagcggcagcaggtggggcggccg
Segments:
2.3.1.0
        939 948
                                              ====Sp1===
        941 950
1.2.1.0
1.2.2.0
           950
        941
2.3.1.0
        945
           958
______
seq( 960.. 1019)
                gaccctaccctcgccaggccccacccctgccccgcccct
Segments:
2.3.1.0
        962 971
                  ====Sp1===
        972 986
2.3.1.0
                          =====Sp1=====
2.3.1.0
        985
           997
                                    =====Sp1====
2.3.2.1
        988
            997
                                      ==Krox-20=
2.3.2.3
        988 997
                                      ====GLI3==
38 segments in this sequence identified as potential binding sites
38 segments in complete file identified as potential binding sites
```

Potential transcription factor binding sites found on -700 + 299 region of mouse P107 promoter found in ALIBABA2 software (https://www.generegulation.com)

AliBaba2.1 predicts the following sites in your sequence

Sequence Rbl1chr2159062088-700..299-mouseMusmusculus

```
aatqatctcqtqcaqqattctqaqtqaaaacqatcaqqttctaqtttaqqttttaaaaaac
Segments:
seq(
                 acctttcaggtaagcgaggaccatctctattcctgaaacgactatttactgggacagt
seq( 120..
                 ttccaqaatcctqqqaqtqaqqctqaqacccqtcaccccaaacccttqtccctqcatccc
Segments:
2.3.1.0
______
seg( 180.. 239)
                 tttctggcgagatttgggagtctctgacgtggcgcttctacgtgaagaagccactttcgg
Segments:
        199 208
1.1.3.0
                                 =C/EBPalp=
1.1.1.6
        201
                                  ==CRE-BP1=
1.1.2.0
        201
            210
                                   ====CREB==
        201 210
                                  =CPE bind=
        202
seq( 240.. 299)
                 cagetecegeetecacetecategagggteaaageteagtgagagegggetggaggegeg
Segments:
        243
            256
2.3.1.0
                    =====Sp1=====
2.3.1.0
        249
2.3.1.0
        283
            297
                                                    =====Sp1=====
2.3.1.0
        291
            300
2.3.1.0
        298
            307
seq( 300.. 359)
                 ccggggagctgacaaacctagggtccacaggacagtgtcatggagaaggcttcccactag
Segments:
2.3.1.0
        291 300
2.3.1.0
        298 307
______
seg( 360.. 419)
                 cgtgaacggactcgcagtcccaagtcacccacaccagggaacccgcggtggagagcgcgg
Segments:
        413 423
2.3.1.0
seq( 420.. 479)
                 ggcgcgagctacagtcccggcagcctcagcaccggctcggatccttccgccccgctctct
Segments:
2.3.1.0
        413 423
2.3.1.0
        464 474
        476
            485
______
seg( 480.. 539)
                 cacqtccqtcccggggcccggagcccgcagctgcccacccagggcccgagctagatct
Segments:
        476 485
1.1.1.6
                 E-BP1=
2.3.1.0
        485
            499
                     =====Sp1=====
1.6.1.0
        490
            499
                         =AP-2alph=
2.3.1.0
        492
            501
                           ===Sp1===
            512
2.3.1.0
        503
2.3.1.0
        520
            529
                                                  ====Sp1===
        520
seq( 540.. 599)
                 ccgttagagtccgaggtccatcttcttatcccattccgggagacgggctgctgcgggctc
```

Potential transcription factor binding sites found on -700 + 299 region of mouse P107 promoter found in ALIBABA2 software (https://www.generegulation.com)

```
Segments:
2.2.1.1
          560
               569
                                         ===GATA-1=
2.3.1.0
          578
               587
          584 593
seg( 600.. 659)
                     cagaggagaaagggactttttgagaagaaaaagcggaggcagacgatgaagggaaggcgag
Segments:
          629 638
2.3.1.0
                                                 ====Sp1===
______
seg( 660.. 719)
                     ctcaagaaggcgattttcqcqcqctttqtcqcqqqqqttqtqqqqtaqctcqccqqqqqq
Segments:
2.3.1.0
          662 671
                       ===Sp1===
          687
2.3.1.0
               696
2.3.1.0
          693 702
seq( 720.. 779)
                     gaaaagaaaaccccgaagccggtcgcgccgccgtcgggccggagggggatatgttcgag
Segments:
2.3.1.0
          743 753
                                           ====Sp1===
2.3.1.0
          756
              765
                                                        ====Sp1===
          764 773
seq( 780.. 839)
                     gacqaqccccacqccqaqqqqqqqqqqqqqqtcqccqqqccaqqqqaqqcqctqcaqqcc
Segments:
          785
               794
2.3.1.0
          795
               806
                                    ====Sp1====
          820
               829
                                                            ====YY1===
seg( 840.. 899)
                     ctgtgccaggaactgaacctggacgagggaagcggccgaagccctggatgacttcacg
Segments:
9.9.1299
          843
              852
                        ====MPBF==
3.5.3.0
          847 856
          860
               869
seg( 900.. 959)
                     gccatccgcggcaactacagcctagaggtgagcggcaggtgggcggcggccccgacc
Segments:
2.3.1.0
          932
               941
                                                    ====Sp1===
              944
1.2.1.0
          935
                                                       ====E1===
          941 952
2.3.1.0
          948
               960
seq( 960.. 1019)
                     ctcgccaggcccaccccggcccgccccgccccaagcc
Segments:
2.3.1.0
          948
               960
2.3.1.0
          966
               978
                           ====Sp1====
               977
2.3.2.1
          968
2.3.1.0
          972
               986
                                =====YY1=====
1.6.1.0
          974
                                  =AP-2alph=
2.3.1.0
          979
               989
                                        ====Sp1===
9.9.561
                                         ==NF-muE1=
2.3.2.3
                                          ====WT1===
          982
               991
2.3.1.0
          985
                                             ====Sp1===
2.3.2.1
          985
               994
                                             ==Krox-20=
9.9.270
               994
                                             ====ETF===
          985
1.6.1.0
                                                 =AP-2alph=
               998
          989
51 segments in this sequence identified as potential binding sites
```

51 segments in complete file identified as potential binding sites