Gene: MECP2 - Sequence: NG_007107.2
Transcript: NM_004992.3 - Protein: NP_004983.1
Date : February 23, 2015

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

```
Exon 1 | Start: 44390 | End: 44518 | Length: 128

.    .    .    .    .    .    .    .    .    .    .    .
actaaaccagtccctccgcgcccaagccgcctcttttccccaaacgacggccgaaagcag

.    .    .    .    .    .    .    .    .    .    .    .
ccaatcaacagctggaggggtccgccccctttttccctggccgaaatggacaggaaatctc

.    .    .    .    .    .    .    .    .    .    .    .
gccaattgacggcatcgccgctgagacctccccctcccccgtcctccccgtcccagccc

.    .    .    .    .    .    .    .    .    .    .    .
ggccatcacagccaatgacgggcgggctcgcagcggcgccgagggcggggcgcgggcgcg

.    .    .    .    .    .    .    .    .    .    .    .
caggtgcagcagcgcgcgggccggccaagagggcggggcgcgacgtcggccgtgcggggt

       |-219     |-209     |-199     |-189     |-179     |-169
CCGGCGTCGGCGGCGCGCGCGCTCCCTCCTCTCGGAGAGAGGGCTGTGGTAAAAGCCGTC

       |-159     |-149     |-139     |-129     |-119     |-109
CGGAAAATGGCCGCCGCCGCCGCCGCCGCGCCGAGCGGAGGAGGAGGAGGAGGCGAGGAG

       |-99 .    .    .    .    .    .    .    .    .    .
GAGAGACTgtgagtgggaccgccgtggccgcgggcggggaccttgccgggggggcggggg

  .    .    .    .    .    .    .    .    .    .    .    .
tcaggggcgggacgtggcgcgggaggggcccgcggggtcggacgacacggctggcggatg

  .    .    .    .    .    .    .    .    .    .    .    .
gcgtccctcctctctaccctccccctcccgccgccgccggtggcgactctcccctcggcc

  .    .    .    .    .    .    .    .    .    .    .    .
cgtcacccgtgctcgcgggtgaccgtcctcggcgcggcctccctggagccgccttcgcct
```

```
  .    .    .    .    .    .    .    .    .    .    .    .
gacgcccctcttcctcccgccctcgacgcgcatcccggcccccggccccgcgggcgcccc

  .    .
tgtcgccg
```

Exon 2 | Start: 49813 | End: 49937 | Length: 124

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.    .    .    .    .    .    .    .    .    .    .    .
tagaagaaatacttgccagaaatcgccactcatggtatgcttttgtagtgtcgaagtgtc

.    .    .    .    .    .    .    .    .    .    .    .
ccctagaggtgacaaggcttgtgatagtgttgattctaacaagcatgaatctttccttta

.    .    .    .    .    .    .    .    .    .    .    .
ttttagcactgtgtgttacgtgccagtaatttgcagcttatcctttgtttctagctaggt

.    .    .    .    .    .    .    .    .    .    .    .
aagctgggaaatagcctagtactttgtctatgtgtttatcttcaaaatgtcccaaatagc

.    .    .    .    .    .    .    .    .    .    .    .
cctgggaaaaaggtcgtgcagctcaatgggggctttcaacttacaattttctttgtttta

         |-89      |-79      |-69      |-59      |-49      |-39
GCTCCATAAAAATACAGACTCACCAGTTCCTGCTTTGATGTGACATGTGACTCCCCAGAA

         |-29      |-19      |-9       |1        |11       |21
TACACCTTGCTTCTGTAGACCAGCTCCAACAGGATTCCATGGTAGCTGGGATGTTAGGGC
                                      M  V  A  G  M  L  G  L
                                      |1

        .    .    .    .    .    .    .    .    .    .    .
TCAGgtaagtaaccttcctttttttttttttagtatatgtcctggtttggccatctgttt
  R


   .    .    .    .    .    .    .    .    .    .    .    .
ttttttttttaaaaaaaaaaaaaaaggaaaagaggaaaaaaatatactactcttggac

   .    .    .    .    .    .    .    .    .    .    .    .
agtataaaagtaccccaaagactaaagacataactgtgccaaactgtgccatataataaa

   .    .    .    .    .    .    .    .    .    .    .    .
aaaaagtcacttccctgagccctgaaaggtcagtgtgtgtagggttacttggtcgccaca
```

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   .    .    .    .    .    .    .    .    .    .    .    .
gcgtgatctgggggcgggcgtcagattagagccggaactggtgatctgcaacttcagttc

   .
acct
```

Exon 3 | Start: 109570 | End: 109921 | Length: 351

```
.    .    .    .    .    .    .    .    .    .    .    .
agccgcagtgtttccgctcagaggaaagggctctgattctcctgcagtgctaggagactt

.    .    .    .    .    .    .    .    .    .    .    .
gtgggtggccacagtgcaggtcaggcacaccggccagcaccacccacagcccaaattcct

.    .    .    .    .    .    .    .    .    .    .    .
aaagaaatatttgggtcccagcttggcccgagtctctgttgtcctggggaaggacatcaa

.    .    .    .    .    .    .    .    .    .    .    .
gatctgagtgtatgatggcctggggccttgcatgtggtgggggtccaagcctgcctctgc

.    .    .    .    .    .    .    .    .    .    .    .
tcacttgttctgcagactggcatgttctctgtgatacttacatacttgtttaacacttca

    |31       |41       |51       |61       |71       |81
GGAAGAAAAGTCAGAAGACCAGGACCTCCAGGGCCTCAAGGACAAACCCCTCAAGTTTAA
 E  E  K  S  E  D  Q  D  L  Q  G  L  K  D  K  P  L  K  F  K
    |11                         |21

    |91       |101      |111      |121      |131      |141
AAAGGTGAAGAAAGATAAGAAAGAAGAGAAAGAGGGCAAGCATGAGCCCGTGCAGCCATC
 K  V  K  K  D  K  K  E  E  K  E  G  K  H  E  P  V  Q  P  S
    |31                         |41

    |151      |161      |171      |181      |191      |201
AGCCCACCACTCTGCTGAGCCCGCAGAGGCAGGCAAAGCAGAGACATCAGAAGGGTCAGG
 A  H  H  S  A  E  P  A  E  A  G  K  A  E  T  S  E  G  S  G
    |51                         |61

    |211      |221      |231      |241      |251      |261
CTCCGCCCCGGCTGTGCCGGAAGCTTCTGCCTCCCCCAAACAGCGGCGCTCCATCATCCG
 S  A  P  A  V  P  E  A  S  A  S  P  K  Q  R  R  S  I  I  R
    |71                         |81
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    |271       |281       |291       |301       |311       |321
TGACCGGGGACCCATGTATGATGACCCCACCCTGCCTGAAGGCTGGACACGGAAGCTTAA
 D  R  G  P  M  Y  D  D  P  T  L  P  E  G  W  T  R  K  L  K
    |91                            |101

    |331       |341       |351       |361       |371       .
GCAAAGGAAATCTGGCCGCTCTGCTGGGAAGTATGATGTGTATTTGATCAAgtaagtaag
 Q  R  K  S  G  R  S  A  G  K  Y  D  V  Y  L  I  N
    |111                           |121

.    .    .    .    .    .    .    .    .    .    .    .
agcaactcctatctctacagggcagggagggcagggacaaggatccctcatggagcagga

.    .    .    .    .    .    .    .    .    .    .    .
aaatgtatgtgcccagggtggggtcgggggggaacataaacaatgaacactgagaccaggt

.    .    .    .    .    .    .    .    .    .    .    .
gtgcttgaaatgaccgtgtacagaggtcgctgccctgagtgggaagttctcaaggtagca

.    .    .    .    .    .    .    .    .    .    .    .
ggccctctatcctctccacacctcaagtctttatctggggatggaatagctgcggaagca

.    .    .    .    .    .    .    .    .    .    .
gaggaacttgcagagctaggggttcagaggggtgaagaagcatgtttcagt
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Exon 4 | Start: 110677 | End: 120315 | Length: 9638

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.    .    .    .    .    .    .    .    .    .    .    .
tgttctagatggtgactcaggcccaggcaccaaccagcagaatgggcctcagcctgacaa

.    .    .    .    .    .    .    .    .    .    .    .
cccttctgtaccaggcctgactctttggttgctgaactttggagaggcctgggggggtca

.    .    .    .    .    .    .    .    .    .    .    .
gcggcaggcagacgagtgagtggctttggtgacaggtcctcaggggcagccaggcagtgt

.    .    .    .    .    .    .    .    .    .    .    .
gactctcgttcaatagtaacgtttgtcagagcgttgtcaccaccatccgctctgccctat

.    .    .    .    .    .    .    .    .    .    .    .
ctctgacattgctatggagagcctctaattgttccttgtgtctttctgtttgtccccaca

   |381       |391       |401       |411       |421       |431
TCCCCAGGGAAAAGCCTTTCGCTCTAAAGTGGAGTTGATTGCGTACTTCGAAAAGGTAGG
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 P  Q  G  K  A  F  R  S  K  V  E  L  I  A  Y  F  E  K  V  G
            |131                        |141

   |441       |451       |461       |471       |481       |491
CGACACATCCCTGGACCCTAATGATTTTGACTTCACGGTAACTGGGAGAGGGAGCCCCTC
 D  T  S  L  D  P  N  D  F  D  F  T  V  T  G  R  G  S  P  S
            |151                        |161

   |501       |511       |521       |531       |541       |551
CCGGCGAGAGCAGAAACCACCTAAGAAGCCCAAATCTCCCAAAGCTCCAGGAACTGGCAG
 R  R  E  Q  K  P  P  K  K  P  K  S  P  K  A  P  G  T  G  R
            |171                        |181

   |561       |571       |581       |591       |601       |611
AGGCCGGGGACGCCCCAAAGGGAGCGGCACCACGAGACCCAAGGCGGCCACGTCAGAGGG
 G  R  G  R  P  K  G  S  G  T  T  R  P  K  A  A  T  S  E  G
            |191                        |201

   |621       |631       |641       |651       |661       |671
TGTGCAGGTGAAAAGGGTCCTGGAGAAAAGTCCTGGGAAGCTCCTTGTCAAGATGCCTTT
 V  Q  V  K  R  V  L  E  K  S  P  G  K  L  L  V  K  M  P  F
            |211                        |221

   |681       |691       |701       |711       |721       |731
TCAAACTTCGCCAGGGGGCAAGGCTGAGGGGGGTGGGGCCACCACATCCACCCAGGTCAT
 Q  T  S  P  G  G  K  A  E  G  G  G  A  T  T  S  T  Q  V  M
            |231                        |241

   |741       |751       |761       |771       |781       |791
GGTGATCAAACGCCCCGGCAGGAAGCGAAAAGCTGAGGCCGACCCTCAGGCCATTCCCAA
 V  I  K  R  P  G  R  K  R  K  A  E  A  D  P  Q  A  I  P  K
            |251                        |261

   |801       |811       |821       |831       |841       |851
GAAACGGGGCCGAAAGCCGGGGAGTGTGGTGGCAGCCGCTGCCGCCGAGGCCAAAAAGAA
 K  R  G  R  K  P  G  S  V  V  A  A  A  A  A  E  A  K  K  K
            |271                        |281

   |861       |871       |881       |891       |901       |911
AGCCGTGAAGGAGTCTTCTATCCGATCTGTGCAGGAGACCGTACTCCCCATCAAGAAGCG
 A  V  K  E  S  S  I  R  S  V  Q  E  T  V  L  P  I  K  K  R
            |291                        |301

   |921       |931       |941       |951       |961       |971
CAAGACCCGGGAGACGGTCAGCATCGAGGTCAAGGAAGTGGTGAAGCCCCTGCTGGTGTC
 K  T  R  E  T  V  S  I  E  V  K  E  V  V  K  P  L  L  V  S
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            |311                          |321

   |981      |991      |1001     |1011     |1021     |1031
CACCCTCGGTGAGAAGAGCGGGAAAGGACTGAAGACCTGTAAGAGCCCTGGGCGGAAAAG
 T  L  G  E  K  S  G  K  G  L  K  T  C  K  S  P  G  R  K  S
            |331                          |341

   |1041     |1051     |1061     |1071     |1081     |1091
CAAGGAGAGCAGCCCCAAGGGGCGCAGCAGCAGCGCCTCCTCACCCCCCAAGAAGGAGCA
 K  E  S  S  P  K  G  R  S  S  S  A  S  S  P  P  K  K  E  H
            |351                          |361

   |1101     |1111     |1121     |1131     |1141     |1151
CCACCACCATCACCACCACTCAGAGTCCCCAAAGGCCCCCGTGCCACTGCTCCCACCCCT
 H  H  H  H  H  H  S  E  S  P  K  A  P  V  P  L  L  P  P  L
            |371                          |381

   |1161     |1171     |1181     |1191     |1201     |1211
GCCCCCACCTCCACCTGAGCCCGAGAGCTCCGAGGACCCCACCAGCCCCCCTGAGCCCCA
 P  P  P  P  P  E  P  E  S  S  E  D  P  T  S  P  P  E  P  Q
            |391                          |401

   |1221     |1231     |1241     |1251     |1261     |1271
GGACTTGAGCAGCAGCGTCTGCAAAGAGGAGAAGATGCCCAGAGGAGGCTCACTGGAGAG
 D  L  S  S  S  V  C  K  E  E  K  M  P  R  G  G  S  L  E  S
            |411                          |421

   |1281     |1291     |1301     |1311     |1321     |1331
CGACGGCTGCCCCAAGGAGCCAGCTAAGACTCAGCCCGCGGTTGCCACCGCCGCCACGGC
 D  G  C  P  K  E  P  A  K  T  Q  P  A  V  A  T  A  A  T  A
            |431                          |441

   |1341     |1351     |1361     |1371     |1381     |1391
CGCAGAAAAGTACAAACACCGAGGGGAGGGAGAGCGCAAAGACATTGTTTCATCCTCCAT
 A  E  K  Y  K  H  R  G  E  G  E  R  K  D  I  V  S  S  S  M
            |451                          |461

   |1401     |1411     |1421     |1431     |1441     |1451
GCCAAGGCCAAACAGAGAGGAGCCTGTGGACAGCCGGACGCCCGTGACCGAGAGAGTTAG
 P  R  P  N  R  E  E  P  V  D  S  R  T  P  V  T  E  R  V  S
            |471                          |481

   |1461      |*11      |*21      |*31      |*41      |*51
CTGACTTTACACGGAGCGGATTGCAAAGCAAACCAACAAGAATAAAGGCAGCTGTTGTCT
 *
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    |*61       |*71       |*81       |*91       |*101      |*111
CTTCTCCTTATGGGTAGGGCTCTGACAAAGCTTCCCGATTAACTGAAATAAAAAATATTT

    |*121      |*131      |*141      |*151      |*161      |*171
TTTTTTCTTTCAGTAAACTTAGAGTTTCGTGGCTTCAGGGTGGGAGTAGTTGGAGCATTG

    |*181      |*191      |*201      |*211      |*221      |*231
GGGATGTTTTTCTTACCGACAAGCACAGTCAGGTTGAAGACCTAACCAGGGCCAGAAGTA

    |*241      |*251      |*261      |*271      |*281      |*291
GCTTTGCACTTTTCTAAACTAGGCTCCTTCAACAAGGCTTGCTGCAGATACTACTGACCA

    |*301      |*311      |*321      |*331      |*341      |*351
GACAAGCTGTTGACCAGGCACCTCCCCTCCCGCCCAAACCTTTCCCCCATGTGGTCGTTA

    |*361      |*371      |*381      |*391      |*401      |*411
GAGACAGAGCGACAGAGCAGTTGAGAGGACACTCCCGTTTTCGGTGCCATCAGTGCCCCG

    |*421      |*431      |*441      |*451      |*461      |*471
TCTACAGCTCCCCCAGCTCCCCCCACCTCCCCCACTCCCAACCACGTTGGGACAGGGAGG

    |*481      |*491      |*501      |*511      |*521      |*531
TGTGAGGCAGGAGAGACAGTTGGATTCTTTAGAGAAGATGGATATGACCAGTGGCTATGG

    |*541      |*551      |*561      |*571      |*581      |*591
CCTGTGCGATCCCACCCGTGGTGGCTCAAGTCTGGCCCCACACCAGCCCCAATCCAAAAC

    |*601      |*611      |*621      |*631      |*641      |*651
TGGCAAGGACGCTTCACAGGACAGGAAAGTGGCACCTGTCTGCTCCAGCTCTGGCATGGC

    |*661      |*671      |*681      |*691      |*701      |*711
TAGGAGGGGGGAGTCCCTTGAACTACTGGGTGTAGACTGGCCTGAACCACAGGAGAGGAT

    |*721      |*731      |*741      |*751      |*761      |*771
GGCCCAGGGTGAGGTGGCATGGTCCATTCTCAAGGGACGTCCTCCAACGGGTGGCGCTAG

    |*781      |*791      |*801      |*811      |*821      |*831
AGGCCATGGAGGCAGTAGGACAAGGTGCAGGCAGGCTGGCCTGGGGTCAGGCCGGGCAGA

    |*841      |*851      |*861      |*871      |*881      |*891
GCACAGCGGGGTGAGAGGGATTCCTAATCACTCAGAGCAGTCTGTGACTTAGTGGACAGG

    |*901      |*911      |*921      |*931      |*941      |*951
GGAGGGGGCAAAGGGGGAGGAGAAGAAAATGTTCTTCCAGTTACTTTCCAATTCTCCTTT
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    |*961      |*971      |*981      |*991      |*1001     |*1011
AGGGACAGCTTAGAATTATTTGCACTATTGAGTCTTCATGTTCCCACTTCAAAACAAACA

    |*1021     |*1031     |*1041     |*1051     |*1061     |*1071
GATGCTCTGAGAGCAAACTGGCTTGAATTGGTGACATTTAGTCCCTCAAGCCACCAGATG

    |*1081     |*1091     |*1101     |*1111     |*1121     |*1131
TGACAGTGTTGAGAACTACCTGGATTTGTATATATACCTGCGCTTGTTTTAAAGTGGGCT

    |*1141     |*1151     |*1161     |*1171     |*1181     |*1191
CAGCACATAGGGTTCCCACGAAGCTCCGAAACTCTAAGTGTTTGCTGCAATTTTATAAGG

    |*1201     |*1211     |*1221     |*1231     |*1241     |*1251
ACTTCCTGATTGGTTTCTCTTCTCCCCTTCCATTTCTGCCTTTTGTTCATTTCATCCTTT

    |*1261     |*1271     |*1281     |*1291     |*1301     |*1311
CACTTCTTTCCCTTCCTCCGTCCTCCTCCTTCCTAGTTCATCCCTTCTCTTCCAGGCAGC

    |*1321     |*1331     |*1341     |*1351     |*1361     |*1371
CGCGGTGCCCAACCACACTTGTCGGCTCCAGTCCCCAGAACTCTGCCTGCCCTTTGTCCT

    |*1381     |*1391     |*1401     |*1411     |*1421     |*1431
CCTGCTGCCAGTACCAGCCCCACCCTGTTTTGAGCCCTGAGGAGGCCTTGGGCTCTGCTG

    |*1441     |*1451     |*1461     |*1471     |*1481     |*1491
AGTCCGACCTGGCCTGTCTGTGAAGAGCAAGAGAGCAGCAAGGTCTTGCTCTCCTAGGTA

    |*1501     |*1511     |*1521     |*1531     |*1541     |*1551
GCCCCCTCTTCCCTGGTAAGAAAAAGCAAAAGGCATTTCCCACCCTGAACAACGAGCCTT

    |*1561     |*1571     |*1581     |*1591     |*1601     |*1611
TTCACCCTTCTACTCTAGAGAAGTGGACTGGAGGAGCTGGGCCCGATTTGGTAGTTGAGG

    |*1621     |*1631     |*1641     |*1651     |*1661     |*1671
AAAGCACAGAGGCCTCCTGTGGCCTGCCAGTCATCGAGTGGCCCAACAGGGGCTCCATGC

    |*1681     |*1691     |*1701     |*1711     |*1721     |*1731
CAGCCGACCTTGACCTCACTCAGAAGTCCAGAGTCTAGCGTAGTGCAGCAGGGCAGTAGC

    |*1741     |*1751     |*1761     |*1771     |*1781     |*1791
GGTACCAATGCAGAACTCCCAAGACCCGAGCTGGGACCAGTACCTGGGTCCCCAGCCCTT

    |*1801     |*1811     |*1821     |*1831     |*1841     |*1851
CCTCTGCTCCCCCTTTTCCCTCGGAGTTCTTCTTGAATGGCAATGTTTTGCTTTTGCTCG

    |*1861     |*1871     |*1881     |*1891     |*1901     |*1911
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ATGCAGACAGGGGGCCAGAACACCACACATTTCACTGTCTGTCTGGTCCATAGCTGTGGT

    |*1921     |*1931     |*1941     |*1951     |*1961     |*1971
GTAGGGGCTTAGAGGCATGGGCTTGCTGTGGGTTTTTAATTGATCAGTTTTCATGTGGGA

    |*1981     |*1991     |*2001     |*2011     |*2021     |*2031
TCCCATCTTTTTAACCTCTGTTCAGGAAGTCCTTATCTAGCTGCATATCTTCATCATATT

    |*2041     |*2051     |*2061     |*2071     |*2081     |*2091
GGTATATCCTTTTCTGTGTTTACAGAGATGTCTCTTATATCTAAATCTGTCCAACTGAGA

    |*2101     |*2111     |*2121     |*2131     |*2141     |*2151
AGTACCTTATCAAAGTAGCAAATGAGACAGCAGTCTTATGCTTCCAGAAACACCCACAGG

    |*2161     |*2171     |*2181     |*2191     |*2201     |*2211
CATGTCCCATGTGAGCTGCTGCCATGAACTGTCAAGTGTGTGTTGTCTTGTGTATTTCAG

    |*2221     |*2231     |*2241     |*2251     |*2261     |*2271
TTATTGTCCCTGGCTTCCTTACTATGGTGTAATCATGAAGGAGTGAAACATCATAGAAAC

    |*2281     |*2291     |*2301     |*2311     |*2321     |*2331
TGTCTAGCACTTCCTTGCCAGTCTTTAGTGATCAGGAACCATAGTTGACAGTTCCAATCA

    |*2341     |*2351     |*2361     |*2371     |*2381     |*2391
GTAGCTTAAGAAAAAACCGTGTTTGTCTCTTCTGGAATGGTTAGAAGTGAGGGAGTTTGC

    |*2401     |*2411     |*2421     |*2431     |*2441     |*2451
CCCGTTCTGTTTGTAGAGTCTCATAGTTGGACTTTCTAGCATATATGTGTCCATTTCCTT

    |*2461     |*2471     |*2481     |*2491     |*2501     |*2511
ATGCTGTAAAAGCAAGTCCTGCAACCAAACTCCCATCAGCCCAATCCCTGATCCCTGATC

    |*2521     |*2531     |*2541     |*2551     |*2561     |*2571
CCTTCCACCTGCTCTGCTGATGACCCCCCCCAGCTTCACTTCTGACTCTTCCCCAGGAAGG

    |*2581     |*2591     |*2601     |*2611     |*2621     |*2631
GAAGGGGGGTCAGAAGAGAGGGTGAGTCCTCCAGAACTCTTCCTCCAAGGACAGAAGGCT

    |*2641     |*2651     |*2661     |*2671     |*2681     |*2691
CCTGCCCCCATAGTGGCCTCGAACTCCTGGCACTACCAAAGGACACTTATCCACGAGAGC

    |*2701     |*2711     |*2721     |*2731     |*2741     |*2751
GCAGCATCCGACCAGGTTGTCACTGAGAAGATGTTTATTTTGGTCAGTTGGGTTTTTATG

    |*2761     |*2771     |*2781     |*2791     |*2801     |*2811
TATTATACTTAGTCAAATGTAATGTGGCTTCTGGAATCATTGTCCAGAGCTGCTTCCCCG
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    |*2821     |*2831     |*2841     |*2851     |*2861     |*2871
TCACCTGGGCGTCATCTGGTCCTGGTAAGAGGAGTGCGTGGCCCACCAGGCCCCCCTGTC

    |*2881     |*2891     |*2901     |*2911     |*2921     |*2931
ACCCATGACAGTTCATTCAGGGCCGATGGGGCAGTCGTGGTTGGGAACACAGCATTTCAA

    |*2941     |*2951     |*2961     |*2971     |*2981     |*2991
GCGTCACTTTATTTCATTCGGGCCCCACCTGCAGCTCCCTCAAAGAGGCAGTTGCCCAGC

    |*3001     |*3011     |*3021     |*3031     |*3041     |*3051
CTCTTTCCCTTCCAGTTTATTCCAGAGCTGCCAGTGGGGCCTGAGGCTCCTTAGGGTTTT

    |*3061     |*3071     |*3081     |*3091     |*3101     |*3111
CTCTCTATTTCCCCCTTTCTTCCTCATTCCCTCGTCTTTCCCAAAGGCATCACGAGTCAG

    |*3121     |*3131     |*3141     |*3151     |*3161     |*3171
TCGCCTTTCAGCAGGCAGCCTTGGCGGTTTATCGCCCTGGCAGGCAGGGGCCCTGCAGCT

    |*3181     |*3191     |*3201     |*3211     |*3221     |*3231
CTCATGCTGCCCCTGCCTTGGGGTCAGGTTGACAGGAGGTTGGAGGGAAAGCCTTAAGCT

    |*3241     |*3251     |*3261     |*3271     |*3281     |*3291
GCAGGATTCTCACCAGCTGTGTCCGGCCCAGTTTTGGGGTGTGACCTCAATTTCAATTTT

    |*3301     |*3311     |*3321     |*3331     |*3341     |*3351
GTCTGTACTTGAACATTATGAAGATGGGGGCCTCTTTCAGTGAATTTGTGAACAGCAGAA

    |*3361     |*3371     |*3381     |*3391     |*3401     |*3411
TTGACCGACAGCTTTCCAGTACCCATGGGGCTAGGTCATTAAGGCCACATCCACAGTCTC

    |*3421     |*3431     |*3441     |*3451     |*3461     |*3471
CCCCACCCTTGTTCCAGTTGTTAGTTACTACCTCCTCTCCTGACAATACTGTATGTCGTC

    |*3481     |*3491     |*3501     |*3511     |*3521     |*3531
GAGCTCCCCCCAGGTCTACCCCTCCCGGCCCTGCCTGCTGGTGGGCTTGTCATAGCCAGT

    |*3541     |*3551     |*3561     |*3571     |*3581     |*3591
GGGATTGCCGGTCTTGACAGCTCAGTGAGCTGGAGATACTTGGTCACAGCCAGGCGCTAG

    |*3601     |*3611     |*3621     |*3631     |*3641     |*3651
CACAGCTCCCTTCTGTTGATGCTGTATTCCCATATCAAAAGACACAGGGGACACCCAGAA

    |*3661     |*3671     |*3681     |*3691     |*3701     |*3711
ACGCCACATCCCCCAATCCATCAGTGCCAAACTAGCCAACGGCCCCAGCTTCTCAGCTCG
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    |*3721     |*3731     |*3741     |*3751     |*3761     |*3771
CTGGATGGCGGAAGCTGCTACTCGTGAGCGCCAGTGCGGGTGCAGACAATCTTCTGTTGG

    |*3781     |*3791     |*3801     |*3811     |*3821     |*3831
GTGGCATCATTCCAGGCCCGAAGCATGAACAGTGCACCTGGGACAGGGAGCAGCCCCAAA

    |*3841     |*3851     |*3861     |*3871     |*3881     |*3891
TTGTCACCTGCTTCTCTGCCCAGCTTTTCATTGCTGTGACAGTGATGGCGAAAGAGGGTA

    |*3901     |*3911     |*3921     |*3931     |*3941     |*3951
ATAACCAGACACAAACTGCCAAGTTGGGTGGAGAAAGGAGTTTCTTTAGCTGACAGAATC

    |*3961     |*3971     |*3981     |*3991     |*4001     |*4011
TCTGAATTTTAAATCACTTAGTAAGCGGCTCAAGCCCAGGAGGGAGCAGAGGGATACGAG

    |*4021     |*4031     |*4041     |*4051     |*4061     |*4071
CGGAGTCCCCTGCGCGGGACCATCTGGAATTGGTTTAGCCCAAGTGGAGCCTGACAGCCA

    |*4081     |*4091     |*4101     |*4111     |*4121     |*4131
GAACTCTGTGTCCCCCGTCTAACCACAGCTCCTTTTCCAGAGCATTCCAGTCAGGCTCTC

    |*4141     |*4151     |*4161     |*4171     |*4181     |*4191
TGGGCTGACTGGGCCAGGGGAGGTTACAGGTACCAGTTCTTTAAGAAGATCTTTGGGCAT

    |*4201     |*4211     |*4221     |*4231     |*4241     |*4251
ATACATTTTTAGCCTGTGTCATTGCCCCAAATGGATTCCTGTTTCAAGTTCACACCTGCA

    |*4261     |*4271     |*4281     |*4291     |*4301     |*4311
GATTCTAGGACCTGTGTCCTAGACTTCAGGGAGTCAGCTGTTTCTAGAGTTCCTACCATG

    |*4321     |*4331     |*4341     |*4351     |*4361     |*4371
GAGTGGGTCTGGAGGACCTGCCCGGTGGGGGGGCAGAGCCCTGCTCCCTCCGGGTCTTCC

    |*4381     |*4391     |*4401     |*4411     |*4421     |*4431
TACTCTTCTCTCTGCTCTGACGGGATTTGTTGATTCTCTCCATTTTGGTGTCTTTCTCTT

    |*4441     |*4451     |*4461     |*4471     |*4481     |*4491
TTAGATATTGTATCAATCTTTAGAAAAGGCATAGTCTACTTGTTATAAATCGTTAGGATA

    |*4501     |*4511     |*4521     |*4531     |*4541     |*4551
CTGCCTCCCCCAGGGTCTAAAATTACATATTAGAGGGGAAAAGCTGAACACTGAAGTCAG

    |*4561     |*4571     |*4581     |*4591     |*4601     |*4611
TTCTCAACAATTTAGAAGGAAAACCTAGAAAACATTTGGCAGAAAATTACATTTCGATGT

    |*4621     |*4631     |*4641     |*4651     |*4661     |*4671
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TTTTGAATGAATACGAGCAAGCTTTTACAACAGTGCTGATCTAAAAATACTTAGCACTTG

    |*4681     |*4691     |*4701     |*4711     |*4721     |*4731
GCCTGAGATGCCTGGTGAGCATTACAGGCAAGGGGAATCTGGAGGTAGCCGACCTGAGGA

    |*4741     |*4751     |*4761     |*4771     |*4781     |*4791
CATGGCTTCTGAACCTGTCTTTTGGGAGTGGTATGGAAGGTGGAGCGTTCACCAGTGACC

    |*4801     |*4811     |*4821     |*4831     |*4841     |*4851
TGGAAGGCCCAGCACCACCCTCCTTCCCACTCTTCTCATCTTGACAGAGCCTGCCCCAGC

    |*4861     |*4871     |*4881     |*4891     |*4901     |*4911
GCTGACGTGTCAGGAAAACACCCAGGGAACTAGGAAGGCACTTCTGCCTGAGGGGCAGCC

    |*4921     |*4931     |*4941     |*4951     |*4961     |*4971
TGCCTTGCCCACTCCTGCTCTGCTCGCCTCGGATCAGCTGAGCCTTCTGAGCTGGCCTCT

    |*4981     |*4991     |*5001     |*5011     |*5021     |*5031
CACTGCCTCCCCAAGGCCCCCTGCCTGCCCTGTCAGGAGGCAGAAGGAAGCAGGTGTGAG

    |*5041     |*5051     |*5061     |*5071     |*5081     |*5091
GGCAGTGCAAGGAGGGAGCACAACCCCCAGCTCCCGCTCCGGGCTCCGACTTGTGCACAG

    |*5101     |*5111     |*5121     |*5131     |*5141     |*5151
GCAGAGCCCAGACCCTGGAGGAAATCCTACCTTTGAATTCAAGAACATTTGGGGAATTTG

    |*5161     |*5171     |*5181     |*5191     |*5201     |*5211
GAAATCTCTTTGCCCCCAAACCCCCATTCTGTCCTACCTTTAATCAGGTCCTGCTCAGCA

    |*5221     |*5231     |*5241     |*5251     |*5261     |*5271
GTGAGAGCAGATGAGGTGAAAAGGCCAAGAGGTTTGGCTCCTGCCCACTGATAGCCCCTC

    |*5281     |*5291     |*5301     |*5311     |*5321     |*5331
TCCCCGCAGTGTTTGTGTGTCAAGTGGCAAAGCTGTTCTTCCTGGTGACCCTGATTATAT

    |*5341     |*5351     |*5361     |*5371     |*5381     |*5391
CCAGTAACACATAGACTGTGCGCATAGGCCTGCTTTGTCTCCTCTATCCTGGGCTTTTGT

    |*5401     |*5411     |*5421     |*5431     |*5441     |*5451
TTTGCTTTTTAGTTTTGCTTTTAGTTTTTCTGTCCCTTTTATTTAACGCACCGACTAGAC

    |*5461     |*5471     |*5481     |*5491     |*5501     |*5511
ACACAAAGCAGTTGAATTTTTATATATATATCTGTATATTGCACAATTATAAACTCATTT

    |*5521     |*5531     |*5541     |*5551     |*5561     |*5571
TGCTTGTGGCTCCACACACACAAAAAAAGACCTGTTAAAATTATACCTGTTGCTTAATTA
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    |*5581     |*5591     |*5601     |*5611     |*5621     |*5631
CAATATTTCTGATAACCATAGCATAGGACAAGGGAAAATAAAAAAAGAAAAAAAAGAAAA

    |*5641     |*5651     |*5661     |*5671     |*5681     |*5691
AAAAACGACAAATCTGTCTGCTGGTCACTTCTTCTGTCCAAGCAGATTCGTGGTCTTTTC

    |*5701     |*5711     |*5721     |*5731     |*5741     |*5751
CTCGCTTCTTTCAAGGGCTTTCCTGTGCCAGGTGAAGGAGGCTCCAGGCAGCACCCAGGT

    |*5761     |*5771     |*5781     |*5791     |*5801     |*5811
TTTGCACTCTTGTTTCTCCCGTGCTTGTGAAAGAGGTCCCAAGGTTCTGGGTGCAGGAGC

    |*5821     |*5831     |*5841     |*5851     |*5861     |*5871
GCTCCCTTGACCTGCTGAAGTCCGGAACGTAGTCGGCACAGCCTGGTCGCCTTCCACCTC

    |*5881     |*5891     |*5901     |*5911     |*5921     |*5931
TGGGAGCTGGAGTCCACTGGGGTGGCCTGACTCCCCCAGTCCCCTTCCCGTGACCTGGTC

    |*5941     |*5951     |*5961     |*5971     |*5981     |*5991
AGGGTGAGCCCATGTGGAGTCAGCCTCGCAGGCCTCCCTGCCAGTAGGGTCCGAGTGTGT

    |*6001     |*6011     |*6021     |*6031     |*6041     |*6051
TTCATCCTTCCCACTCTGTCGAGCCTGGGGGCTGGAGCGGAGACGGGAGGCCTGGCCTGT

    |*6061     |*6071     |*6081     |*6091     |*6101     |*6111
CTCGGAACCTGTGAGCTGCACCAGGTAGAACGCCAGGGACCCCAGAATCATGTGCGTCAG

    |*6121     |*6131     |*6141     |*6151     |*6161     |*6171
TCCAAGGGGTCCCCTCCAGGAGTAGTGAAGACTCCAGAAATGTCCCTTTCTTCTCCCCCA

    |*6181     |*6191     |*6201     |*6211     |*6221     |*6231
TCCTACGAGTAATTGCATTTGCTTTTGTAATTCTTAATGAGCAATATCTGCTAGAGAGTT

    |*6241     |*6251     |*6261     |*6271     |*6281     |*6291
TAGCTGTAACAGTTCTTTTTGATCATCTTTTTTTAATAATTAGAAACACCAAAAAAATCC

    |*6301     |*6311     |*6321     |*6331     |*6341     |*6351
AGAAACTTGTTCTTCCAAAGCAGAGAGCATTATAATCACCAGGGCCAAAAGCTTCCCTCC

    |*6361     |*6371     |*6381     |*6391     |*6401     |*6411
CTGCTGTCATTGCTTCTTCTGAGGCCTGAATCCAAAAGAAAAACAGCCATAGGCCCTTTC

    |*6421     |*6431     |*6441     |*6451     |*6461     |*6471
AGTGGCCGGGCTACCCGTGAGCCCTTCGGAGGACCAGGGCTGGGGCAGCCTCTGGGCCCA
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    |*6481     |*6491     |*6501     |*6511     |*6521     |*6531
CATCCGGGGCCAGCTCCGGCGTGTGTTCAGTGTTAGCAGTGGGTCATGATGCTCTTTCCC

    |*6541     |*6551     |*6561     |*6571     |*6581     |*6591
ACCCAGCCTGGGATAGGGGCAGAGGAGGCGAGGAGGCCGTTGCCGCTGATGTTTGGCCGT

    |*6601     |*6611     |*6621     |*6631     |*6641     |*6651
GAACAGGTGGGTGTCTGCGTGCGTCCACGTGCGTGTTTTCTGACTGACATGAAATCGACG

    |*6661     |*6671     |*6681     |*6691     |*6701     |*6711
CCCGAGTTAGCCTCACCCGGTGACCTCTAGCCCTGCCCGGATGGAGCGGGGCCCACCCGG

    |*6721     |*6731     |*6741     |*6751     |*6761     |*6771
TTCAGTGTTTCTGGGGAGCTGGACAGTGGAGTGCAAAAGGCTTGCAGAACTTGAAGCCTG

    |*6781     |*6791     |*6801     |*6811     |*6821     |*6831
CTCCTTCCCTTGCTACCACGGCCTCCTTTCCGTTTGATTTGTCACTGCTTCAATCAATAA

    |*6841     |*6851     |*6861     |*6871     |*6881     |*6891
CAGCCGCTCCAGAGTCAGTAGTCAATGAATATATGACCAAATATCACCAGGACTGTTACT

    |*6901     |*6911     |*6921     |*6931     |*6941     |*6951
CAATGTGTGCCGAGCCCTTGCCCATGCTGGGCTCCCGTGTATCTGGACACTGTAACGTGT

    |*6961     |*6971     |*6981     |*6991     |*7001     |*7011
GCTGTGTTTGCTCCCCTTCCCCTTCCTTCTTTGCCCTTTACTTGTCTTTCTGGGGTTTTT

    |*7021     |*7031     |*7041     |*7051     |*7061     |*7071
CTGTTTGGGTTTGGTTTGGTTTTTATTTCTCCTTTTGTGTTCCAAACATGAGGTTCTCTC

    |*7081     |*7091     |*7101     |*7111     |*7121     |*7131
TACTGGTCCTCTTAACTGTGGTGTTGAGGCTTATATTTGTGTAATTTTTGGTGGGTGAAA

    |*7141     |*7151     |*7161     |*7171     |*7181     |*7191
GGAATTTTGCTAAGTAAATCTCTTCTGTGTTTGAACTGAAGTCTGTATTGTAACTATGTT

    |*7201     |*7211     |*7221     |*7231     |*7241     |*7251
TAAAGTAATTGTTCCAGAGACAAATATTTCTAGACACTTTTTCTTTACAAACAAAAGCAT

    |*7261     |*7271     |*7281     |*7291     |*7301     |*7311
TCGGAGGGAGGGGGATGGTGACTGAGATGAGAGGGGAGAGCTGAACAGATGACCCCTGCC

    |*7321     |*7331     |*7341     |*7351     |*7361     |*7371
CAGATCAGCCAGAAGCCACCCAAAGCAGTGGAGCCCAGGAGTCCCACTCCAAGCCAGCAA

    |*7381     |*7391     |*7401     |*7411     |*7421     |*7431
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GCCGAATAGCTGATGTGTTGCCACTTTCCAAGTCACTGCAAAACCAGGTTTTGTTCCGCC

    |*7441     |*7451     |*7461     |*7471     |*7481     |*7491
CAGTGGATTCTTGTTTTGCTTCCCCTCCCCCCGAGATTATTACCACCATCCCGTGCTTTT

    |*7501     |*7511     |*7521     |*7531     |*7541     |*7551
AAGGAAAGGCAAGATTGATGTTTCCTTGAGGGGAGCCAGGAGGGGATGTGTGTGTGCAGA

    |*7561     |*7571     |*7581     |*7591     |*7601     |*7611
GCTGAAGAGCTGGGGAGAATGGGGCTGGGCCCACCCAAGCAGGAGGCTGGGACGCTCTGC

    |*7621     |*7631     |*7641     |*7651     |*7661     |*7671
TGTGGGCACAGGTCAGGCTAATGTTGGCAGATGCAGCTCTTCCTGGACAGGCCAGGTGGT

    |*7681     |*7691     |*7701     |*7711     |*7721     |*7731
GGGCATTCTCTCTCCAAGGTGTGCCCCGTGGGCATTACTGTTTAAGACACTTCCGTCACA

    |*7741     |*7751     |*7761     |*7771     |*7781     |*7791
TCCCACCCCATCCTCCAGGGCTCAACACTGTGACATCTCTATTCCCCACCCTCCCCTTCC

    |*7801     |*7811     |*7821     |*7831     |*7841     |*7851
CAGGGCAATAAAATGACCATGGAGGGGGCTTGCACTCTCTTGGCTGTCACCCGATCGCCA

    |*7861     |*7871     |*7881     |*7891     |*7901     |*7911
GCAAAACTTAGATGTGAGAAAACCCCTTCCCATTCCATGGCGAAAACATCTCCTTAGAAA

    |*7921     |*7931     |*7941     |*7951     |*7961     |*7971
AGCCATTACCCTCATTAGGCATGGTTTTGGGCTCCCAAAACACCTGACAGCCCCTCCCTC

    |*7981     |*7991     |*8001     |*8011     |*8021     |*8031
CTCTGAGAGGCGGAGAGTGCTGACTGTAGTGACCATTGCATGCCGGGTGCAGCATCTGGA

    |*8041     |*8051     |*8061     |*8071     |*8081     |*8091
AGAGCTAGGCAGGGTGTCTGCCCCCTCCTGAGTTGAAGTCATGCTCCCCTGTGCCAGCCC

    |*8101     |*8111     |*8121     |*8131     |*8141     |*8151
AGAGGCCGAGAGCTATGGACAGCATTGCCAGTAACACAGGCCACCCTGTGCAGAAGGGAG

    |*8161     |*8171     |*8181     |*8191     |*8201     |*8211
CTGGCTCCAGCCTGGAAACCTGTCTGAGGTTGGGAGAGGTGCACTTGGGGCACAGGGAGA

    |*8221     |*8231     |*8241     |*8251     |*8261     |*8271
GGCCGGGACACACTTAGCTGGAGATGTCTCTAAAAGCCCTGTATCGTATTCACCTTCAGT

    |*8281     |*8291     |*8301     |*8311     |*8321     |*8331
TTTTGTGTTTTGGGACAATTACTTTAGAAAATAAGTAGGTCGTTTTAAAAACAAAAATTA
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    |*8341     |*8351     |*8361     |*8371     |*8381     |*8391
TTGATTGCTTTTTTGTAGTGTTCAGAAAAAAGGTTCTTTGTGTATAGCCAAATGACTGAA

    |*8401     |*8411     |*8421     |*8431     |*8441     |*8451
AGCACTGATATATTTAAAAACAAAAGGCAATTTATTAAGGAAATTTGTACCATTTCAGTA

    |*8461     |*8471     |*8481     |*8491     |*8501     |*8511
AACCTGTCTGAATGTACCTGTATACGTTTCAAAAACACCCCCCCCCCACTGAATCCCTGT

    |*8521     |*8531     |*8541     |*8551  .     .     .     .
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GBK Parser: Version: 1.1, Version Date: 11/02/2015
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Control: Version: 1, Version Date: 11/02/2015
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