Band 55 protein

```
                  10         20         30         40         50
ISR       MESAEEPLPARPALETEGLRFLHVTVGSLLASYGWYVLFSCILLYIVIQK
MOUSE     -DRD----S-@------S-*----------------I------------R
RAT            ---S--------S------------------I----V--------
HUMAN     --RQ--S-S--------------T-------T----IV-------V-F--

                  60         70         80         90         100
ISR       LSVRLRALRQRQLDQADAVLEPDAVVKRQEALAAARLRMQEDLNAQVEKH
MOUSE     --L-------------ET-----V--------------------------
RAT       --L-------------E------V--------------------------
HUMAN     --A-----------R-A-AV---V-------------K---E--------

                 110        120        130        140        150
ISR       KEKLRQLEEEKRRQKIEMWDSMQEGRSYRRNPGRPQEEDGPGPSTSSSVT
MOUSE     ----------------------------K--S-------------/---I
RAT       ----------------------------K----------------/---I
HUMAN     ----K--------------------K--KG-AKK-----S-----/---L

                 160        170        180       189
ISR       RKGKSDKKPLRGNGYNPLTGEGGGTCAWRPGRRGPSSGG
MOUSE     P-----------G-------------S------------
RAT       P-----------G-----
HUMAN     /-R---R-----G-----S-----A- S------------
```

@=R or S
* = R or O
A= mixture of A and V

Figure 1

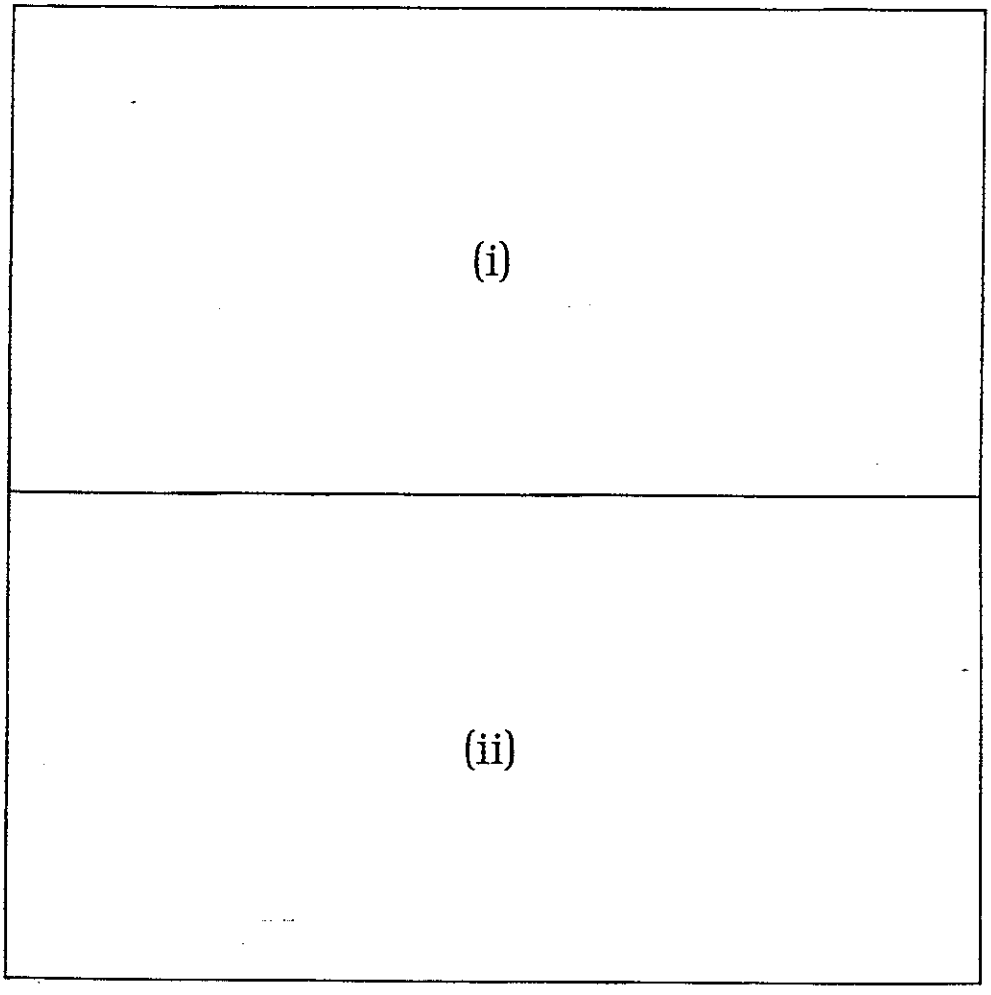


Figure 2

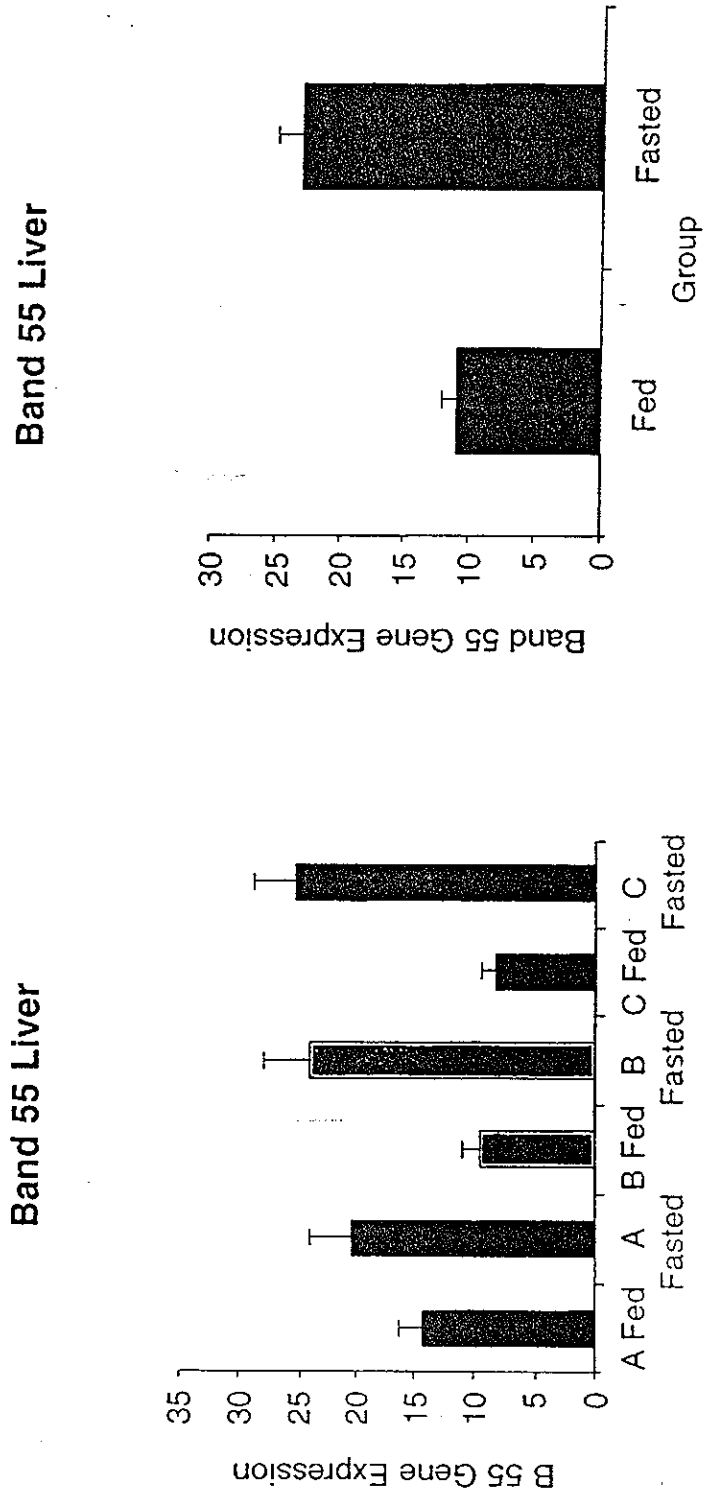

Band 55 Liver
Band 55 Gene Expression
30
25
20
15
10
5
0
Fed
Fasted
Group
Band 55 Liver
B 55 Gene Expression
35
30
25
20
15
10
5
0
A Fed
A
Fasted
B Fed
B
Fasted
C Fed
C
Fasted

Figure 2(i)

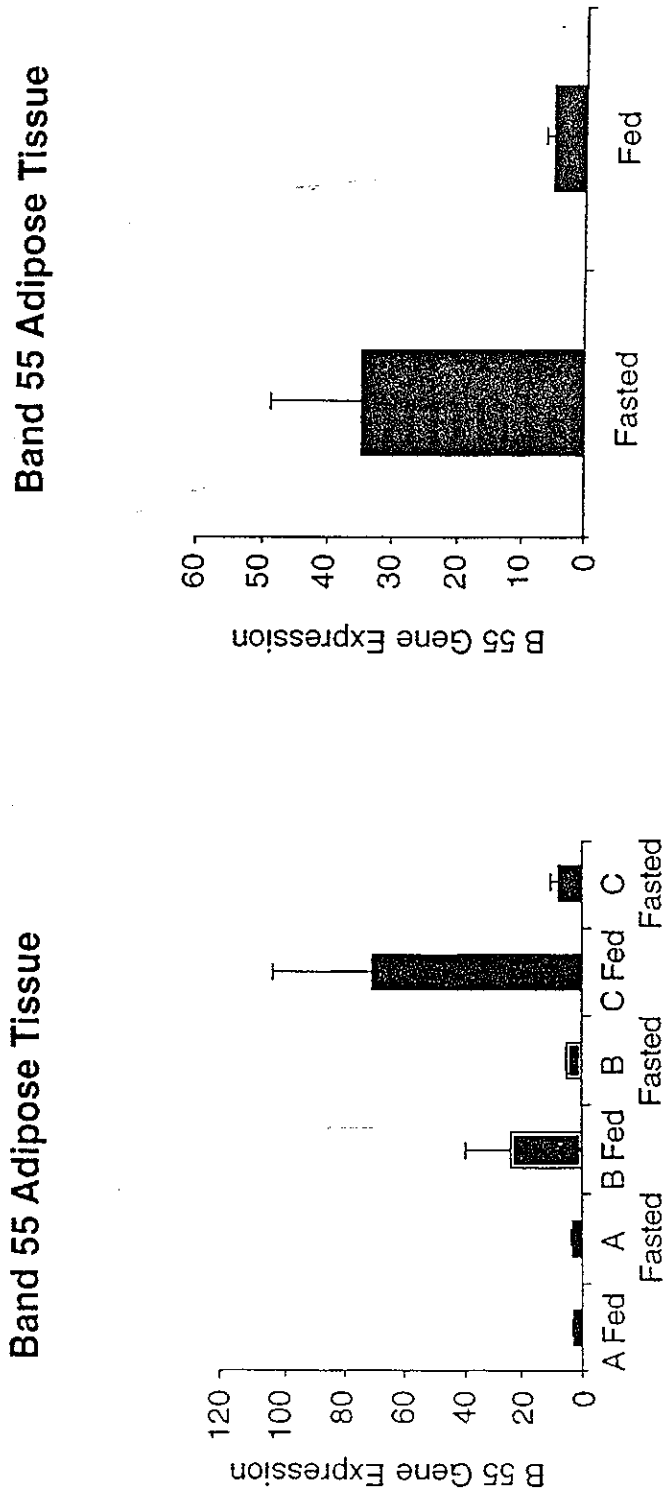

Band 55 Adipose Tissue
B 55 Gene Expression
0
10
20
30
40
50
60
Fasted
Fed
Band 55 Adipose Tissue
B 55 Gene Expression
0
20
40
60
80
100
120
A Fed
A Fasted
B Fed
B Fasted
C Fed
C Fasted

Figure 2(ii)

17 OCT 2000

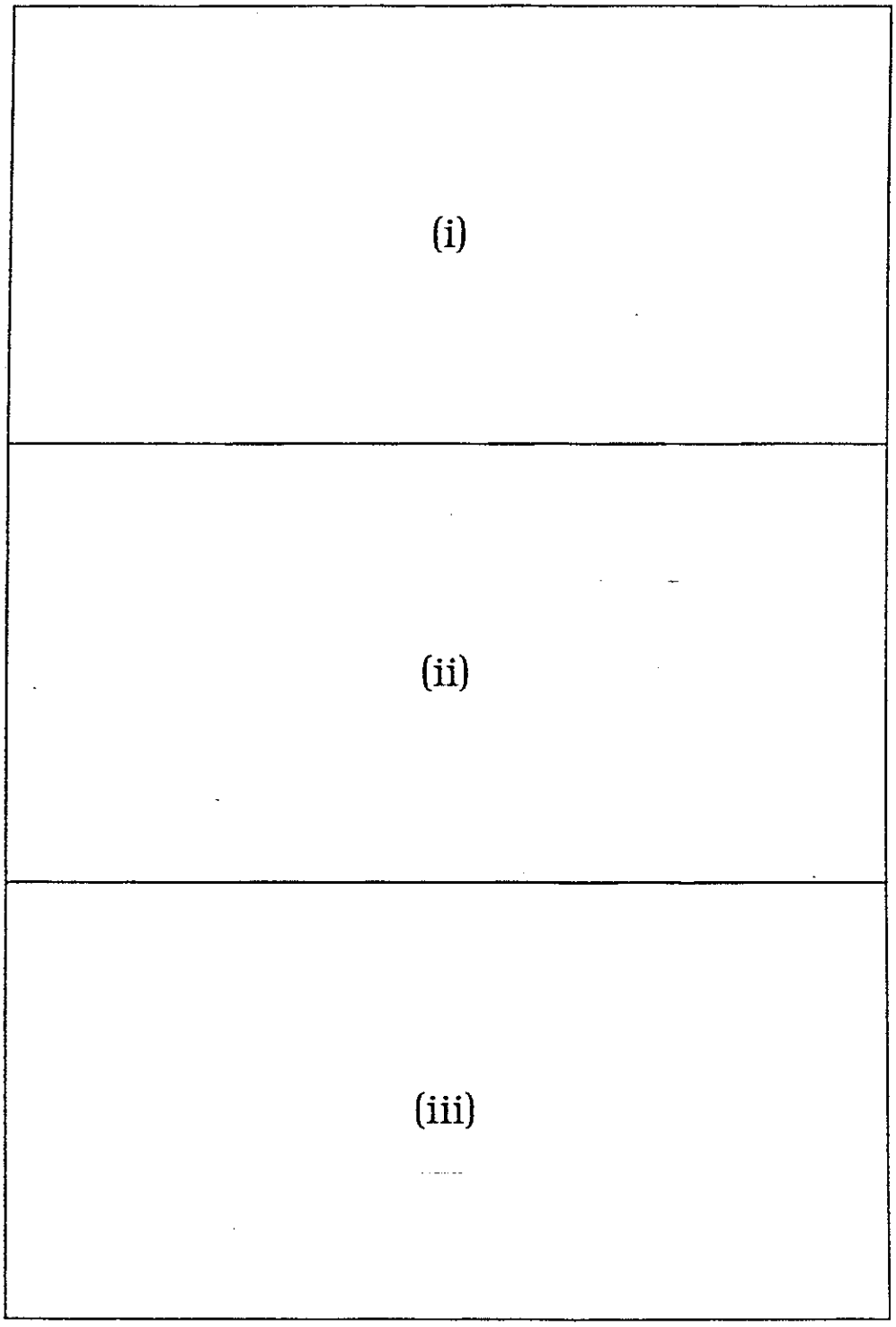


Figure 3

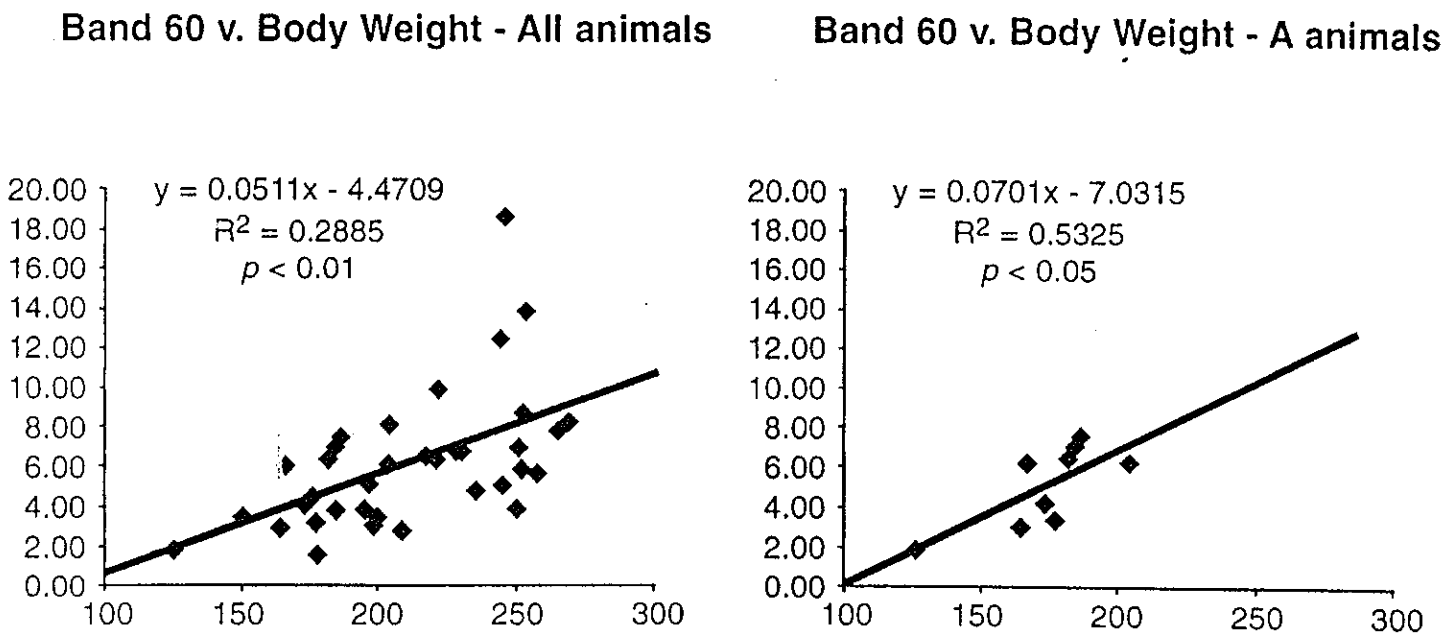


Figure 3(i)

17 OCT 2003

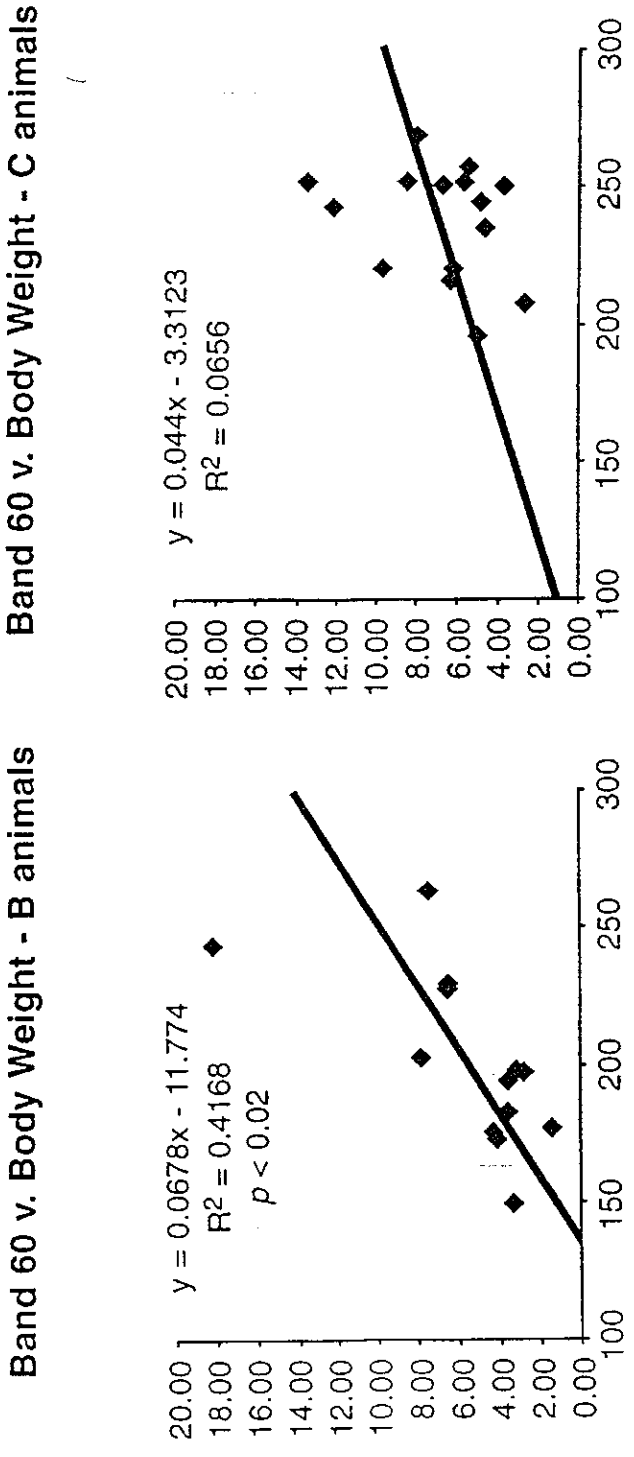

Band 60 v. Body Weight - B animals
y = 0.0678x - 11.774
R2 = 0.4168
p < 0.02
Band 60 v. Body Weight - C animals
y = 0.044x - 3.3123
R2 = 0.0656
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
100
150
200
250
300

Figure 3(ii)

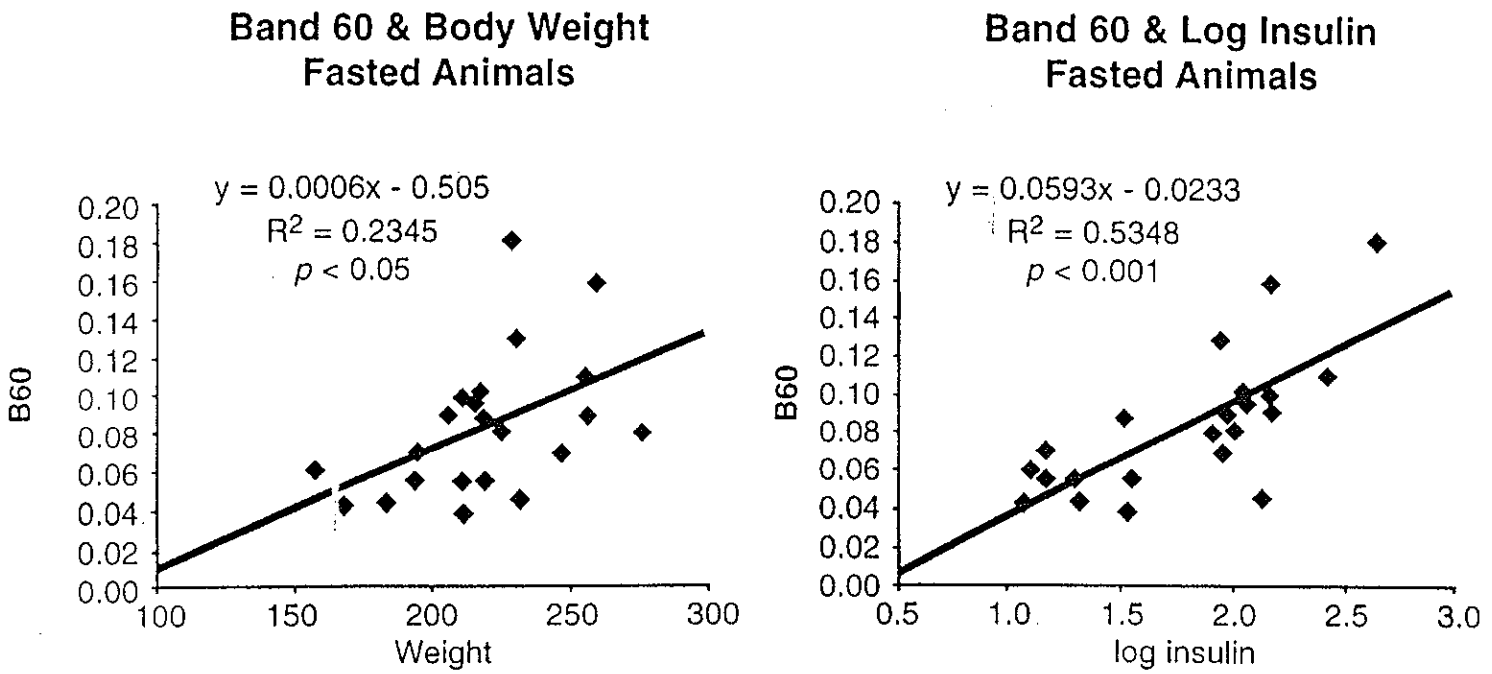


Figure 3(iii)

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17 OCT 2003

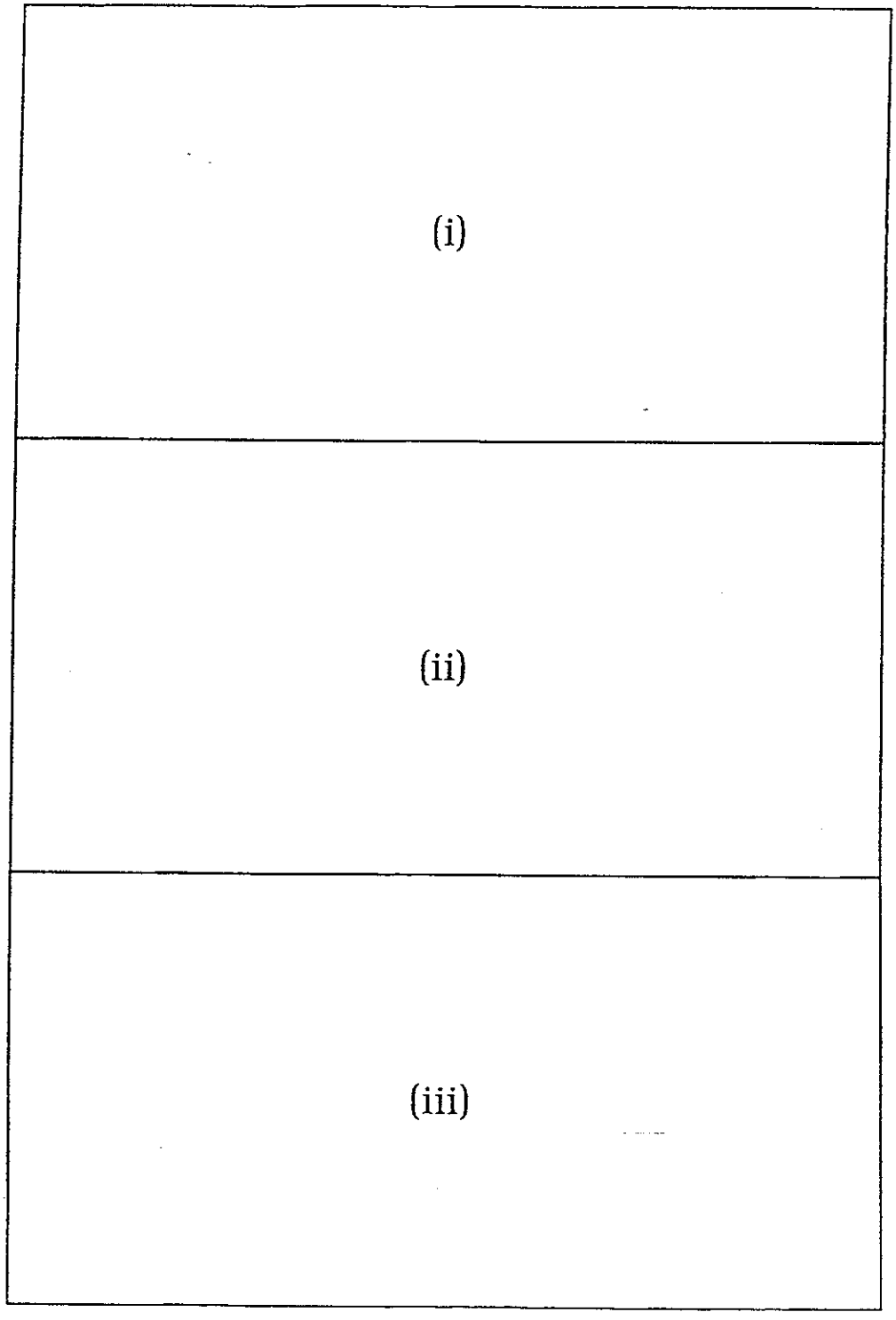
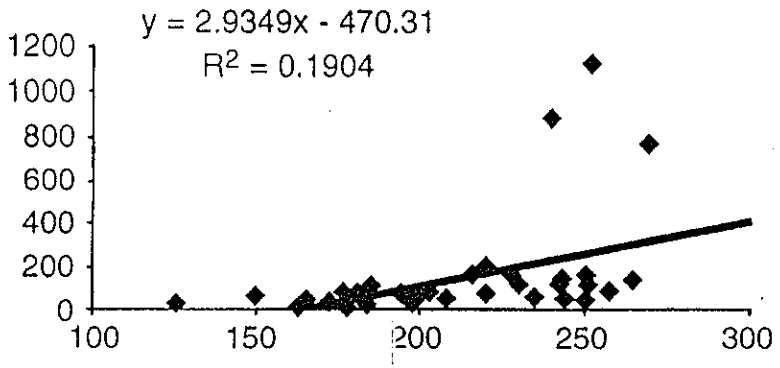


Figure 4

LIVER

Band 38 v. Body weight - All animals



Band 38 v. Body weight - A animals

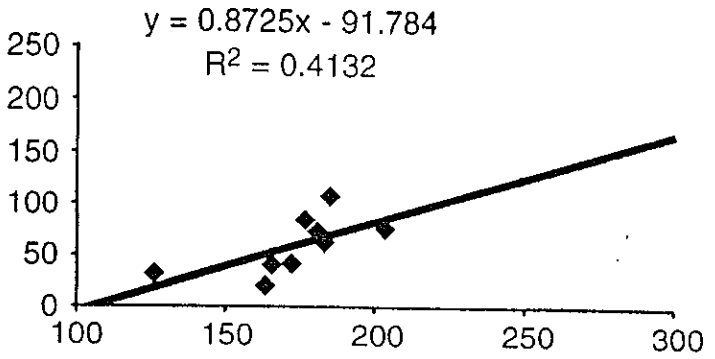
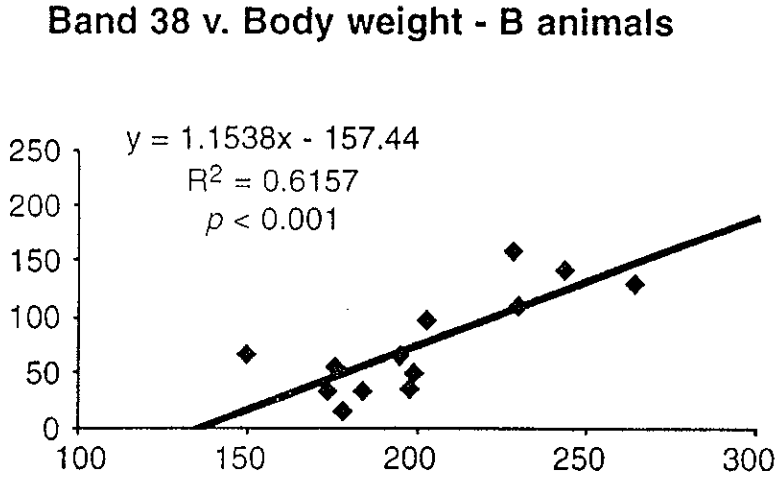


Figure 4(i)

10/20

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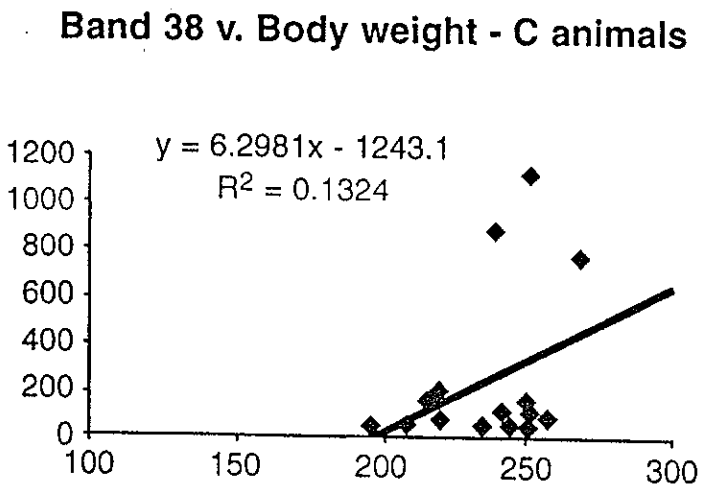


Figure 4(ii)

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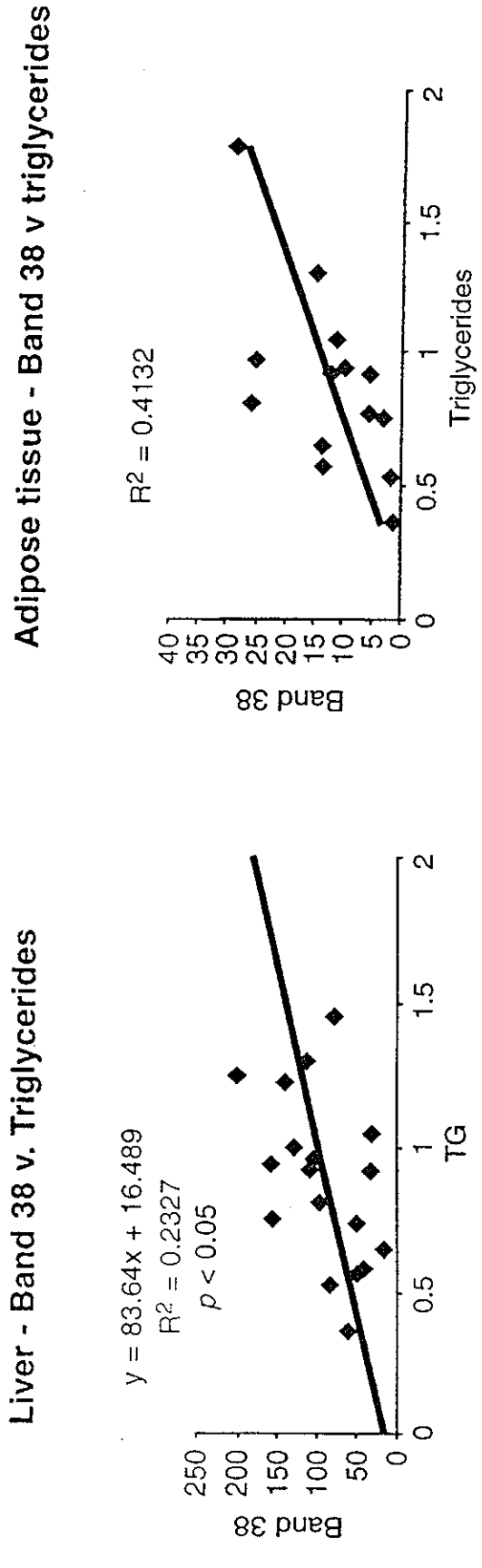

Adipose tissue - Band 38 v triglycerides
R2 = 0.4132
Band 38
Triglycerides
0
5
10
15
20
25
30
35
40
0
0.5
1
1.5
2
Liver - Band 38 v. Triglycerides
y = 83.64x + 16.489
R2 = 0.2327
p < 0.05
Band 38
TG
0
50
100
150
200
250
0
0.5
1
1.5
2

Figure 4(iii)

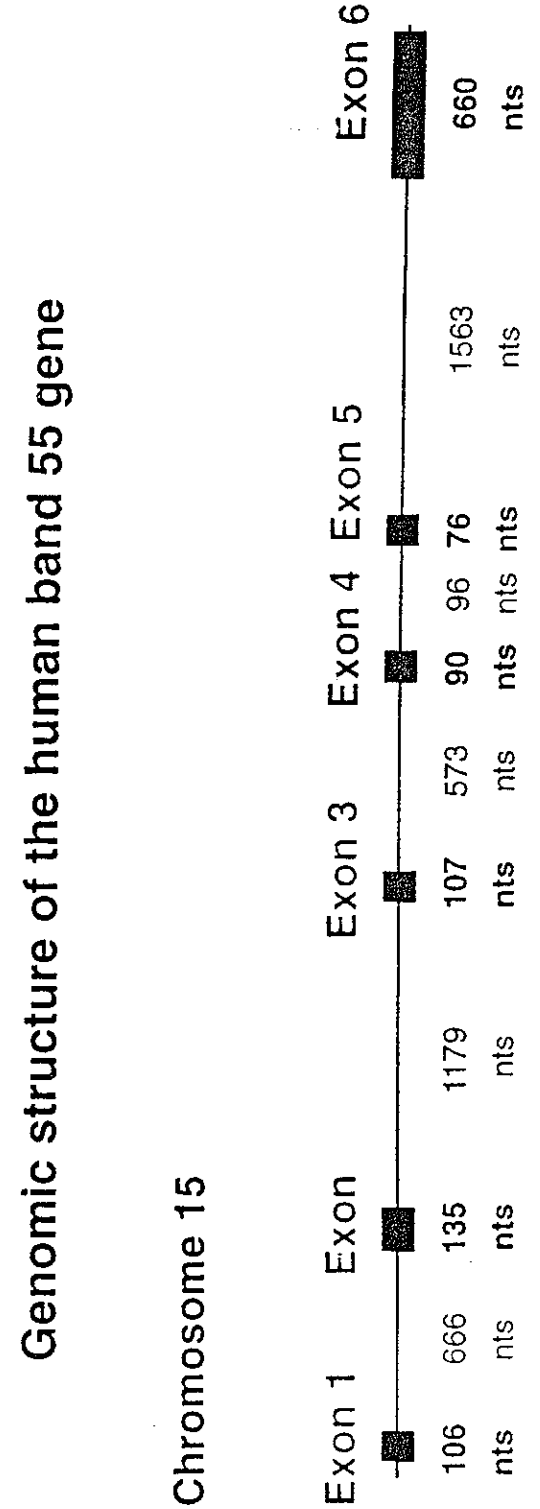

Genomic structure of the human band 55 gene
Chromosome 15
Exon 1
Exon
Exon 3
Exon 4
Exon 5
Exon 6
106 nts
666 nts
135 nts
1179 nts
107 nts
573 nts
90 nts
96 nts
76 nts
1563 nts
660 nts

Figure 5

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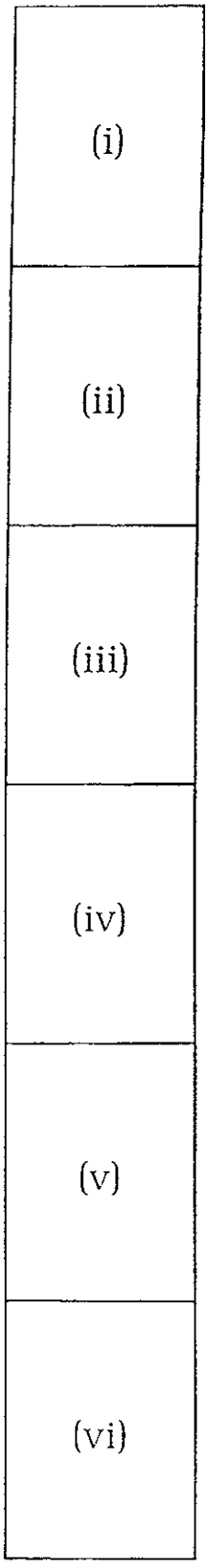


Figure 6

1 CAGGGCTGGG CGGCGGCGGC GGCGGCGGTC ATGGAACGCC AAGAGGAGTC

Transcription initiation site start exon 1

translation start codon

51 TCTGTCCGCG CGGCCGGCCC TGGAGACCGA GGGGCTGCGC TTCCTGCACA

101 CCACGGGTGA GTCGTTGCGG GGCAGCCGGG CGCGCGCCGC CACTTTTGCG

end exon 1

151 ACGCGCAGCC ATGATGGGTG GGTCGTCCGC CGCTGCACCG GGCGCCGGAG

201 CCTGGGAGGC CTGGGAACGG TCGGGCGTTG GCGCTTACGC GGACCTTGGG

251 CAGCAGGCCC GGACCTTGCG CGGAGGCTTC TCGGGAGCCG CACTTCCCTG

301 GGCGGCTCGG CTGTCCCTTG TTTGCGCAAG TCTTTTTTGC GAACCAAGCC

351 CTTCCTGTGG TAGTTACTGG GGTCACTCGG CCGTTGGCGT TTGCCTCTGG

401 GACCCGTCCC ACACAGCCCC ATACACACTC CTGACTCCCC GCGCTGTCAC

451 CCCTTTCTAT GTGGCTCTGA AAGGCCTTTG CCTTCCTGAT TCAGATTAGT

501 TGCTCTTCAT TCTTCAAAAC CCAGTTGCTG TGCCCTCCAC ACTCTAACTG

551 CCCCCGACTC CCCAGATGGT TGGGAAGTCT CACTTCTCAG TGATCCCTGA

601 ATTGTCGCAC TTCTTGAGTT CGTGTTTTAA CGATCTACTT AGGAGGCTTT

651 TTCCTCAGCC TAGACCATGA AGGCTTTGAG GGCAGGAGTT ACACTTTGTG

701 TTTGTTGAGT CTTATGGAAA GGTCAACTAG TAGTGTCATT TTTAGTTTTT

751 TGAAAACTGT TTTTCTTTTC AGTGGGCTCC CTGCTGGCCA CCTATGGCTG

start exon 2

801 GTACATCGTC TTCAGCTGCA TCCTTCTCTA CGTGGTCTTT CAGAAGCTTT

851 CCGCCCGGCT AAGAGCCTTG AGGCAGAGGC AGCTGGACCG AGCTGCGGCT

901 GCTGTGGGTT AGTGCCTGAT AACCGAAATG AAAGCGGTGG TTTTGCACCT

end exon 2

Figure 6(i)

```
 951  CCTTTATATT AAGAGTTAGT CTCTTAGTAA AAGTAAGAGG GGCCACACAG
1001  GAAGACCCTG TCTCTATTTA AAAAAAAAAA AAATAGCCGG GAGTGGCGGC
1051  ACGCACCTGT AGTCCCAGCT GCTCAGGAGG CTGAGGCGGG ATAATCACTT
1101  GAGTCCAGGG AGTCAAAGCT GCAGTGGGCT ATGCTCGGGC CACACTACAC
1151  TCCAGCCTGG GCAATTGATT GAGACCTTGT CTTTAAAAAA AAAAAAAAAA
1201  AAAAAGTAGG AAGTATATGG TTCTCGGTGG GGCGCGGTGG CTCACACCTG
1251  TAATCCCAGC ACTTTGGGAA GCCGAGGCAG GAGGATGACT TGAGGTCAGG
1301  GGTTCGAGAA CAGCCTGGCC AACATGGTGA AACCCTGTCT CTACTAAAAA
1351  TACAAATATT AGTGGGGCGT GGTGACGGGC ACCTGTAATC CCAGCTATTA
1401  GGGTGGCTGA GGCAGGAGAA ATCGCTTGAA.CCTGGGAGCT GGAGATTGCA
1451  GTGAGCTGAG ATTGTGCCAC TGCACTCCAG CCTGGGCAAC AGAGTGAGAC
1501  TGTCTTTTCT TTCTTTTTTT TTTTTTTTTC TATGAGATGG AGTCTAGCCT
1551  TGTTGCAAAG AGCGAGACTC TATGAGTAGA CGTTATGAAT AGAAATGAGT
1601  TCATTTCTAT TCATAATGCT ATTTGGAAGG ATTTTTCTTT TCTGTAGAAA
1651  CAAATACTTA AGAATCTTCT GCGCTAATTA AGGGATGGAT AATGATTTAG
1701  AAAACTTTAT ATTTCCTTGG TAGTCTTCCA GGATTCTAGT CAGCCTAGAG
1751  ACTGTGGGTG TCACTGAGGT ATCCAAGATG TGCTCTGTGT GGCCACTATC
1801  CCAGGCTTTA TGAATCGGAA TTGCTCAGGG GAACTCAGAA ATTGGCATTT
1851  CTAACAGATT TCTGGTGATG TAGATATTTC GGGCTAAAAT CCGTGGCTCA
1901  GCAACAGACC CCTGCCCCCT GAAGCAGTAA AATGTATGCA GAGGGGTTAG
1951  GAGTACTTAT GTAAAAATAT GTTGTTTCAT TGTCTGATAT CCATACCTCT
2001  TTATACTTTT AATAATATGG ACACTCAAAA GTTTCTATTT TATATTGTAC
```

Figure 6(ii)

17 OCT 2003

2051 ACAGTGCTTT ATCTCCATTT TTTTCTGACA TTTTAGAACC TGATGTTGTT

start exon 3

2101 GTTAAACGAC AAGAAGCTTT AGCAGCTGCT CGACTGAAAA TGCAAGAAGA

2151 ACTAAATGCG CAAGTTGAAA AGCATAAGGA AAAACTGAAA CAAGTATGAA

end exon 3

2201 CTGGTTTCAG TTTGAATGTG TGCATAGAAA TTGTCTGAGG TTTAGTGGCT

2251 AACGATGCCT GTGTCTGTGT TGTCTATAAG CTTCTAGGAC CAGGTCCTAT

2301 CCCATTAGAT TCAATAAGCA TTTCAGTTCC TACCATGTAA GTATTGGTGA

2351 TATCAAGAAG AATACACGAT TGTTAGGGAA CACTAGATGT GTGAATATAT

2401 TACCATGAAA GGTCCAGAGC ACAAAAGGAG GGACAGGCTG GAGCAGGGAG

2451 CATGTGAGTG TGTGTGTGCA TGTGCCTGTG TCTTCCCCAT TACCAAAAAT

2501 GTCCTGACAG GAGTGAGTTT CAGAAGAATG GAGTCAGTAA TCTTTTTCAT

2551 GAAACATTTT GCTTTCTTTA ATAGTGTACA AAAACCAAAG CTGCTCTATG

2601 TGAGTTAAAC TCACACTACC AGATCACAAC AGTTTTATTA ACTAAAGAAA

2651 ACGAGGGTGA AGTTTGTTCT GAAAGACATT TAAATTAAGA ATTATCAGAG

2701 TTAGCTTTGT CTTTGAGAGA AATGGCAGCT TCTGAATTCT TTCTGTAAAA

2751 TGTGATTGTT TCTCAGCTTG AAGAAGAAAA AAGGAGACAG AAGATTGAAA

start exon 4

2801 TGTGGGACAG CATGCAAGAA GGAAAAAGTT ACAAAGGAAA TGCAAAGAAG

2851 CCCCAGGTGA CTGGAGACCT CGGCCGGCTG GCATGCGGTA GATGAAGATT

end exon 4

2901 GCCAAGTAGA ATGTTTTAAT TGCTTCTTAC ACTACTGTGT GTGTTCAAAC

```
2951  AGGAGGAAGA CAGTCCTGGG CCTTCCACTT CATCTGTCCT GAAACGGAAA
        ↑
        start exon 5

3001  TCGGACAGAA AGCCTTTGCG GGGAGGAGGT AAGCACCACT GATGTCAAAT
                                    ↑
                                    end exon 5

3051  GTTAACAGAT TTTCAACACT TACAGGATAT AGTTACCTTT TAAGAACAAG

3101  ATTGTTTGTT TCTTTGTCCA TAAATTAAGA CTAATTCCTT AGGATTGTGA

3151  AGATTCAATA AAGGAAACAG ATGCAAATCA CCTCCTAGGT CCTCACTAAG

3201  TACTTAGAAG GATTGTACTT ATAGTATTCT AACTTGATCC TTCTGCAGCC

3251  CCGTAGAGGG AGAGCTAAGT AGGGTGAGGA ATTGTCTGCC AATCTTCAGA

3301  TGAGTGTCAA GGAGCTGGAA CACAGTGGTT TTGGTCTTTC TGGCTGGGAC

3351  CACCTTGTTT CTTGCAAATA ACAAGGAGTA GCAGACAGAT GCTCATCCAA

3401  AGCTGCTTCC TGTGTGCAGC ACTGCCCCGG GGACTCTGGA TGATGCCACA

3451  GCAGTCTGTC TTCATCCCAT CCCTGAGAAT TTCAAATCTG GGAAGATGGG

3501  ACTCACAAAC GAAAATAAGC AATCCTTGGT GATTCTGGCT AAGAGTTGCA

3551  AGTTACTGCT GAGGAAGGAA AGAACAAACA CACTAGAACA CTGTAGGAAC

3601  CAAGGCGGAA GATTTTGTAT CCTCCATAGG AGGAGAGGGG CACCGCAGAG

3651  GCCCTGATGG TGTCTTTGAG GACTGAGGAA AGACTGGGGC ATGGGCTCCA

3701  AGGCAGCAGG GCCACAGACT TGGCTGACCT TAAACGCTGA GCTGTAATCC

3751  CCTTTGTGTC AGAAGACTAA ACCTGGCTTG CTGTAGAGAA GGTGATGCAT

3801  CTGGAAAGAA AATGCTATTT TTAAATGGTC CTGCCGGAAG CTTATTTTTA

3851  GACACATAGA GGTGATATTT AGGAGAGGAA TGGAAATCGT AGAAGATGGA

3901  ATGCAGGGTG TGCTTGCCTG CACGGCCTCT TTCAGCATCC CCAGCATTTC

3951  TGAGCTGGGA CTTTTGACTA GCCTGGCTTT ACAAATAAGG AAACTGAGGC
```

Figure 6(iv)

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```
4001  ACAGTGTTTA ATTGCCCAAA GATTCCACTA TAAGTAAGGA GTAAAAGTAA
4051  CATTTAAGTT CTGGGTGGCC CTAGAACCTT AGCACTCAAC CAGGTTACCA
4101  GTTGTGCACT GACTTTGGGA AGCTCATGAG GGAGTGGGGT GGTTGGGGGT
4151  AGGGAAGGAT ACAGAAGACC CCGTTCTGAC TGGTAGAAGT GACAAGTTTG
4201  ACTCTTGATT TTTTTTAATC TGTTTTCTGT AGCGTGAACA GCCCTTATTT
4251  GAATGTATGA GTTTTAGTAA GCACTGTGAT AGGAGGATTC ATATACTTAA
4301  ATCAGGCCCT CTTGAGAGAG TTTTTTGGTG ACCCTTTTGC ATGTGTTTCG
4351  GAGGTTGGGA CAAAGAAGCT GAATGACTTT TTTCCCCACC AGACAATCAG
4401  TTCAAATGGC AATCACAATA TAAAGGTTTT TTTTTTTTTC ACATAGCTAA
4451  AAGGTTTTTT TAAATGTCCC TTAGGATCTG TATCTTTGCA GTGCTTTGCG
4501  TGTCACTCTC ATAATTTTAT TGTGGATATA CAATGTTCCC AGATTTTCAG
4551  ATTTTTATCA ATACTGTTGT GCTGCTTTTC TGTCCTCCCA GGTTATAACC
                                                 ↑
                                          start exon 6
4601  CGTTGTCTGG TGAAGGAGGC GGAGCTTGCT CCTGGAGACC TGGACGCAGA
4651  GGCCCGTCAT CTGGCGGATG AGGCTAAGAA TCTTGTTAGT GTCACTTTTG
                            ↑
                   translation stop codon
4701  ACATTAGCAA GATGAACCCT TAACCCTCGA TTCAATTGCC TTACGCACGC
4751  TTTTCACAGT GACTAGCCAA GGGGAGGTGG GGTTGATTTC TGTTCCTAAC
4801  TACACCTGCA TATGTCAGGG CTCCAGTCAG CAAAAGGTAT AGATGTTGCC
4851  TCTAGGCATG AGGTCATTGG TCACATTCTA CTTGGAGACA GTGATTGCAT
4901  TCATTGATTT CATGGTTAAT TGCTAGTTGG TAGGTAAAGG CCTCTAGATG
4951  ATTAGCAATC TTGATAAAAG AGGCCTAGTA ATGTTCTTTT GAGGTTAGAA
5001  ATCCTTGCTG CTAGGACAGT CTCTGTGACA GGTTGCGTTG AATGATGTCT
```

Figure 6(v)

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5051 TCCTTATCAA TGGTGAGCCC ACCAGTGAGG ATTACTGATG TGGACAGTTG

5101 ATGGGGTTTG TTTCTGTATA TTTATTTTTA TGTACAGAAC TTTGTAAAAA

5151 CGAAACTATT TAAAAAACAA GAATAACATT TTTAGCATCT TTATTCAAGG

5201 AGATTTATGG ACTTCAATTT GTCTATCAAA CATTAAATAG CTTTTTATTA

5251 C

↑

transcription termination site

end exon 6

Figure 6(vi)