FIG. 1

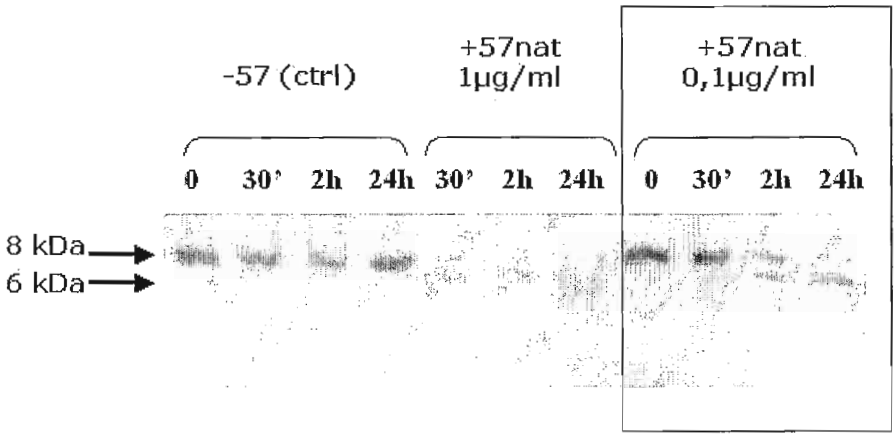

-57 (ctrl)
+57nat 1µg/ml
+57nat 0,1µg/ml
0 30' 2h 24h 30' 2h 24h 0 30' 2h 24h
8 kDa
6 kDa

FIG. 2


1 MEKKQRFSLRKYKSGTFSVLIGSVFLVMTTTVAADELSTMSEPTITNHAQ 50
1 .....MRKKQKLPFDKLAIALMSTSILLNAQSDI 29
51 QQAQHLTNTELSSAESKSQDTSQITLKTNREKEQSQDLVSEPTTTELADT 100
30 KANTVTEDTPATEQAVETPQPTAVSEEAPSSKETKTPQTPDDAEETIADD 79
101 DAASMANTGSDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVAVI 150
80 ANDLAPQAPAKTADTPATSKATIRDLNDPSQVKTLQEKAGKGAGTVVAVI 129
151 DTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVFAH 200
130 DAGFDKNHEAWRLTDKTKARYQSKEDLEKAKKEHGITYGEWVNDKVAYYH 179
201 NYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQAPK 250
180 DYSKDGKTAVD..... 190
251 ETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATGER 300
191 .....QEHGTHVSGILSGNAPSETKEPYR 214
301 FLGIAPEAQVMFMRVFANDIMGSAESLFIKAIEDAVALGADVINLSLGTA 350
215 LEGAMPEAQLLLMRVEIVNGLADYARNYAQAIIDAVNLGAKVINMSFGNA 264
351 NGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPDYG 400
265 ALAYANLPDETKKAFDYAKSKGVSIVTSAGNDSSFGGKTRLPLADHPDYG 314
401 LVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSESVD 450
315 VVGTPAAADSTLTVASYSPDKQLTETATVKTAD.....QQDKE 352
451 FKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYDEM 500
353 MPVLSTNRFEPNKAYDYAYANRGMKEDDFKDVKGKIALIERG.DIDFKDK 401
501 IALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAMSQ 550
402 IANAKKAGAVGVLIYD......NQDKGFPIELPNVDQMPAAFISRKDGLL 445
551 LNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPGGD 600
446 LKENPQKTITFNATPKVLPTASGTKLSRFSSWGLTADGNIKPDIAAPGQD 495
601 IYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIADIV 650
496 ILSSVANNKYAKLSGTSMSAPLVAGIMGLLQKQYETQYPDMTPSERLDLA 545

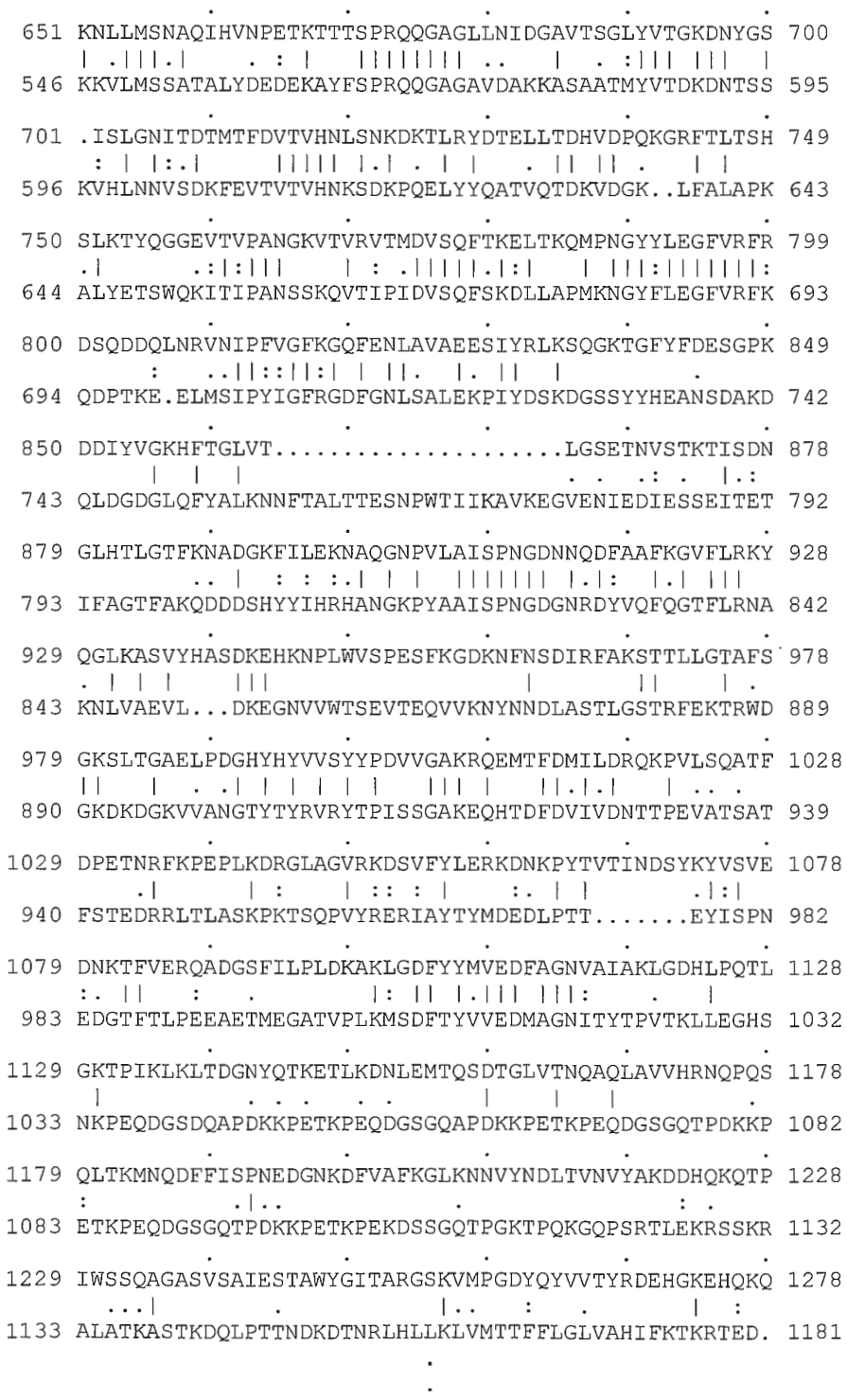

651 KNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNYGS 700
546 KKVLMSSATALYDEDEKAYFSPRQQGAGAVDAKKASAATMYVTDKDNTSS 595
701 .ISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTSH 749
596 KVHLNNVSDKFEVTVTVHNKSDKPQELYYQATVQTDKVDGK..LFALAPK 643
750 SLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRFR 799
644 ALYETSWQKITIPANSSKQVTIPIDVSQFSKDLLAPMKNGYFLEGFVRFK 693
800 DSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGPK 849
694 QDPTKE.ELMSIPYIGFRGDFGNLSALEKPIYDSKDGSSYYHEANSDAKD 742
850 DDIYVGKHFTGLVT.....LGSETNVSTKTISDN 878
743 QLDGDGLQFYALKNNFTALTTESNPWTIIKAVKEGVENIEDIESSEITET 792
879 GLHTLGTFKNADGKFILEKNAQGNPVLAISPNGDNNQDFAAFKGVFLRKY 928
793 IFAGTFAKQDDDSHYYIHRHANGKPYAAISPNGDGNRDYVQFQGTFLRNA 842
929 QGLKASVYHASDKEHKNPLWVSPESFKGDKNFNSDIRFAKSTTLLGTAFS 978
843 KNLVAEVL...DKEGNVVWTSEVTEQVVKNYNNDLASTLGSTRFEKTRWD 889
979 GKSLTGAELPDGHYHYVVSYYPDVVGAKRQEMTFDMILDRQKPVLSQATF 1028
890 GKDKDGKVVANGTYTYRVRYTPISSGAKEQHTDFDVIVDNTTPEVATSAT 939
1029 DPETNRFKPEPLKDRGLAGVRKDSVFYLERKDNKPYTVTINDSYKYVSVE 1078
940 FSTEDRRLTLASKPKTSQPVYRERIAYTYMDEDLPTT.....EYISPN 982
1079 DNKTFVERQADGSFILPLDKAKLGDFYYMVEDFAGNVAIAKLGDHLPQTL 1128
983 EDGTFTLPEEAETMEGATVPLKMSDFTYVVEDMAGNITYTPVTKLLEGHS 1032
1129 GKTPIKLKLTDGNYQTKETLKDNLEMTQSDTGLVTNQAQLAVVHRNQPQS 1178
1033 NKPEQDGSDQAPDKKPETKPEQDGSGQAPDKKPETKPEQDGSGQTPDKKP 1082
1179 QLTKMNQDFFISPNEDGNKDFVAFKGLKNNVYNDLTVNVYAKDDHQKQTP 1228
1083 ETKPEQDGSGQTPDKKPETKPEKDSSGQTPGKTPQKGQPSRTLEKRSSKR 1132
1229 IWSSQAGASVSAIESTAWYGITARGSKVMPGDYQYVVTYRDEHGKEHQKQ 1278
1133 ALATKASTKDQLPTTNDKDTNRLHLLKLVMTTFFLGLVAHIFKTKRTED. 1181

FIG. 3

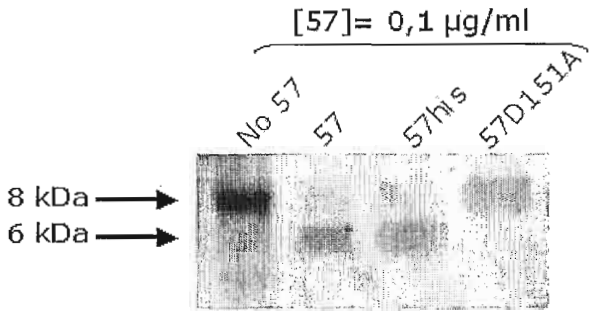


FIG. 4

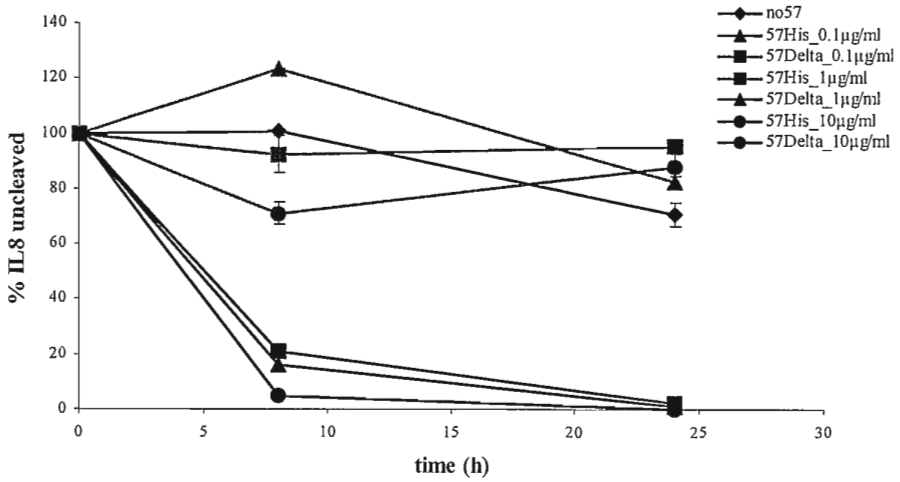
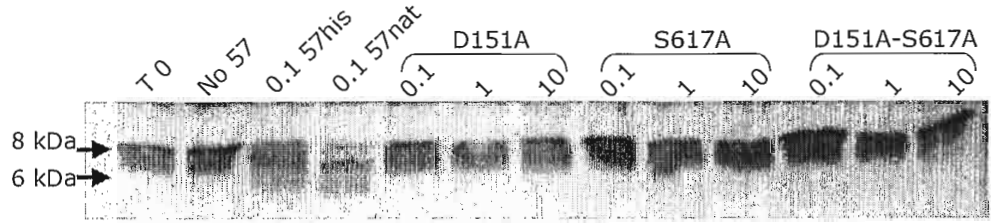
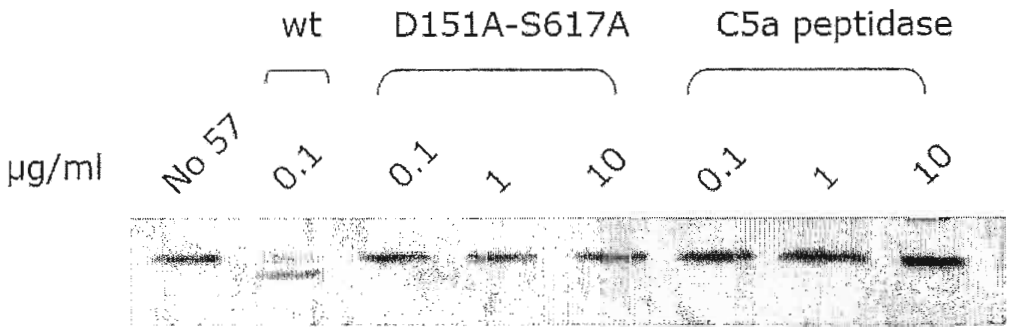

no57
57His_0.1µg/ml
57Delta_0.1µg/ml
57His_1µg/ml
57Delta_1µg/ml
57His_10µg/ml
57Delta_10µg/ml
% IL8 uncleaved
time (h)
0
20
40
60
80
100
120
140
0
5
10
15
20
25
30

FIG. 5


T 0
No 57
0.1 57his
0.1 57nat
D151A
S617A
D151A-S617A
0.1
1
10
8 kDa
6 kDa

A


wt
D151A-S617A
C5a peptidase
µg/ml
No 57
0.1
0.1
1
10
0.1
1
10

B

FIG. 6

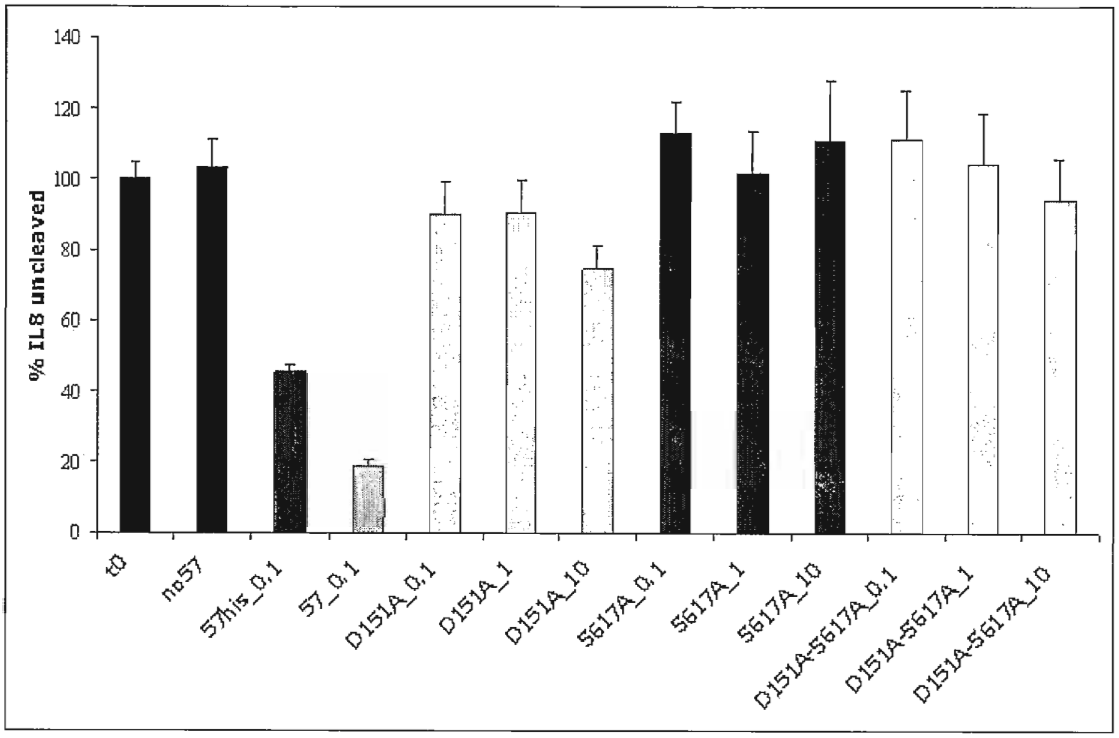

% IL8 uncleaved
140
120
100
80
60
40
20
0
t0
no57
57his_0.1
57_0.1
D151A_0.1
D151A_1
D151A_10
5617A_0.1
5617A_1
5617A_10
D151A-5617A_0.1
D151A-5617A_1
D151A-5617A_10

FIG. 7

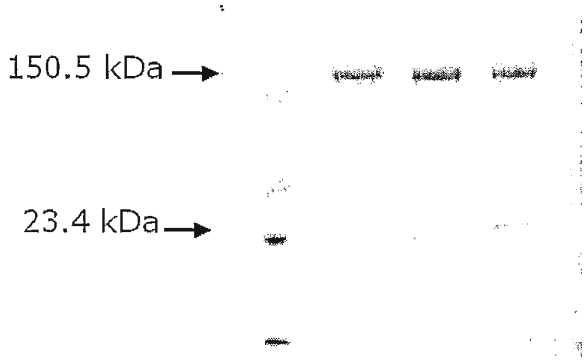
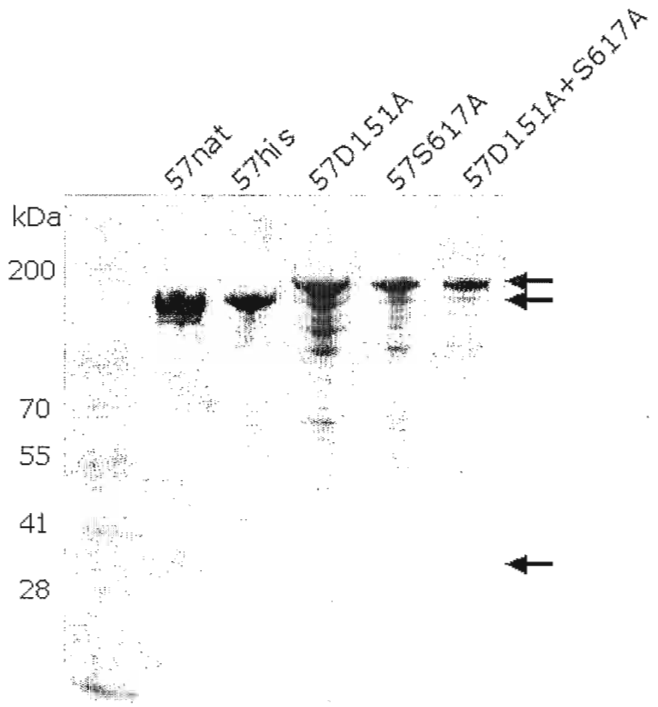


FIG. 8




SDS-PAGE 4-12%

FIG. 9

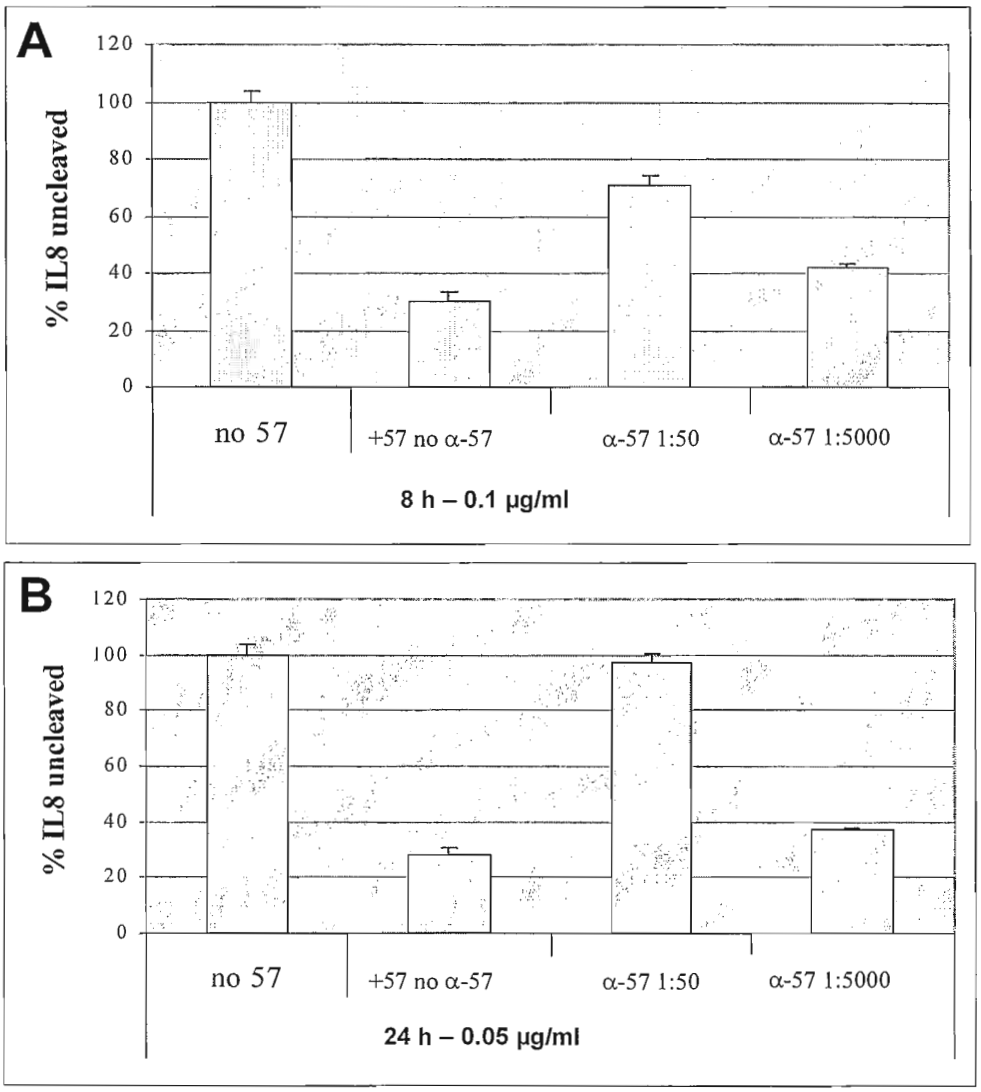

A
% IL8 uncleaved
120
100
80
60
40
20
0
no 57
+57 no α-57
α-57 1:50
α-57 1:5000
8 h – 0.1 µg/ml
B
% IL8 uncleaved
120
100
80
60
40
20
0
no 57
+57 no α-57
α-57 1:50
α-57 1:5000
24 h – 0.05 µg/ml

FIG. 10A

```
                          1                                                 50
    gas57M1_SF370     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLVMTTT--VAADELSTMSEPTITNH
    gas57M1_31075     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLVMTTT--VAADELSTMSEPTITNH
    gas57M1_31237     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLVMTTT--VAADELSTMSEPTITNH
     gas57M1_3348     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLVMTTT--VAADELSTMSEPTITNH
    gas57M2_34585     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLVMTTT--VAADELSTMSEPTITNH
  gas57M3,1_21398     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLVMTTT--VAANELSTMSEPTITNH
gas57M44-61_20839     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLVMTTT--VAADELSTMSEPTITNH
 gas57M6,31_20022     (1) VEKKQRFSLRKYKSGTFSVLIGSAFLMMTTT--VAADELSTMSEPTITNH
   gas57M11_20648     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLVMTTT--VAADELSTMSEPTITNH
    gas57M23_2071     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELSTMSEPTITNH
 gas57M18,3_40128     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMTTTTVAADELTTTSEPTITNH
    gas57M4_10092     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMTTTTVAADELTTTSEPTITNH
    gas57M4_30968     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMTTTTVAADELTTTSEPTITNH
 gas57M6,31_22692     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMTTTTVAADELTTTSEPTITNH
 gas57M68,5_22814     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMTTT-VAADELTTTSEPTITNH
   gas57M68_23623     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMMTTTVAADELTTTSEPTITNH
    gas57M2_10064     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
    gas57M2_10065     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
   gas57M77_10251     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
   gas57M77_10527     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
   gas57M77_20696     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
   gas57M89_21915     (1) VEKKQRFSLRKYKSGTFSVLVGSVFLMMTTT--VAADELTTTSEPTITNH
   gas57M89_23717     (1) VEKKQRFSLRKYKSGTFSVLVGSVFLMMTTT--VAADELTTTSEPTITNH
   gas57M94_10134     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
   gas57M28_10164     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
   gas57M28_10218     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
   gas57M28_10266     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
   gas57M28_10299     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
   gas57M28_30176     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
   gas57M28_30574     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
  gas57M6,9_21802     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMTTT-VAADELTTTSEPTITNH
   gas57M75_10012     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMMTTTVAADELTTTSEPTITNH
   gas57M75_20671     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMMTTTVAADELTTTSEPTITNH
   gas57M75_30603     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMMTTTVAADELTTTSEPTITNH
   gas57M75_30207     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMMTTTVAADELTTTSEPTITNH
   gas57M22_20641     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMTTT-VAADELTTTSEPTITNH
   gas57M22_23465     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMTTT-VAADELTTTSEPTITNH
  gas57M3,1_30610     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMTTT-VAADELTTTSEPTITNH
  gas57M3,1_40603     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMTTT-VAADELTTTSEPTITNH
 gas57M3,28_24214     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMTTT-VAADELTTTSEPTITNH
 gas57M3,34_10307     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMTTT-VAADELTTTSEPTITNH
    gas57M4_40427     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMTTT-VAADELTTTSEPTITNH
     gas57M3_2721     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMMTTT-VAADELTTTSEPTITNH
   gas57M12_10296     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
   gas57M12_10035     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
   gas57M12_20069     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
   gas57M12_22432     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
    gas57M4_40499     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
  gas57M6,1_21259     (1) VEKKQRFSLRKYKSGTFSVLIGSVFLMMTTT--VAADELTTTSEPTITNH
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FIG. 10B

```
                          51                                                  100
    gas57M1_SF370     (49) AQQQAQHLTNTELSSAESKSQDTSQITLKTNREKEQSQDLVSEPTTTELA
    gas57M1_31075     (49) AQQQAQHLTNTELSSAESKSQDTSQITLKTNREKEQSQDLVSEPTTTELA
    gas57M1_31237     (49) AQQQAQHLTNTELSSAESKSQDTSQITLKTNREKEQSQDLVSEPTTTELA
     gas57M1_3348     (49) AQQQAQHLTNTELSSAESKSQDTSQITLKTNREKEQSQDLVSEPTTTELA
    gas57M2_34585     (49) AQQQAQHLTNTELSSAESKSQDTSQITLKTNREKEQSQDLVSEPTTTELA
  gas57M3,1_21398     (49) AQQQAQHLTNTELSSAESKPQDTSQITPKTNREKEQSQDLVSEPTTTELA
gas57M44-61_20839     (49) AQQQAQHLTNTELSSAESKSQDTSQITPKTNREKEQSQDLVSEPTTTELA
 gas57M6,31_20022     (49) TQQQAQHLTNTELSSAESKSQDTSQITPKTNREKEQSQDLVSEP-TTELA
   gas57M11_20648     (49) AQQQAQHLTNTELSSAESKTQDTSQITPKTNREKEQPQGLVSEPTTTELA
    gas57M23_2071     (49) TQQQAQHLTNTELSSAESKSQDTSQITPKTNREKEQPQGLVSEP-TTELA
 gas57M18,3_40128     (51) AQQQAQHLTNTELSSAESQSPDTSQITPKTNREKEQPQGLVSEPTTTELA
    gas57M4_10092     (51) AQQQAQHLTNTELSSAESQSPDTSQITPKTNREKEQPQGLVSEPTTTELA
    gas57M4_30968     (51) AQQQAQHLTNTELSSAESQSPDTSQITPKTNREKEQPQGLVSEPTTTELA
 gas57M6,31_22692     (51) AQQQAQHLTNTELSSAESQSPDTSQITPKTNREKEQPQGLVFEPTTTELA
 gas57M68,5_22814     (50) AQQQAQHLTNTELSSAESQSPDTSQITPKTNREKEQPQGLVSEPTTTELA
   gas57M68_23623     (51) AQQQAQHLTNTELSSAESQSPDTSQITPKTNREKEQPQGLVSEPTTTELA
    gas57M2_10064     (49) AQQQAPPLTNTELSSAESQPQDTSQVTPETNREKEQPQGLVSEPTTTELA
    gas57M2_10065     (49) AQQQAPPLTNTELSSAESQPQDTSQVTPETNREKEQPQGLVSEPTTTELA
   gas57M77_10251     (49) AQQQAQPLTNTELSSAESQSPHTSQVTPETNREKEQSQDLVSKPTTTELA
   gas57M77_10527     (49) AQQQAQPLTNTELSSAESQSPHTSQVTPETNREKEQSQDLVSKPTTTELA
   gas57M77_20696     (49) AQQQAQPLTNTELSSAESQSPHTSQVTPETNREKEQSQDLVSKPTTTELA
   gas57M89_21915     (49) AQQQAQPLTNTELSSAESQSPDTSQVTPETNREKEQSQDLVSKPTTTELA
   gas57M89_23717     (49) AQQQAQPLTNTELSSAESQSPDTSQVTPETNREKEQSQDLVSKPTTTELA
   gas57M94_10134     (49) AQQQAQPLTNTELSSAESQSPDTSQITPKTNREKEQSQDLVSKPTTTELA
   gas57M28_10164     (49) AQQQAQHLTNTELSSAESQSPDTSQITPKINREKEQPQGLVSEPTTTELA
   gas57M28_10218     (49) AQQQAQHLTNTELSSAESQSPDTSQITPKINREKEQPQGLVSEPTTTELA
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   gas57M28_10299     (49) AQQQAQHLTNTELSSAESQSPDTSQITPKINREKEQPQGLVSEPTTTELA
   gas57M28_30176     (49) AQQQAQHLTNTELSSAESQSPDTSQITPKINREKEQPQGLVSEPTTTELA
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  gas57M6,9_21802     (50) AQQQAQHLTNTELSSAESKPQDTSQITPKTNREKEQSQDLVSEPTTTELA
   gas57M75_10012     (51) AQQQAQHLTNTELSSAESKPQDTSQITPKTNREKEQSQDLVSEPTTTELA
   gas57M75_20671     (51) AQQQAQHLTNTELSSAESKPQDTSQITPKTNREKEQSQDLVSEPTTTELA
   gas57M75_30603     (51) AQQQAQHLTNTELSSAESKPQDTSQITPKTNREKEQSQDLVFEPTTTELA
   gas57M75_30207     (51) AQQQAQHLTNTELSSAESKPQDTSQITPKTNREKEQSQDLVSEPTTTELA
   gas57M22_20641     (50) TQQQAQHLTNTELSSAESKPQDTSQITLKTNREKEQPQGLVSEPTTTELA
   gas57M22_23465     (50) TQQQAQHLTNTELSSAESKPQDTSQITLKTNREKEQPQGLVSEPTTTELA
  gas57M3,1_30610     (50) TQQQAQHLTNTELSSAESKPQDTSQITLKTNREKEQPQGLVSEPTTTELA
  gas57M3,1_40603     (50) TQQQAQHLTNTELSSAESKPQDTSQITLKTNREKEQPQGLVSEPTTTELA
 gas57M3,28_24214     (50) TQQQAQHLTNTELSSAESKPQDTSQITLKTNREKEQPQGLVSEPTTTELA
 gas57M3,34_10307     (50) TQQQAQHLTNTELSSAESKPQDTSQITLKTNREKEQPQGLVSEPTTTELA
    gas57M4_40427     (50) TQQQAQHLTNTELSSAESKPQDTSQITLKTNREKEQPQGLVSEPTTTELA
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   gas57M12_10296     (49) TQQQAQHLTNTELSSAESKPQDTSQITLKTNREKEQPQGLVSEPTTTELA
   gas57M12_10035     (49) TQQQAQHLTNTELSSAESKPQDTSQITLKTNREKEQPQGLVSEPTTTELA
   gas57M12_20069     (49) TQQQAQHLTNTELSSAESKPQDTSQITLKTNREKEQPQGLVSEPTTTELA
   gas57M12_22432     (49) TQQQAQHLTNTELSSAESKPQDTSQITLKTNREKEQPQGLVSEPTTTELA
    gas57M4_40499     (49) TQQQAQHLTNTELSSAESKPQDTSQITLKTNREKEQPQGLVSEPTTTELA
  gas57M6,1_21259     (49) TQQQAQHLTNTELSSAESKPQDTSQITLKTNREKEQPQGLVSEPTTTELA
```

FIG. 10C

```
                          101                                                 150
    gas57M1_SF370    (99) DTDAASMANTGSDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
    gas57M1_31075    (99) DTDAASMANTGSDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
    gas57M1_31237    (99) DTDAASMANTGSDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
     gas57M1_3348    (99) DTDAASMANTGSDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
    gas57M2_34585    (99) DTDAASMANTGSDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
  gas57M3,1_21398    (99) DTDAAPMADTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
gas57M44-61_20839    (99) DTDAASMANTGSDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
 gas57M6,31_20022    (98) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M11_20648    (99) DTDAASMADTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
    gas57M23_2071    (98) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
 gas57M18,3_40128   (101) DTDAASMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
    gas57M4_10092   (101) DTDAASMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
    gas57M4_30968   (101) DTDAASMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
 gas57M6,31_22692   (101) DTDAASMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
 gas57M68,5_22814   (100) DTDAASMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M68_23623   (101) DTDAASMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
    gas57M2_10064    (99) DTDAAPMANTGSDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
    gas57M2_10065    (99) DTDAAPMANTGSDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M77_10251    (99) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M77_10527    (99) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M77_20696    (99) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M89_21915    (99) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M89_23717    (99) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M94_10134    (99) DTDSAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M28_10164    (99) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M28_10218    (99) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M28_10266    (99) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M28_10299    (99) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M28_30176    (99) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M28_30574    (99) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
  gas57M6,9_21802   (100) DTDAASMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M75_10012   (101) DTDAASMANTGPDATQKSASLPPVNTDVHDWVKTKGAWGKGYKGQGKVVA
   gas57M75_20671   (101) DTDAASMANTGPDATQKSASLPPVNTDVHDWVKTKGAWGKGYKGQGKVVA
   gas57M75_30603   (101) DTDAASMANTGPDATQKSASLPPVNTDVHDWVKTKGAWGKGYKGQGKVVA
   gas57M75_30207   (101) DTDAASMANTGPDATQKSASLPPVNTDVHDWVKTKGAWGKGYKGQGKVVA
   gas57M22_20641   (100) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M22_23465   (100) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
  gas57M3,1_30610   (100) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
  gas57M3,1_40603   (100) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
 gas57M3,28_24214   (100) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
 gas57M3,34_10307   (100) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
    gas57M4_40427   (100) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
     gas57M3_2721   (100) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M12_10296    (99) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M12_10035    (99) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M12_20069    (99) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
   gas57M12_22432    (99) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
    gas57M4_40499    (99) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
  gas57M6,1_21259    (99) DTDAAPMANTGPDATQKSASLPPVNTDVHDWVKTKGAWDKGYKGQGKVVA
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FIG. 10D

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                                151                                 200
    gas57M1_SF370   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
    gas57M1_31075   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
    gas57M1_31237   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
     gas57M1_3348   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
    gas57M2_34585   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
  gas57M3,1_21398   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
gas57M44-61_20839   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
 gas57M6,31_20022   (148) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M11_20648   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
    gas57M23_2071   (148) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
 gas57M18,3_40128   (151) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
    gas57M4_10092   (151) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
    gas57M4_30968   (151) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
 gas57M6,31_22692   (151) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
 gas57M68,5_22814   (150) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M68_23623   (151) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
    gas57M2_10064   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
    gas57M2_10065   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M77_10251   (149) VIDTGIDPAHQSMHISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M77_10527   (149) VIDTGIDPAHQSMHISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M77_20696   (149) VIDTGIDPAHQSMHISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M89_21915   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M89_23717   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M94_10134   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M28_10164   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M28_10218   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M28_10266   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M28_10299   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M28_30176   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M28_30574   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
  gas57M6,9_21802   (150) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M75_10012   (151) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M75_20671   (151) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M75_30603   (151) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M75_30207   (151) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M22_20641   (150) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M22_23465   (150) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
  gas57M3,1_30610   (150) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
  gas57M3,1_40603   (150) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
 gas57M3,28_24214   (150) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
 gas57M3,34_10307   (150) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
    gas57M4_40427   (150) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
     gas57M3_2721   (150) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M12_10296   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M12_10035   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M12_20069   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
   gas57M12_22432   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
    gas57M4_40499   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
  gas57M6,1_21259   (149) VIDTGIDPAHQSMRISDVSTAKVKSKEDMLARQKAAGINYGSWINDKVVF
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FIG. 10E

```
                          201                                                 250
    gas57M1_SF370   (199) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
    gas57M1_31075   (199) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
    gas57M1_31237   (199) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
     gas57M1_3348   (199) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
    gas57M2_34585   (199) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
  gas57M3,1_21398   (199) AHNYVENSDNIKENQFEDFDEDWENFEFDADAEPKAIKKHKIYRPQSTQA
gas57M44-61_20839   (199) AHNYVENSDNIKENQFEDFDEDWENFEFDADAEPKAIKKHKIYRPQSTQA
 gas57M6,31_20022   (198) AHNYVENSDNIKENQFEDFDEDWENFEFDADAEPKAIKKHKIYRPQSTQA
   gas57M11_20648   (199) AHNYVENSDNIKENQFGDFDEDWENFEFD--AEPKAIKKNKIYRPQSTQA
    gas57M23_2071   (198) AHNYVENSDNIKENQFGDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
 gas57M18,3_40128   (201) AHNYVENSDNIKENQFGDFDEDWENFEFD--AEPKAIKKNKIYRPQSTQA
    gas57M4_10092   (201) AHNYVENSDNIKENQFGDFDEDWENFEFD--AEPKAIKKNKIYRPQSTQA
    gas57M4_30968   (201) AHNYVENSDNIKENQFGDFDEDWENFEFD--AEPKAIKKNKIYRPQSTQA
 gas57M6,31_22692   (201) AHNYVENSDNIKENQFGDFDEDWENFEFD--AEPKAIKKNKIYRPQSTQA
 gas57M68,5_22814   (200) AHNYVENSDNIKENQFEDFDEDWENFEFD--AEPKAIKKNKIYRPQSTQA
   gas57M68_23623   (201) AHNYVENSDNIKENQFEDFDEDWENFEFD--AEPKAIKKNKIYRPQSTQA
    gas57M2_10064   (199) AHNYVENSDNIKENQFGDFDEDWENFEFD--AEPKAIKKNKIYRPQSTQA
    gas57M2_10065   (199) AHNYVENSDNIKENQFGDFDEDWENFEFD--AEPKAIKKNKIYRPQSTQA
   gas57M77_10251   (199) AHNYVENSDNIKENQFGDFDEDWENFEFD--AEPKAIKKHKIYRPQSTQA
   gas57M77_10527   (199) AHNYVENSDNIKENQFGDFDEDWENFEFD--AEPKAIKKHKIYRPQSTQA
   gas57M77_20696   (199) AHNYVENSDNIKENQFGDFDEDWENFEFD--AEPKAIKKHKIYRPQSTQA
   gas57M89_21915   (199) AHNYVENSDNIKENQFGDFDEDWENFEFDADAEPKAIKKHKIYRPQSTQA
   gas57M89_23717   (199) AHNYVENSDNIKENQFGDFDEDWENFEFDADAEPKAIKKHKIYRPQSTQA
   gas57M94_10134   (199) AHNYVENSDNIKENQFGDFDEDWENFEFD--AEPKAIKKHKIYRPQSTQA
   gas57M28_10164   (199) AHNYVENSDNIKENQFEDFDEDWENFEFD--AEPKAIKKHKIYRPQSTQA
   gas57M28_10218   (199) AHNYVENSDNIKENQFEDFDEDWENFEFD--AEPKAIKKHKIYRPQSTQA
   gas57M28_10266   (199) AHNYVENSDNIKENQFEDFDEDWENFEFD--AEPKAIKKHKIYRPQSTQA
   gas57M28_10299   (199) AHNYVENSDNIKENQFEDFDEDWENFEFD--AEPKAIKKHKIYRPQSTQA
   gas57M28_30176   (199) AHNYVENSDNIKENQFEDFDEDWENFEFD--AEPKAIKKHKIYRPQSTQA
   gas57M28_30574   (199) AHNYVENSDNIKENQFEDFDEDWENFEFD--AEPKAIKKHKIYRPQSTQA
  gas57M6,9_21802   (200) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
   gas57M75_10012   (201) AHNYVENSDNIKENQFEDFDEDWENFEFDADAEPKAIKKHKIYRPQSTQA
   gas57M75_20671   (201) AHNYVENSDNIKENQFEDFDEDWENFEFDADAEPKAIKKHKIYRPQSTQA
   gas57M75_30603   (201) AHNYVENSDNIKENQFEDFDEDWENFEFDADAEPKAIKKHKIYRPQSTQA
   gas57M75_30207   (201) AHNYVENSDNIKENQFEDFDEDWENFEFDADAEPKAIKKHKIYRPQSTQA
   gas57M22_20641   (200) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
   gas57M22_23465   (200) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
  gas57M3,1_30610   (200) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
  gas57M3,1_40603   (200) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
 gas57M3,28_24214   (200) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
 gas57M3,34_10307   (200) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
    gas57M4_40427   (200) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
     gas57M3_2721   (200) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
   gas57M12_10296   (199) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
   gas57M12_10035   (199) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
   gas57M12_20069   (199) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
   gas57M12_22432   (199) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
    gas57M4_40499   (199) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
  gas57M6,1_21259   (199) AHNYVENSDNIKENQFEDFDEDWENFEFDAEAEPKAIKKHKIYRPQSTQA
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FIG. 10F

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                                  251                                                 300
gas57M1_SF370          (249) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
gas57M1_31075          (249) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
gas57M1_31237          (249) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M1_3348          (249) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
gas57M2_34585          (249) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
gas57M3,1_21398        (249) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
gas57M44-61_20839      (249) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
gas57M6,31_20022       (248) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M11_20648        (247) PKETVIKTEETDGSHDIDWTQTDDETKYESHGMHVTGIVAGNSKEAAATG
  gas57M23_2071        (248) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
gas57M18,3_40128       (249) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M4_10092         (249) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M4_30968         (249) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
gas57M6,31_22692       (249) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
gas57M68,5_22814       (248) PKETVIKTEETDGSHDIDWTQTDDETKYESHGMHVTGIVAGNSKEAAATG
 gas57M68_23623        (249) PKETVIKTEETDGSHDIDWTQTDDETKYESHGMHVTGIVAGNSKEAAATG
 gas57M2_10064         (247) PKETVIKTEETDGSHDIDWTQTDDETKYESHGMHVTGIVAGNSKEAAATG
 gas57M2_10065         (247) PKETVIKTEETDGSHDIDWTQTDDETKYESHGMHVTGIVAGNSKEAAATG
 gas57M77_10251        (247) PKETVIKTEETDGSHDIDWTQTDDETKYESHGMHVTGIVAGNSKEAAATG
 gas57M77_10527        (247) PKETVIKTEETDGSHDIDWTQTDDETKYESHGMHVTGIVAGNSKEAAATG
 gas57M77_20696        (247) PKETVIKTEETDGSHDIDWTQTDDETKYESHGMHVTGIVAGNSKEAAATG
 gas57M89_21915        (249) PKETVIKTEETDGSHDIDWTQTDDETKYESHGMHVTGIVAGNSKEAAATG
 gas57M89_23717        (249) PKETVIKTEETDGSHDIDWTQTDDETKYESHGMHVTGIVAGNSKEAAATG
 gas57M94_10134        (247) PKETVIKTEETDGSHDIDWTQTDDETKYESHGMHVTGIVAGNSKEAAATG
 gas57M28_10164        (247) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M28_10218        (247) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M28_10266        (247) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M28_10299        (247) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M28_30176        (247) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M28_30574        (247) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M6,9_21802       (250) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M75_10012        (251) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M75_20671        (251) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M75_30603        (251) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M75_30207        (251) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M22_20641        (250) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M22_23465        (250) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M3,1_30610       (250) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M3,1_40603       (250) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
gas57M3,28_24214       (250) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
gas57M3,34_10307       (250) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M4_40427         (250) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
  gas57M3_2721         (250) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M12_10296        (249) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M12_10035        (249) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M12_20069        (249) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M12_22432        (249) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
 gas57M4_40499         (249) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
gas57M6,1_21259        (249) PKETVIKTEETDGSHDIDWTQTDDDTKYESHGMHVTGIVAGNSKEAAATG
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FIG. 10G

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                          301                                                 350
    gas57M1_SF370   (299) ERFLGIAPEAQVMFMRVFANDIMGSAESLFIKAIEDAVALGADVINLSLG
    gas57M1_31075   (299) ERFLGIAPEAQVMFMRVFANDIMGSAESLFIKAIEDAVALGADVINLSLG
    gas57M1_31237   (299) ERFLGIAPEAQVMFMRVFANDIMGSAESLFIKAIEDAVALGADVINLSLG
     gas57M1_3348   (299) ERFLGIAPEAQVMFMRVFANDIMGSAESLFIKAIEDAVALGADVINLSLG
    gas57M2_34585   (299) ERFLGIAPEAQVMFMRVFANDIMGSAESLFIKAIEDAVALGADVINLSLG
  gas57M3,1_21398   (299) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
gas57M44-61_20839   (299) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
 gas57M6,31_20022   (298) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M11_20648   (297) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
    gas57M23_2071   (298) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
 gas57M18,3_40128   (299) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
    gas57M4_10092   (299) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
    gas57M4_30968   (299) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
 gas57M6,31_22692   (299) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
 gas57M68,5_22814   (298) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M68_23623   (299) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
    gas57M2_10064   (297) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
    gas57M2_10065   (297) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M77_10251   (297) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M77_10527   (297) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M77_20696   (297) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M89_21915   (299) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M89_23717   (299) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M94_10134   (297) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M28_10164   (297) ERFLGIAPETQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M28_10218   (297) ERFLGIAPETQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M28_10266   (297) ERFLGIAPETQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M28_10299   (297) ERFLGIAPETQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M28_30176   (297) ERFLGIAPETQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M28_30574   (297) ERFLGIAPETQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
  gas57M6,9_21802   (300) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M75_10012   (301) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M75_20671   (301) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M75_30603   (301) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M75_30207   (301) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M22_20641   (300) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M22_23465   (300) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
  gas57M3,1_30610   (300) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
  gas57M3,1_40603   (300) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
 gas57M3,28_24214   (300) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
 gas57M3,34_10307   (300) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
    gas57M4_40427   (300) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
     gas57M3_2721   (300) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M12_10296   (299) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M12_10035   (299) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M12_20069   (299) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
   gas57M12_22432   (299) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
    gas57M4_40499   (299) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
  gas57M6,1_21259   (299) ERFLGIAPEAQVMFMRVFANDVMGSAESLFIKAIEDAVALGADVINLSLG
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FIG. 10H

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                          351                                                 400
    gas57M1_SF370   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
    gas57M1_31075   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
    gas57M1_31237   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
     gas57M1_3348   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
    gas57M2_34585   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
  gas57M3,1_21398   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
gas57M44-61_20839   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
 gas57M6,31_20022   (348) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M11_20648   (347) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
    gas57M23_2071   (348) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
 gas57M18,3_40128   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
    gas57M4_10092   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
    gas57M4_30968   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
 gas57M6,31_22692   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
 gas57M68,5_22814   (348) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M68_23623   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
    gas57M2_10064   (347) TANGAQLSGSKPLIEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
    gas57M2_10065   (347) TANGAQLSGSKPLIEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M77_10251   (347) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M77_10527   (347) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M77_20696   (347) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGFDHDDPLATNPD
   gas57M89_21915   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M89_23717   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M94_10134   (347) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M28_10164   (347) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M28_10218   (347) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M28_10266   (347) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M28_10299   (347) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M28_30176   (347) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M28_30574   (347) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
  gas57M6,9_21802   (350) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M75_10012   (351) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M75_20671   (351) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M75_30603   (351) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M75_30207   (351) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M22_20641   (350) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M22_23465   (350) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
  gas57M3,1_30610   (350) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
  gas57M3,1_40603   (350) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
 gas57M3,28_24214   (350) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
 gas57M3,34_10307   (350) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
    gas57M4_40427   (350) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
     gas57M3_2721   (350) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M12_10296   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M12_10035   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M12_20069   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
   gas57M12_22432   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
    gas57M4_40499   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
  gas57M6,1_21259   (349) TANGAQLSGSKPLMEAIEKAKKAGVSVVVAAGNERVYGSDHDDPLATNPD
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FIG. 10I

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                          401                                                 450
    gas57M1_SF370    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
    gas57M1_31075    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
    gas57M1_31237    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
     gas57M1_3348    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
    gas57M2_34585    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
  gas57M3,1_21398    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
gas57M44-61_20839    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
 gas57M6,31_20022    (398) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M11_20648    (397) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
    gas57M23_2071    (398) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
 gas57M18,3_40128    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTAKELENRADLNHGKAIYSES
    gas57M4_10092    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTAKELENRADLNHGKAIYSES
    gas57M4_30968    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTAKELENRADLNHGKAIYSES
 gas57M6,31_22692    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTAKELENRADLNHGKAIYSES
 gas57M68,5_22814    (398) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M68_23623    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
    gas57M2_10064    (397) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
    gas57M2_10065    (397) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M77_10251    (397) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M77_10527    (397) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M77_20696    (397) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M89_21915    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M89_23717    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M94_10134    (397) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELESRADLNHGKAIYSES
   gas57M28_10164    (397) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M28_10218    (397) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M28_10266    (397) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M28_10299    (397) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M28_30176    (397) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M28_30574    (397) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
  gas57M6,9_21802    (400) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M75_10012    (401) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M75_20671    (401) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M75_30603    (401) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M75_30207    (401) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M22_20641    (400) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M22_23465    (400) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
  gas57M3,1_30610    (400) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
  gas57M3,1_40603    (400) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
 gas57M3,28_24214    (400) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
 gas57M3,34_10307    (400) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
    gas57M4_40427    (400) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
     gas57M3_2721    (400) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M12_10296    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M12_10035    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M12_20069    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
   gas57M12_22432    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
    gas57M4_40499    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
  gas57M6,1_21259    (399) YGLVGSPSTGRTPTSVAAINSKWVIQRLMTVKELENRADLNHGKAIYSES
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FIG. 10J

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                          451                                                 500
    gas57M1_SF370    (449) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
    gas57M1_31075    (449) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
    gas57M1_31237    (449) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
     gas57M1_3348    (449) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
    gas57M2_34585    (449) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
  gas57M3,1_21398    (449) VDFKNIKDSLGYDKSHQFAYVKESTDAGYKAQDVKGKIALIERDPNKTYD
gas57M44-61_20839    (449) VDFKDIKDSLGYDKSHQFAYVKESTDAGYKAQDVKDKIALIERDPNKTYD
 gas57M6,31_20022    (448) VDFKNIKDSLGYDKSHQFAYVKESTDAGYKAQDVKDKIALIERDPNKTYD
   gas57M11_20648    (447) VDFKNIKDSLGYDKSHQFAYVKESTDAGYKAQDVKDKIALIERDPNKTYD
    gas57M23_2071    (448) VDFKNIKDSLGYDKSHQFAYVKESTDAGYKAQDVKGKIALIERDPNKTYD
 gas57M18,3_40128    (449) VDFKNIKDSLGYDKSHQFAYVKESTDAGYKAQDVKDKIALIERDPNKTYD
    gas57M4_10092    (449) VDFKNIKDSLGYDKSHQFAYVKESTDAGYKAQDVKDKIALIERDPNKTYD
    gas57M4_30968    (449) VDFKNIKDSLGYDKSHQFAYVKESTDAGYKAQDVKDKIALIERDPNKTYD
 gas57M6,31_22692    (449) VDFKNIKDSLGYDKSHQFAYVKESTDAGYKAQDVKDKIALIERDPNKTYD
 gas57M68,5_22814    (448) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
   gas57M68_23623    (449) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
    gas57M2_10064    (447) VDFKDIKDSLGYDKSHQFAYVKESTDAGYKAQDVKGKIALIERDPNKTYD
    gas57M2_10065    (447) VDFKDIKDSLGYDKSHQFAYVKESTDAGYKAQDVKGKIALIERDPNKTYD
   gas57M77_10251    (447) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
   gas57M77_10527    (447) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
   gas57M77_20696    (447) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
   gas57M89_21915    (449) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
   gas57M89_23717    (449) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
   gas57M94_10134    (447) VDFKDIKDSLGYDKSHQFAYVKESTDAGYKAQDVKGKIALIERDPNKTYD
   gas57M28_10164    (447) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
   gas57M28_10218    (447) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
   gas57M28_10266    (447) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
   gas57M28_10299    (447) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
   gas57M28_30176    (447) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
   gas57M28_30574    (447) VDFKDIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
  gas57M6,9_21802    (450) VDFKNIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
   gas57M75_10012    (451) VDFKNIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
   gas57M75_20671    (451) VDFKNIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
   gas57M75_30603    (451) VDFKNIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
   gas57M75_30207    (451) VDFKNIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
   gas57M22_20641    (450) VDFKNIKDSLGYDKTHQFAYVKESTDAGYKAQDVKGKIALIERDPNKTYD
   gas57M22_23465    (450) VDFKNIKDSLGYDKTHQFAYVKESTDAGYKAQDVKGKIALIERDPNKTYD
  gas57M3,1_30610    (450) VDFKNIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
  gas57M3,1_40603    (450) VDFKNIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
 gas57M3,28_24214    (450) VDFKNIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
 gas57M3,34_10307    (450) VDFKNIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
    gas57M4_40427    (450) VDFKNIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
     gas57M3_2721    (450) VDFKNIKDSLGYDKSHQFAYVKESTDAGYNAQDVKGKIALIERDPNKTYD
   gas57M12_10296    (449) VDFKNIKDSLGYDKSHQFAYVKESTDAGYNAQNVKGKIALIERDPNKTYD
   gas57M12_10035    (449) VDFKNIKDSLGYDKSHQFAYVKESTDAGYNAQNVKGKIALIERDPNKTYD
   gas57M12_20069    (449) VDFKNIKDSLGYDKSHQFAYVKESTDAGYNAQNVKGKIALIERDPNKTYD
   gas57M12_22432    (449) VDFKNIKDSLGYDKSHQFAYVKESTDAGYNAQNVKGKIALIERDPNKTYD
    gas57M4_40499    (449) VDFKNIKDSLGYDKSHQFAYVKESTDAGYNAQNVKGKIALIERDPNKTYD
  gas57M6,1_21259    (449) VDFKNIKDSLGYDKSHQFAYVKESTDAGYNAQNVKGKIALIERDPNKTYD
```

FIG. 10K

| | | 501 550 |
|---|---|---|
| gas57M1_SF370 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M1_31075 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M1_31237 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M1_3348 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M2_34585 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M3,1_21398 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M44-61_20839 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M6,31_20022 | (498) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M11_20648 | (497) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M23_2071 | (498) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M18,3_40128 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M4_10092 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M4_30968 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M6,31_22692 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M68,5_22814 | (498) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTSNGMGIPSAFISHEFGKAM |
| gas57M68_23623 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTSNGMGIPSAFISHEFGKAM |
| gas57M2_10064 | (497) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISYEFGKAM |
| gas57M2_10065 | (497) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISYEFGKAM |
| gas57M77_10251 | (497) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M77_10527 | (497) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M77_20696 | (497) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M89_21915 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M89_23717 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M94_10134 | (497) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M28_10164 | (497) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M28_10218 | (497) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M28_10266 | (497) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M28_10299 | (497) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M28_30176 | (497) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M28_30574 | (497) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M6,9_21802 | (500) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTSNGMGIPSAFISHEFGKAM |
| gas57M75_10012 | (501) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M75_20671 | (501) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M75_30603 | (501) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M75_30207 | (501) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M22_20641 | (500) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M22_23465 | (500) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M3,1_30610 | (500) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKVM |
| gas57M3,1_40603 | (500) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKVM |
| gas57M3,28_24214 | (500) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKVM |
| gas57M3,34_10307 | (500) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKVM |
| gas57M4_40427 | (500) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKVM |
| gas57M3_2721 | (500) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M12_10296 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M12_10035 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M12_20069 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M12_22432 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M4_40499 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |
| gas57M6,1_21259 | (499) | EMIALAKKHGALGVLIFNNKPGQSNRSMRLTANGMGIPSAFISHEFGKAM |

FIG. 10L

```
                          551                                                 600
    gas57M1_SF370   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
    gas57M1_31075   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
    gas57M1_31237   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
     gas57M1_3348   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
    gas57M2_34585   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
  gas57M3,1_21398   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
gas57M44-61_20839   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
 gas57M6,31_20022   (548) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M11_20648   (547) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
    gas57M23_2071   (548) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
 gas57M18,3_40128   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
    gas57M4_10092   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
    gas57M4_30968   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
 gas57M6,31_22692   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
 gas57M68,5_22814   (548) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M68_23623   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
    gas57M2_10064   (547) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
    gas57M2_10065   (547) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M77_10251   (547) SQLNGNGTGSLVFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M77_10527   (547) SQLNGNGTGSLVFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M77_20696   (547) SQLNGNGTGSLVFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M89_21915   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M89_23717   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M94_10134   (547) SQLNTNGTGSLVFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M28_10164   (547) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M28_10218   (547) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M28_10266   (547) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M28_10299   (547) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M28_30176   (547) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M28_30574   (547) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
  gas57M6,9_21802   (550) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M75_10012   (551) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M75_20671   (551) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M75_30603   (551) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M75_30207   (551) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M22_20641   (550) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M22_23465   (550) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
  gas57M3,1_30610   (550) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
  gas57M3,1_40603   (550) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
 gas57M3,28_24214   (550) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
 gas57M3,34_10307   (550) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
    gas57M4_40427   (550) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
     gas57M3_2721   (550) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M12_10296   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M12_10035   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M12_20069   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
   gas57M12_22432   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
    gas57M4_40499   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
  gas57M6,1_21259   (549) SQLNGNGTGSLEFDSVVSKAPSQKGNEMNHFSNWGLTSDGYLKPDITAPG
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FIG. 10M

```
                                601                                650
    gas57M1_SF370   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
    gas57M1_31075   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
    gas57M1_31237   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
     gas57M1_3348   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
    gas57M2_34585   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
  gas57M3,1_21398   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
gas57M44-61_20839   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
 gas57M6,31_20022   (598) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M11_20648   (597) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
    gas57M23_2071   (598) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
 gas57M18,3_40128   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
    gas57M4_10092   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
    gas57M4_30968   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
 gas57M6,31_22692   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
 gas57M68,5_22814   (598) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M68_23623   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
    gas57M2_10064   (597) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
    gas57M2_10065   (597) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M77_10251   (597) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M77_10527   (597) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M77_20696   (597) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M89_21915   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M89_23717   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M94_10134   (597) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M28_10164   (597) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M28_10218   (597) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M28_10266   (597) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M28_10299   (597) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M28_30176   (597) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M28_30574   (597) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
  gas57M6,9_21802   (600) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M75_10012   (601) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M75_20671   (601) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M75_30603   (601) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M75_30207   (601) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M22_20641   (600) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M22_23465   (600) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
  gas57M3,1_30610   (600) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
  gas57M3,1_40603   (600) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
 gas57M3,28_24214   (600) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
 gas57M3,34_10307   (600) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
    gas57M4_40427   (600) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
     gas57M3_2721   (600) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M12_10296   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M12_10035   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M12_20069   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
   gas57M12_22432   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
    gas57M4_40499   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
  gas57M6,1_21259   (599) GDIYSTYNDNHYGSQTGTSMASPQIAGASLLVKQYLEKTQPNLPKEKIAD
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FIG. 10N

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                          651                                                700
    gas57M1_SF370    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
    gas57M1_31075    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
    gas57M1_31237    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
     gas57M1_3348    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
    gas57M2_34585    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
  gas57M3,1_21398    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
gas57M44-61_20839    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
 gas57M6,31_20022    (648) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M11_20648    (647) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
    gas57M23_2071    (648) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
 gas57M18,3_40128    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
    gas57M4_10092    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
    gas57M4_30968    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
 gas57M6,31_22692    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
 gas57M68,5_22814    (648) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M68_23623    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
    gas57M2_10064    (647) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
    gas57M2_10065    (647) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M77_10251    (647) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M77_10527    (647) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M77_20696    (647) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M89_21915    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M89_23717    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M94_10134    (647) IVKNLLMSNAQIHVNPETKMTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M28_10164    (647) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M28_10218    (647) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M28_10266    (647) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M28_10299    (647) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M28_30176    (647) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M28_30574    (647) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
  gas57M6,9_21802    (650) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M75_10012    (651) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M75_20671    (651) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M75_30603    (651) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M75_30207    (651) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M22_20641    (650) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M22_23465    (650) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
  gas57M3,1_30610    (650) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
  gas57M3,1_40603    (650) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
 gas57M3,28_24214    (650) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
 gas57M3,34_10307    (650) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
    gas57M4_40427    (650) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
     gas57M3_2721    (650) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M12_10296    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M12_10035    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M12_20069    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
   gas57M12_22432    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
    gas57M4_40499    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
  gas57M6,1_21259    (649) IVKNLLMSNAQIHVNPETKTTTSPRQQGAGLLNIDGAVTSGLYVTGKDNY
```

FIG. 10O

| | | 701 | 750 |
|---|---|---|---|
| gas57M1_SF370 | (699) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M1_31075 | (699) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M1_31237 | (699) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M1_3348 | (699) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M2_34585 | (699) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M3,1_21398 | (699) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M44-61_20839 | (699) | GSISLGNVTDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M6,31_20022 | (698) | GSISLGNVTDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M11_20648 | (697) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M23_2071 | (698) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M18,3_40128 | (699) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M4_10092 | (699) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M4_30968 | (699) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M6,31_22692 | (699) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M68,5_22814 | (698) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M68_23623 | (699) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M2_10064 | (697) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M2_10065 | (697) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M77_10251 | (697) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M77_10527 | (697) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M77_20696 | (697) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M89_21915 | (699) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M89_23717 | (699) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M94_10134 | (697) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGHFTLTS | |
| gas57M28_10164 | (697) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M28_10218 | (697) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M28_10266 | (697) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M28_10299 | (697) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M28_30176 | (697) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M28_30574 | (697) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M6,9_21802 | (700) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M75_10012 | (701) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M75_20671 | (701) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M75_30603 | (701) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M75_30207 | (701) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M22_20641 | (700) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M22_23465 | (700) | GSISLGNITDTMTFDVTVHNLSNKDKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M3,1_30610 | (700) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M3,1_40603 | (700) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M3,28_24214 | (700) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M3,34_10307 | (700) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M4_40427 | (700) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M3_2721 | (700) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M12_10296 | (699) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M12_10035 | (699) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M12_20069 | (699) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M12_22432 | (699) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M4_40499 | (699) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |
| gas57M6,1_21259 | (699) | GSISLGNITDTMTFDVTVHNLSNKAKTLRYDTELLTDHVDPQKGRFTLTS | |

FIG. 10P

```
                          751                                                800
    gas57M1_SF370    (749) HSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
    gas57M1_31075    (749) HSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
    gas57M1_31237    (749) HSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
     gas57M1_3348    (749) HSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
    gas57M2_34585    (749) HSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
  gas57M3,1_21398    (749) RSLKTYQGGEVTVPANGKVTVKVTMDVSQFTKELTKQMPNGYYLEGFVRF
gas57M44-61_20839    (749) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
 gas57M6,31_20022    (748) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M11_20648    (747) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
    gas57M23_2071    (748) RSLKTYQGGEVTVPANGKVTVKVTMDVSQFTKELTKQMPNGYYLEGFVRF
 gas57M18,3_40128    (749) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
    gas57M4_10092    (749) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
    gas57M4_30968    (749) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
 gas57M6,31_22692    (749) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
 gas57M68,5_22814    (748) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M68_23623    (749) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
    gas57M2_10064    (747) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
    gas57M2_10065    (747) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M77_10251    (747) RSLKTYQGGEVTVPANGKVTVKVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M77_10527    (747) RSLKTYQGGEVTVPANGKVTVKVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M77_20696    (747) RSLKTYQGGEVTVPANGKVTVKVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M89_21915    (749) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M89_23717    (749) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M94_10134    (747) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M28_10164    (747) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M28_10218    (747) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M28_10266    (747) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M28_10299    (747) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M28_30176    (747) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M28_30574    (747) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
  gas57M6,9_21802    (750) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M75_10012    (751) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M75_20671    (751) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M75_30603    (751) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M75_30207    (751) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M22_20641    (750) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M22_23465    (750) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
  gas57M3,1_30610    (750) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
  gas57M3,1_40603    (750) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
 gas57M3,28_24214    (750) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
 gas57M3,34_10307    (750) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
    gas57M4_40427    (750) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
     gas57M3_2721    (750) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M12_10296    (749) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M12_10035    (749) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M12_20069    (749) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
   gas57M12_22432    (749) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
    gas57M4_40499    (749) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
  gas57M6,1_21259    (749) RSLKTYQGGEVTVPANGKVTVRVTMDVSQFTKELTKQMPNGYYLEGFVRF
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FIG. 10Q

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                          801                                                 850
    gas57M1_SF370   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
    gas57M1_31075   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
    gas57M1_31237   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
     gas57M1_3348   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
    gas57M2_34585   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
  gas57M3,1_21398   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
gas57M44-61_20839   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
 gas57M6,31_20022   (798) RDSQDAQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M11_20648   (797) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
    gas57M23_2071   (798) RDSQDAQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
 gas57M18,3_40128   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
    gas57M4_10092   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
    gas57M4_30968   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
 gas57M6,31_22692   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
 gas57M68,5_22814   (798) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M68_23623   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
    gas57M2_10064   (797) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
    gas57M2_10065   (797) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M77_10251   (797) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M77_10527   (797) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M77_20696   (797) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M89_21915   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M89_23717   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M94_10134   (797) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M28_10164   (797) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M28_10218   (797) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M28_10266   (797) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M28_10299   (797) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M28_30176   (797) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M28_30574   (797) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
  gas57M6,9_21802   (800) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M75_10012   (801) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M75_20671   (801) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M75_30603   (801) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M75_30207   (801) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M22_20641   (800) RDSQDAQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M22_23465   (800) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
  gas57M3,1_30610   (800) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
  gas57M3,1_40603   (800) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
 gas57M3,28_24214   (800) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
 gas57M3,34_10307   (800) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
    gas57M4_40427   (800) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
     gas57M3_2721   (800) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M12_10296   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M12_10035   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M12_20069   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
   gas57M12_22432   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
    gas57M4_40499   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
  gas57M6,1_21259   (799) RDSQDDQLNRVNIPFVGFKGQFENLAVAEESIYRLKSQGKTGFYFDESGP
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FIG. 10R

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                          851                                                 900
    gas57M1_SF370    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
    gas57M1_31075    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
    gas57M1_31237    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
     gas57M1_3348    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
    gas57M2_34585    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
  gas57M3,1_21398    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
gas57M44-61_20839    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
 gas57M6,31_20022    (848) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M11_20648    (847) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
    gas57M23_2071    (848) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
 gas57M18,3_40128    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
    gas57M4_10092    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
    gas57M4_30968    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
 gas57M6,31_22692    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
 gas57M68,5_22814    (848) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M68_23623    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
    gas57M2_10064    (847) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
    gas57M2_10065    (847) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M77_10251    (847) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M77_10527    (847) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M77_20696    (847) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M89_21915    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M89_23717    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M94_10134    (847) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M28_10164    (847) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M28_10218    (847) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M28_10266    (847) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M28_10299    (847) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M28_30176    (847) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M28_30574    (847) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
  gas57M6,9_21802    (850) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M75_10012    (851) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M75_20671    (851) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M75_30603    (851) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M75_30207    (851) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M22_20641    (850) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M22_23465    (850) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
  gas57M3,1_30610    (850) KDDIYVGKHFTGLVTLGSETNVSTKMISDNGLHTLGTFKNADGKFILEKN
  gas57M3,1_40603    (850) KDDIYVGKHFTGLVTLGSETNVSTKMISDNGLHTLGTFKNADGKFILEKN
 gas57M3,28_24214    (850) KDDIYVGKHFTGLVTLGSETNVSTKMISDNGLHTLGTFKNADGKFILEKN
 gas57M3,34_10307    (850) KDDIYVGKHFTGLVTLGSETNVSTKMISDNGLHTLGTFKNADGKFILEKN
    gas57M4_40427    (850) KDDIYVGKHFTGLVTLGSETNVSTKMISDNGLHTLGTFKNADGKFILEKN
     gas57M3_2721    (850) KDDIYVGKHFTGLVTLGSETNVSTKMISDNGLHTLGTFKNADGKFILEKN
   gas57M12_10296    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNADGKFILEKN
   gas57M12_10035    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNVDGKFILEKN
   gas57M12_20069    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNVDGKFILEKN
   gas57M12_22432    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNVDGKFILEKN
    gas57M4_40499    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNVDGKFILEKN
  gas57M6,1_21259    (849) KDDIYVGKHFTGLVTLGSETNVSTKTISDNGLHTLGTFKNVDGKFILEKN
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FIG. 10S

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                          901                                                 950
    gas57M1_SF370    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
    gas57M1_31075    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
    gas57M1_31237    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
     gas57M1_3348    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
    gas57M2_34585    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
  gas57M3,1_21398    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
gas57M44-61_20839    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
 gas57M6,31_20022    (898) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M11_20648    (897) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
    gas57M23_2071    (898) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
 gas57M18,3_40128    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
    gas57M4_10092    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
    gas57M4_30968    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
 gas57M6,31_22692    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
 gas57M68,5_22814    (898) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M68_23623    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
    gas57M2_10064    (897) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
    gas57M2_10065    (897) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M77_10251    (897) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M77_10527    (897) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M77_20696    (897) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M89_21915    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M89_23717    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M94_10134    (897) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M28_10164    (897) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M28_10218    (897) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M28_10266    (897) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M28_10299    (897) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M28_30176    (897) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M28_30574    (897) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
  gas57M6,9_21802    (900) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M75_10012    (901) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M75_20671    (901) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M75_30603    (901) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M75_30207    (901) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M22_20641    (900) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M22_23465    (900) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
  gas57M3,1_30610    (900) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
  gas57M3,1_40603    (900) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
 gas57M3,28_24214    (900) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
 gas57M3,34_10307    (900) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
    gas57M4_40427    (900) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
     gas57M3_2721    (900) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M12_10296    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M12_10035    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M12_20069    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
   gas57M12_22432    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
    gas57M4_40499    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
  gas57M6,1_21259    (899) AQGNPVLAISPNGDNNQDFAAFKGVFLRKYQGLKASVYHASDKEHKNPLW
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FIG. 10T

```
                          951                                                1000
    gas57M1_SF370    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGHYHYVVSY
    gas57M1_31075    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGHYHYVVSY
    gas57M1_31237    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGHYHYVVSY
     gas57M1_3348    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGHYHYVVSY
    gas57M2_34585    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGHYHYVVSY
  gas57M3,1_21398    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
gas57M44-61_20839    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
 gas57M6,31_20022    (948) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M11_20648    (947) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGHYHYVVSY
    gas57M23_2071    (948) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
 gas57M18,3_40128    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
    gas57M4_10092    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
    gas57M4_30968    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
 gas57M6,31_22692    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
 gas57M68,5_22814    (948) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M68_23623    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
    gas57M2_10064    (947) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
    gas57M2_10065    (947) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M77_10251    (947) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M77_10527    (947) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M77_20696    (947) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M89_21915    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M89_23717    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M94_10134    (947) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M28_10164    (947) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M28_10218    (947) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M28_10266    (947) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M28_10299    (947) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M28_30176    (947) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M28_30574    (947) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
  gas57M6,9_21802    (950) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M75_10012    (951) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M75_20671    (951) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M75_30603    (951) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M75_30207    (951) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M22_20641    (950) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGHYHYVVSY
   gas57M22_23465    (950) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGHYHYVVSY
  gas57M3,1_30610    (950) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
  gas57M3,1_40603    (950) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
 gas57M3,28_24214    (950) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
 gas57M3,34_10307    (950) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
    gas57M4_40427    (950) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
     gas57M3_2721    (950) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M12_10296    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M12_10035    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M12_20069    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
   gas57M12_22432    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
    gas57M4_40499    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
  gas57M6,1_21259    (949) VSPESFKGDKNFNSDIRFAKSTTLLGTAFSGKSLTGAELPDGYYHYVVSY
```

FIG. 10U

| | | 1001 1050 |
|---|---|---|
| gas57M1_SF370 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M1_31075 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M1_31237 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M1_3348 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M2_34585 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M3,1_21398 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M44-61_20839 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M6,31_20022 | (998) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M11_20648 | (997) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M23_2071 | (998) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M18,3_40128 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M4_10092 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M4_30968 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M6,31_22692 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M68,5_22814 | (998) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M68_23623 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M2_10064 | (997) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M2_10065 | (997) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M77_10251 | (997) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M77_10527 | (997) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M77_20696 | (997) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M89_21915 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M89_23717 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M94_10134 | (997) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M28_10164 | (997) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M28_10218 | (997) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M28_10266 | (997) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M28_10299 | (997) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M28_30176 | (997) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M28_30574 | (997) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M6,9_21802 | (1000) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M75_10012 | (1001) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M75_20671 | (1001) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M75_30603 | (1001) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M75_30207 | (1001) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M22_20641 | (1000) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M22_23465 | (1000) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M3,1_30610 | (1000) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M3,1_40603 | (1000) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M3,28_24214 | (1000) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M3,34_10307 | (1000) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M4_40427 | (1000) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M3_2721 | (1000) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M12_10296 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M12_10035 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M12_20069 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M12_22432 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M4_40499 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |
| gas57M6,1_21259 | (999) | YPDVVGAKRQEMTFDMILDRQKPVLSQATFDPETNRFKPEPLKDRGLAGV |

FIG. 10V

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                          1051                                                1100
    gas57M1_SF370  (1049) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
    gas57M1_31075  (1049) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
    gas57M1_31237  (1049) RKDSAFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
     gas57M1_3348  (1049) RKDSAFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
    gas57M2_34585  (1049) RKDSAFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
  gas57M3,1_21398  (1049) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
gas57M44-61_20839  (1049) RKDSVFYLERKDNKPYIVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
 gas57M6,31_20022  (1048) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M11_20648  (1047) RKDSVFYLERKDNKPYTVTINDSYKYVSVADNKTFVERQADGSFILPLDK
    gas57M23_2071  (1048) RKDSVFYLERKDNKPYTVTINDSYKYVSVADNKTFVERQADGSFILPLDK
 gas57M18,3_40128  (1049) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
    gas57M4_10092  (1049) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
    gas57M4_30968  (1049) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
 gas57M6,31_22692  (1049) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
 gas57M68,5_22814  (1048) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M68_23623  (1049) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
    gas57M2_10064  (1047) RKDSVFYLERKDNKPYTVTINDSYKYVSVADNKTFVERQADGSFILPLDK
    gas57M2_10065  (1047) RKDSVFYLERKDNKPYTVTINDSYKYVSVADNKTFVERQADGSFILPLDK
   gas57M77_10251  (1047) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M77_10527  (1047) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M77_20696  (1047) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M89_21915  (1049) RKDSVFYLERKDNKPYTVTINDSYKYVSVADNKTFVERQADGSFILPLDK
   gas57M89_23717  (1049) RKDSVFYLERKDNKPYTVTINDSYKYVSVADNKTFVERQADGSFILPLDK
   gas57M94_10134  (1047) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M28_10164  (1047) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M28_10218  (1047) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M28_10266  (1047) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M28_10299  (1047) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M28_30176  (1047) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M28_30574  (1047) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
  gas57M6,9_21802  (1050) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M75_10012  (1051) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M75_20671  (1051) RKDSVFYLKRKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M75_30603  (1051) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M75_30207  (1051) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M22_20641  (1050) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M22_23465  (1050) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
  gas57M3,1_30610  (1050) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDSKTFVERQADGSFILPLDK
  gas57M3,1_40603  (1050) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDSKTFVERQADGSFILPLDK
 gas57M3,28_24214  (1050) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDSKTFVERQADGSFILPLDK
 gas57M3,34_10307  (1050) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDSKTFVERQADGSFILPLDK
    gas57M4_40427  (1050) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDSKTFVERQADGSFILPLDK
     gas57M3_2721  (1050) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDSKTFVERQADGSFILPLDK
   gas57M12_10296  (1049) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M12_10035  (1049) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M12_20069  (1049) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
   gas57M12_22432  (1049) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
    gas57M4_40499  (1049) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
  gas57M6,1_21259  (1049) RKDSVFYLERKDNKPYTVTINDSYKYVSVEDNKTFVERQADGSFILPLDK
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FIG. 10W

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                          1101                                                1150
    gas57M1_SF370  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
    gas57M1_31075  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
    gas57M1_31237  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
     gas57M1_3348  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
    gas57M2_34585  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
  gas57M3,1_21398  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
gas57M44-61_20839  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
 gas57M6,31_20022  (1098) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M11_20648  (1097) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
    gas57M23_2071  (1098) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
 gas57M18,3_40128  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
    gas57M4_10092  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
    gas57M4_30968  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
 gas57M6,31_22692  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
 gas57M68,5_22814  (1098) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M68_23623  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
    gas57M2_10064  (1097) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
    gas57M2_10065  (1097) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M77_10251  (1097) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M77_10527  (1097) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M77_20696  (1097) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M89_21915  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M89_23717  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M94_10134  (1097) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M28_10164  (1097) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M28_10218  (1097) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M28_10266  (1097) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M28_10299  (1097) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M28_30176  (1097) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M28_30574  (1097) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
  gas57M6,9_21802  (1100) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M75_10012  (1101) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M75_20671  (1101) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M75_30603  (1101) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M75_30207  (1101) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M22_20641  (1100) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M22_23465  (1100) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
  gas57M3,1_30610  (1100) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
  gas57M3,1_40603  (1100) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
 gas57M3,28_24214  (1100) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
 gas57M3,34_10307  (1100) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
    gas57M4_40427  (1100) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
     gas57M3_2721  (1100) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M12_10296  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M12_10035  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M12_20069  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
   gas57M12_22432  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
    gas57M4_40499  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
  gas57M6,1_21259  (1099) AKLGDFYYMVEDFAGNVAIAKLGDHLPQTLGKTPIKLKLTDGNYQTKETL
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FIG. 10X

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                          1151                                                1200
    gas57M1_SF370  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
    gas57M1_31075  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
    gas57M1_31237  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
     gas57M1_3348  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
    gas57M2_34585  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
  gas57M3,1_21398  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
gas57M44-61_20839  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
 gas57M6,31_20022  (1148) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M11_20648  (1147) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
    gas57M23_2071  (1148) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
 gas57M18,3_40128  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
    gas57M4_10092  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
    gas57M4_30968  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
 gas57M6,31_22692  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
 gas57M68,5_22814  (1148) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M68_23623  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
    gas57M2_10064  (1147) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
    gas57M2_10065  (1147) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M77_10251  (1147) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M77_10527  (1147) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M77_20696  (1147) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M89_21915  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M89_23717  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M94_10134  (1147) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M28_10164  (1147) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M28_10218  (1147) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M28_10266  (1147) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M28_10299  (1147) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M28_30176  (1147) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M28_30574  (1147) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
  gas57M6,9_21802  (1150) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M75_10012  (1151) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M75_20671  (1151) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M75_30603  (1151) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M75_30207  (1151) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M22_20641  (1150) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M22_23465  (1150) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
  gas57M3,1_30610  (1150) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
  gas57M3,1_40603  (1150) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
 gas57M3,28_24214  (1150) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
 gas57M3,34_10307  (1150) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
    gas57M4_40427  (1150) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
     gas57M3_2721  (1150) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M12_10296  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M12_10035  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M12_20069  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
   gas57M12_22432  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
    gas57M4_40499  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
  gas57M6,1_21259  (1149) KDNLEMTQSDTGLVTNQAQLAVVHRNQPQSQLTKMNQDFFISPNEDGNKD
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FIG. 10Y

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                          1201                                                1250
    gas57M1_SF370  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASVSAIESTAWYG
    gas57M1_31075  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASVSAIESTAWYG
    gas57M1_31237  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASVSAIESTAWYG
     gas57M1_3348  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASVSAIESTAWYG
    gas57M2_34585  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASVSAIESTAWYG
  gas57M3,1_21398  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
gas57M44-61_20839  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
 gas57M6,31_20022  (1198) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M11_20648  (1197) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
    gas57M23_2071  (1198) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
 gas57M18,3_40128  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
    gas57M4_10092  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
    gas57M4_30968  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
 gas57M6,31_22692  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
 gas57M68,5_22814  (1198) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M68_23623  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
    gas57M2_10064  (1197) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
    gas57M2_10065  (1197) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M77_10251  (1197) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M77_10527  (1197) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M77_20696  (1197) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M89_21915  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M89_23717  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M94_10134  (1197) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M28_10164  (1197) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M28_10218  (1197) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M28_10266  (1197) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M28_10299  (1197) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M28_30176  (1197) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M28_30574  (1197) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
  gas57M6,9_21802  (1200) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M75_10012  (1201) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M75_20671  (1201) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M75_30603  (1201) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M75_30207  (1201) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M22_20641  (1200) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M22_23465  (1200) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
  gas57M3,1_30610  (1200) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
  gas57M3,1_40603  (1200) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
 gas57M3,28_24214  (1200) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
 gas57M3,34_10307  (1200) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
    gas57M4_40427  (1200) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
     gas57M3_2721  (1200) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M12_10296  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M12_10035  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M12_20069  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
   gas57M12_22432  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
    gas57M4_40499  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
 gas57M6,1_21259  (1199) FVAFKGLKNNVYNDLTVNVYAKDDHQKQTPIWSSQAGASASAIESTAWYG
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FIG. 10Z

```
                          1251                                                1300
    gas57M1_SF370  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
    gas57M1_31075  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
    gas57M1_31237  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
     gas57M1_3348  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
    gas57M2_34585  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
  gas57M3,1_21398  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
gas57M44-61_20839  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
 gas57M6,31_20022  (1248) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M11_20648  (1247) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
    gas57M23_2071  (1248) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
 gas57M18,3_40128  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
    gas57M4_10092  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
    gas57M4_30968  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
 gas57M6,31_22692  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
 gas57M68,5_22814  (1248) ITARGSKVMPGDYQYVVTYRDEHGKVHQKQYTISVNDKKPMITQGRFDTI
   gas57M68_23623  (1249) ITARGSKVMPGDYQYVVTYRDEHGKVHQKQYTISVNDKKPMITQGRFDTI
    gas57M2_10064  (1247) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
    gas57M2_10065  (1247) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M77_10251  (1247) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M77_10527  (1247) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M77_20696  (1247) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M89_21915  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M89_23717  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M94_10134  (1247) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M28_10164  (1247) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M28_10218  (1247) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M28_10266  (1247) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M28_10299  (1247) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M28_30176  (1247) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M28_30574  (1247) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
  gas57M6,9_21802  (1250) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M75_10012  (1251) ITARGSKVMPGDYQYVVTYRDEHGKVHQKQYTISVNDKKPMITQGRFDTI
   gas57M75_20671  (1251) ITARGSKVMPGDYQYVVTYRDEHGKVHQKQYTISVNDKKPMITQGRFDTI
   gas57M75_30603  (1251) ITARGSKVMPGDYQYVVTYRDEHGKVHQKQYTISVNDKKPMITQGRFDTI
   gas57M75_30207  (1251) ITARGSKVMPGDYQYVVTYRDEHGKVHQKQYTISVNDKKPMITQGRFDTI
   gas57M22_20641  (1250) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M22_23465  (1250) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
  gas57M3,1_30610  (1250) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
  gas57M3,1_40603  (1250) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
 gas57M3,28_24214  (1250) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
 gas57M3,34_10307  (1250) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
    gas57M4_40427  (1250) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
     gas57M3_2721  (1250) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M12_10296  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M12_10035  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M12_20069  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
   gas57M12_22432  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
    gas57M4_40499  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
  gas57M6,1_21259  (1249) ITARGSKVMPGDYQYVVTYRDEHGKEHQKQYTISVNDKKPMITQGRFDTI
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FIG. 10AA

```
                          1301                                                1350
    gas57M1_SF370  (1299) NGVDHFTPDKTKALDSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
    gas57M1_31075  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
    gas57M1_31237  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
     gas57M1_3348  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
    gas57M2_34585  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
  gas57M3,1_21398  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
gas57M44-61_20839  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
 gas57M6,31_20022  (1298) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M11_20648  (1297) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
    gas57M23_2071  (1298) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
 gas57M18,3_40128  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
    gas57M4_10092  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
    gas57M4_30968  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
 gas57M6,31_22692  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
 gas57M68,5_22814  (1298) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M68_23623  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
    gas57M2_10064  (1297) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
    gas57M2_10065  (1297) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M77_10251  (1297) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M77_10527  (1297) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M77_20696  (1297) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M89_21915  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M89_23717  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M94_10134  (1297) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M28_10164  (1297) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M28_10218  (1297) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M28_10266  (1297) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M28_10299  (1297) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M28_30176  (1297) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M28_30574  (1297) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
  gas57M6,9_21802  (1300) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M75_10012  (1301) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M75_20671  (1301) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M75_30603  (1301) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M75_30207  (1301) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M22_20641  (1300) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M22_23465  (1300) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
  gas57M3,1_30610  (1300) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
  gas57M3,1_40603  (1300) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
 gas57M3,28_24214  (1300) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
 gas57M3,34_10307  (1300) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
    gas57M4_40427  (1300) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
     gas57M3_2721  (1300) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M12_10296  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M12_10035  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M12_20069  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
   gas57M12_22432  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
    gas57M4_40499  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
  gas57M6,1_21259  (1299) NGVDHFTPDKTKALGSSGIVREEVFYLAKKNGRKFDVTEGKDGITVSDNK
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FIG. 10BB

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                          1351                                                1400
    gas57M1_SF370  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
    gas57M1_31075  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
    gas57M1_31237  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
     gas57M1_3348  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
    gas57M2_34585  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
  gas57M3,1_21398  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
gas57M44-61_20839  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
 gas57M6,31_20022  (1348) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M11_20648  (1347) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
    gas57M23_2071  (1348) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
 gas57M18,3_40128  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
    gas57M4_10092  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
    gas57M4_30968  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
 gas57M6,31_22692  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
 gas57M68,5_22814  (1348) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M68_23623  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
    gas57M2_10064  (1347) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
    gas57M2_10065  (1347) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M77_10251  (1347) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M77_10527  (1347) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M77_20696  (1347) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M89_21915  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M89_23717  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M94_10134  (1347) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M28_10164  (1347) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M28_10218  (1347) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M28_10266  (1347) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M28_10299  (1347) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M28_30176  (1347) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M28_30574  (1347) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
  gas57M6,9_21802  (1350) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M75_10012  (1351) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M75_20671  (1351) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M75_30603  (1351) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M75_30207  (1351) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M22_20641  (1350) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M22_23465  (1350) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
  gas57M3,1_30610  (1350) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKVVGKDK
  gas57M3,1_40603  (1350) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKVVGKDK
 gas57M3,28_24214  (1350) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKVVGKDK
 gas57M3,34_10307  (1350) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKVVGKDK
    gas57M4_40427  (1350) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKVVGKDK
     gas57M3_2721  (1350) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKVVGKDK
   gas57M12_10296  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M12_10035  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M12_20069  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
   gas57M12_22432  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
    gas57M4_40499  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
  gas57M6,1_21259  (1349) VYIPKNPDGSYTISKRDGVTLSDYYYLVEDRAGNVSFATLRDLKAVGKDK
```

FIG. 10CC

| | | 1401 1450 |
|---|---|---|
| gas57M1_SF370 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M1_31075 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M1_31237 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M1_3348 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M2_34585 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M3,1_21398 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M44-61_20839 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M6,31_20022 | (1398) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M11_20648 | (1397) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M23_2071 | (1398) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M18,3_40128 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M4_10092 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M4_30968 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M6,31_22692 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M68,5_22814 | (1398) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M68_23623 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M2_10064 | (1397) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M2_10065 | (1397) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M77_10251 | (1397) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M77_10527 | (1397) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M77_20696 | (1397) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M89_21915 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M89_23717 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M94_10134 | (1397) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M28_10164 | (1397) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M28_10218 | (1397) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M28_10266 | (1397) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M28_10299 | (1397) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M28_30176 | (1397) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M28_30574 | (1397) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M6,9_21802 | (1400) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M75_10012 | (1401) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M75_20671 | (1401) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M75_30603 | (1401) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M75_30207 | (1401) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M22_20641 | (1400) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M22_23465 | (1400) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M3,1_30610 | (1400) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M3,1_40603 | (1400) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M3,28_24214 | (1400) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M3,34_10307 | (1400) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M4_40427 | (1400) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M3_2721 | (1400) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M12_10296 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M12_10035 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M12_20069 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M12_22432 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M4_40499 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |
| gas57M6,1_21259 | (1399) | AVVNFGLDLPVPEDKQIVNFTYLVRDADGKPIENLEYYNNSGNSLILPYG |

FIG. 10DD

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                          1451                                                1500
    gas57M1_SF370  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKITMLATSQITAH
    gas57M1_31075  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKITMLATSQITAH
    gas57M1_31237  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKITMLATSQITAH
     gas57M1_3348  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKITMLATSQITAH
    gas57M2_34585  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKITMLATSQITAH
  gas57M3,1_21398  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
gas57M44-61_20839  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTILATSQITAH
 gas57M6,31_20022  (1448) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M11_20648  (1447) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
    gas57M23_2071  (1448) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
 gas57M18,3_40128  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
    gas57M4_10092  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
    gas57M4_30968  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
 gas57M6,31_22692  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
 gas57M68,5_22814  (1448) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M68_23623  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
    gas57M2_10064  (1447) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
    gas57M2_10065  (1447) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M77_10251  (1447) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M77_10527  (1447) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M77_20696  (1447) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M89_21915  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M89_23717  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M94_10134  (1447) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M28_10164  (1447) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M28_10218  (1447) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M28_10266  (1447) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M28_10299  (1447) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M28_30176  (1447) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M28_30574  (1447) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
  gas57M6,9_21802  (1450) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQITFKMTMLATSQITAH
   gas57M75_10012  (1451) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M75_20671  (1451) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M75_30603  (1451) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M75_30207  (1451) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M22_20641  (1450) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M22_23465  (1450) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
  gas57M3,1_30610  (1450) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
  gas57M3,1_40603  (1450) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
 gas57M3,28_24214  (1450) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
 gas57M3,34_10307  (1450) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
    gas57M4_40427  (1450) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
     gas57M3_2721  (1450) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M12_10296  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M12_10035  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M12_20069  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
   gas57M12_22432  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
    gas57M4_40499  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
  gas57M6,1_21259  (1449) KYTVELLTYDTNAAKLESDKIVSFTLSADNNFQQVTFKMTMLATSQITAH
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FIG. 10EE

| | | 1501 1550 |
|---|---|---|
| gas57M1_SF370 | (1499) | FDHLLPEGSRVSLKTAQDQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M1_31075 | (1499) | FDHLLPEGSRVSLKTAQDQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M1_31237 | (1499) | FDHLLPEGSRVSLKTAQDQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M1_3348 | (1499) | FDHLLPEGSRVSLKTAQDQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M2_34585 | (1499) | FDHLLPEGSRVSLKTAQDQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M3,1_21398 | (1499) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M44-61_20839 | (1499) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M6,31_20022 | (1498) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M11_20648 | (1497) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M23_2071 | (1498) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M18,3_40128 | (1499) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEDTYEVVVSLPK |
| gas57M4_10092 | (1499) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEDTYEVVVSLPK |
| gas57M4_30968 | (1499) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEDTYEVVVSLPK |
| gas57M6,31_22692 | (1499) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEDTYEVVVSLPK |
| gas57M68,5_22814 | (1498) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M68_23623 | (1499) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M2_10064 | (1497) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M2_10065 | (1497) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M77_10251 | (1497) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M77_10527 | (1497) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M77_20696 | (1497) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M89_21915 | (1499) | FDHLLPEGSRVSLKTAQGQLIPLGQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M89_23717 | (1499) | FDHLLPEGSRVSLKTAQGQLIPLGQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M94_10134 | (1497) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M28_10164 | (1497) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M28_10218 | (1497) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M28_10266 | (1497) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M28_10299 | (1497) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M28_30176 | (1497) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M28_30574 | (1497) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M6,9_21802 | (1500) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M75_10012 | (1501) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M75_20671 | (1501) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M75_30603 | (1501) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M75_30207 | (1501) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M22_20641 | (1500) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M22_23465 | (1500) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M3,1_30610 | (1500) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M3,1_40603 | (1500) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M3,28_24214 | (1500) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M3,34_10307 | (1500) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M4_40427 | (1500) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M3_2721 | (1500) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M12_10296 | (1499) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M12_10035 | (1499) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M12_20069 | (1499) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M12_22432 | (1499) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M4_40499 | (1499) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |
| gas57M6,1_21259 | (1499) | FDHLLPEGSRVSLKTAQGQLIPLEQSLYVPKAYGKTVQEGTYEVVVSLPK |

FIG. 10FF

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                          1551                                                1600
    gas57M1_SF370  (1549) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
    gas57M1_31075  (1549) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
    gas57M1_31237  (1549) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
     gas57M1_3348  (1549) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
    gas57M2_34585  (1549) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
  gas57M3,1_21398  (1549) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
gas57M44-61_20839  (1549) GYRIEGNTKVNALPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
 gas57M6,31_20022  (1548) GYRIEGNTKVNALPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M11_20648  (1547) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
    gas57M23_2071  (1548) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
 gas57M18,3_40128  (1549) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
    gas57M4_10092  (1549) GYRIEGNTKVNALPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTV
    gas57M4_30968  (1549) GYRIEGNTKVNALPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTV
 gas57M6,31_22692  (1549) GYRIEGNTKVNALPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTV
 gas57M68,5_22814  (1548) GYRIEGNTKVNALPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M68_23623  (1549) GYRIEGNTKVNALPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
    gas57M2_10064  (1547) GYRIEGNTKVNALPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
    gas57M2_10065  (1547) GYRIEGNTKVNALPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M77_10251  (1547) GYRIEGNTKVNALPNEVHELSLRLVKVGDASDLTGDHKVMSKNNSQALTA
   gas57M77_10527  (1547) GYRIEGNTKVNALPNEVHELSLRLVKVGDASDLTGDHKVMSKNNSQALTA
   gas57M77_20696  (1547) GYRIEGNTKVNALPNEVHELSLRLVKVGDASDLTGDHKVMSKNNSQALTA
   gas57M89_21915  (1549) GYRIEGNTKVNALPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M89_23717  (1549) GYRIEGNTKVNALPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M94_10134  (1547) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M28_10164  (1547) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M28_10218  (1547) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M28_10266  (1547) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M28_10299  (1547) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M28_30176  (1547) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M28_30574  (1547) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
  gas57M6,9_21802  (1550) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M75_10012  (1551) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M75_20671  (1551) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M75_30603  (1551) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M75_30207  (1551) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M22_20641  (1550) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M22_23465  (1550) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
  gas57M3,1_30610  (1550) GYRIEGDTKVNALPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
  gas57M3,1_40603  (1550) GYRIEGDTKVNALPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
 gas57M3,28_24214  (1550) GYRIEGDTKVNALPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
 gas57M3,34_10307  (1550) GYRIEGDTKVNALPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
    gas57M4_40427  (1550) GYRIEGDTKVNALPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
     gas57M3_2721  (1550) GYRIEGDTKVNALPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M12_10296  (1549) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M12_10035  (1549) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M12_20069  (1549) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
   gas57M12_22432  (1549) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
    gas57M4_40499  (1549) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
  gas57M6,1_21259  (1549) GYRIEGNTKVNTLPNEVHELSLRLVKVGDASDSTGDHKVMSKNNSQALTA
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FIG. 10GG

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                                1601                                          1650
    gas57M1_SF370  (1599) SATPTKSTTSATAKALPSTGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
    gas57M1_31075  (1599) SATPTKSTTSATAKALPSTGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
    gas57M1_31237  (1599) SATPTKSTTSATAKALPSTGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
     gas57M1_3348  (1599) SATPTKSTTSATAKALPSTGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
    gas57M2_34585  (1599) SATPTKSTTSATAKALPSTGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
  gas57M3,1_21398  (1599) SATPTKTTTSATAKALPSTGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
gas57M44-61_20839  (1599) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
 gas57M6,31_20022  (1598) SARPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKE-
   gas57M11_20648  (1597) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
    gas57M23_2071  (1598) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
 gas57M18,3_40128  (1599) SATPTKTTTSATAKALPSTGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
    gas57M4_10092  (1599) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
    gas57M4_30968  (1599) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
 gas57M6,31_22692  (1599) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
 gas57M68,5_22814  (1598) SATPTKTTTSATAKALPSTGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M68_23623  (1599) SATPTKTTTSATAKALPSTGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
    gas57M2_10064  (1597) SATPTKTTTSATAKALPSTGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
    gas57M2_10065  (1597) SATPTKTTTSATAKALPSTGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M77_10251  (1597) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M77_10527  (1597) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M77_20696  (1597) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M89_21915  (1599) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M89_23717  (1599) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M94_10134  (1597) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M28_10164  (1597) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M28_10218  (1597) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M28_10266  (1597) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M28_10299  (1597) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M28_30176  (1597) FATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M28_30574  (1597) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
  gas57M6,9_21802  (1600) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M75_10012  (1601) SATPTKTTTSATAKALPSTGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M75_20671  (1601) SATPTKTTTSATAKALPSTGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M75_30603  (1601) SATPTKTTTSATAKALPSTGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M75_30207  (1601) SATPTKTTTSATAKALPSTGEKMGLKLRIVGLVLLGLTCVFSRKKSTKE-
   gas57M22_20641  (1600) SATPTKTTTSATAKALPSTGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M22_23465  (1600) SATPTKTTTSATAKALPSTGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
  gas57M3,1_30610  (1600) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
  gas57M3,1_40603  (1600) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
 gas57M3,28_24214  (1600) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
 gas57M3,34_10307  (1600) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
    gas57M4_40427  (1600) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
     gas57M3_2721  (1600) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M12_10296  (1599) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M12_10035  (1599) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M12_20069  (1599) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
   gas57M12_22432  (1599) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
    gas57M4_40499  (1599) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
  gas57M6,1_21259  (1599) SATPTKTTTSATAKALPSAGEKMGLKLRIVGLVLLGLTCVFSRKKSTKD-
```

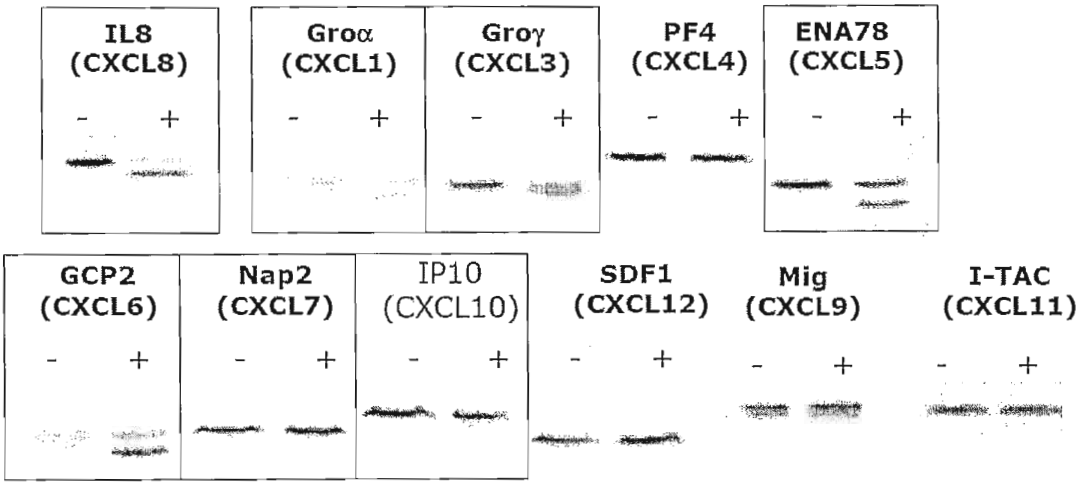
FIG. 11

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CxCL4           ----MSSAAGFCASRPGLLFLGLLLLP-LVVAFAS----------AEAEED-------GD 38
CXCL7           MSLRLDTTPSCNSARPLHALQVLLLLSLLLTALASSTKGQTKRNLAKGKEESLDSDLYAE 60
CXCL1           ----MARAALSAAPSNPRLLRVALLLLLLVAAGRR----------AAGASVA------TE 40
CXCL2           ----MARATLSAAPSNPRLLRVALLLLLLVAASRR----------AAGAPLA------TE 40
CXCL3           ----MAHATLSAAPSNPRLLRVALLLLLLVAASRR----------AAGASVV------TE 40
CXCL6           --MSLPSSRAARVPGPSGSLCALLALLLLLTPPGP---------LASAGPVS---AVLTE 46
CXCL8           -----MTSKLAVALLAAFLISAALCEGAVLPRSAK----------------------E 31
CXCL12alpha     -------------MNAKVVVVLVLVLTALCLSDGK--------------PVS------LS 27
CXCL12gamma     -------------MNAKVVVVLVLVLTALCLSDGK--------------PVS------LS 27
CXCL12beta      -------------MNAKVVVVLVLVLTALCLSDGK--------------PVS------LS 27
CXCL9           -------------MKKSGVLFLLGIILLVLIGVQGTP---------------------VVRK 28
CXCL10          -------------MNQTAILICC-LIFLTLSGIQGVP---------------------LSRT 27
CXCL11          -------------MSVKGMAIALAVILCATV-VQGFP---------------------MFKR 27
                                 .   :

CxCL4           LQCLCVKTTSQ-VRPRHITSLEVIKAGPHCPTAQLIATLKN-GRKICLDLQAPLYKKIIK 96
CXCL7           LRCMCIKTTSG-IHPKNIQSLEVIGKGTHCNQVEVIATLKD-GRKICLDPDAPRIKKIVQ 118
CXCL1           LRCQCLQTLQG-IHPKNIQSVNVKSPGPHCAQTEVIATLKN-GRKACLNPASPIVKKIIE 98
CXCL2           LRCQCLQTLQG-IHLKNIQSVKVKSPGPHCAQTEVIATLKN-GQKACLNPASPMVKKIIE 98
CXCL3           LRCQCLQTLQG-IHLKNIQSVNVRSPGPHCAQTEVIATLKN-GKKACLNPASPMVQKIIE 98
CXCL6           LRCTCLRVTLR-VNPKTIGKLQVFPAGPQCSKVEVVASLKN-GKQVCLDPEAPFLKKVIQ 104
CXCL8           LRCQCIKTYSKPFHPKFIKELRVIESGPHCANTEIIVKLSD-GRELCLDPKENWVQRVVE 90
CXCL12alpha     YRCPCRFFESH-VARANVKHLKILN-TPNCALQIVARLKNN-NRQVCIDPKLKWIQEYLE 84
CXCL12gamma     YRCPCRFFESH-VARANVKHLKILN-TPNCALQIVARLKNN-NRQVCIDPKLKWIQEYLE 84
CXCL12beta      YRCPCRFFESH-VARANVKHLKILN-TPNCALQIVARLKNN-NRQVCIDPKLKWIQEYLE 84
CXCL9           GRCSCISTNQGTIHLQSLKDLKQFAPSPSCEKIEIIATLKN-GVQTCLNPDSADVKELIK 87
CXCL10          VRCTCISISNQPVNPRSLEKLEIIPASQFCPRVEIIATMKKKGEKRCLNPESKAIKNLLK 87
CXCL11          GRCLCIGPGVKAVKVADIEKASIMYPSNNCDKIEVIITLKENKGQRCLNPKSKQARLIIK 87
                 :* *       .    :          *    :    ..   : *::      :  ::

CxCL4           KLLESCXCL---------------------------- 105
CXCL7           KKLAGDESAD---------------------------- 128
CXCL1           KMLNSDKSN----------------------------- 107
CXCL2           KMLKNGKSN----------------------------- 107
CXCL3           KILNKGSTN----------------------------- 107
CXCL6           KILDSGNKKN---------------------------- 114
CXCL8           KFLKRAENS----------------------------- 99
CXCL12alpha     KALNK--------------------------------- 89
CXCL12gamma     KALNKGRREEKVGKKEKIGKKKRQKKRKAAQKRKN--- 119
CXCL12beta      KALNKRFKM----------------------------- 93
CXCL9           KWEKQVSQKKKQKNGKKHQKKKVLKVRKSQRSRQKKTT 125
CXCL10          ----AVSKER-----------------SKRSP------ 98
CXCL11          ----KVERKNF--------------------------- 94
```

FIG. 12


IL8
(CXCL8)
- +
Groα
(CXCL1)
- +
Groγ
(CXCL3)
- +
PF4
(CXCL4)
- +
ENA78
(CXCL5)
- +
GCP2
(CXCL6)
- +
Nap2
(CXCL7)
- +
IP10
(CXCL10)
- +
SDF1
(CXCL12)
- +
Mig
(CXCL9)
- +
I-TAC
(CXCL11)
- +