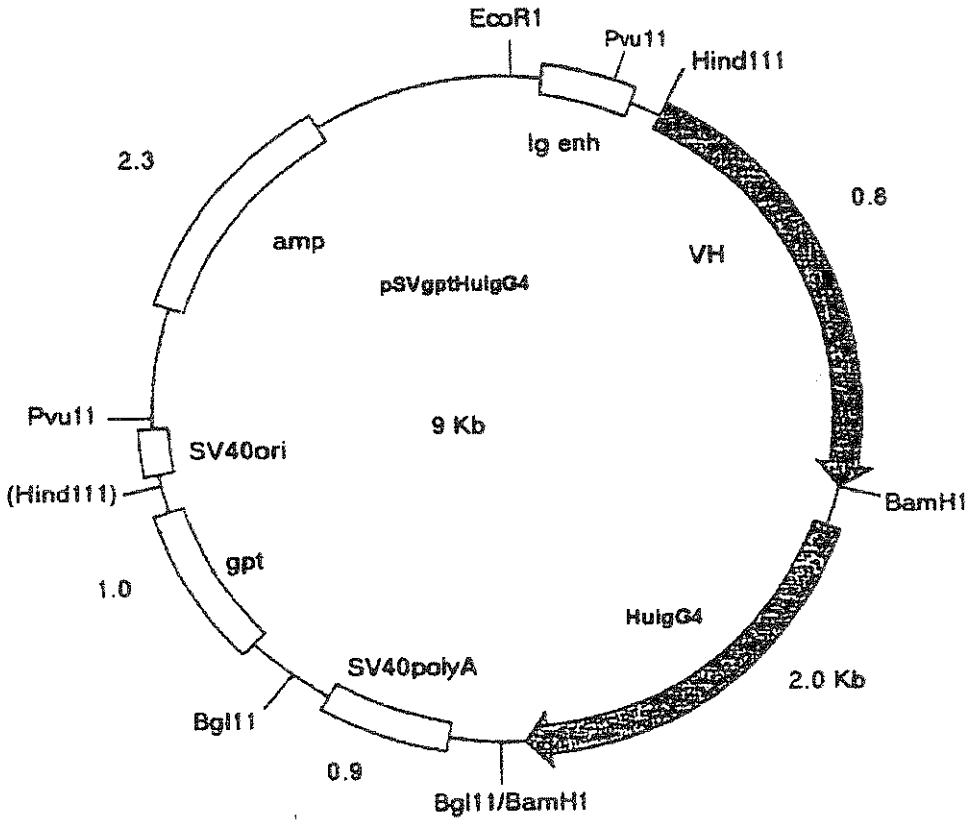

EcoR1
Pvu11
Hind111
Ig enh
0.6
VH
2.3
amp
pSVgptHuIgG4
9 Kb
Pvu11
SV40ori
(Hind111)
BamH1
gpt
1.0
HuIgG4
SV40polyA
2.0 Kb
Bgl11
0.9
Bgl11/BamH1

FIG 1

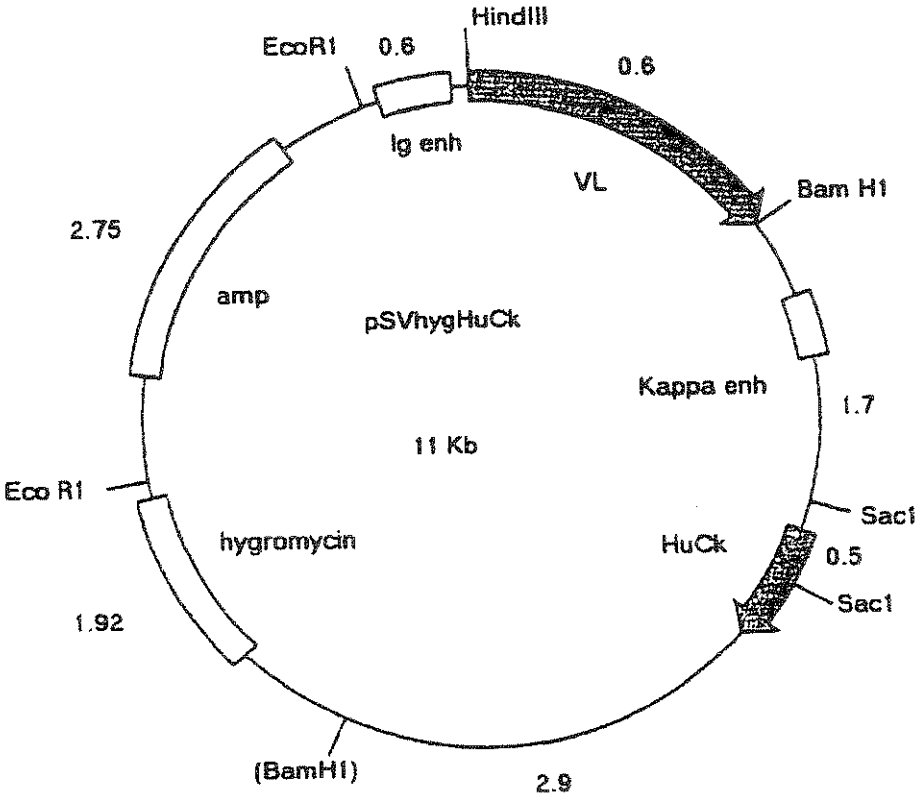

HindIII
EcoR1
0.6
0.6
Ig enh
VL
Bam H1
2.75
amp
pSVhygHuCk
Kappa enh
1.7
11 Kb
Eco R1
Sac1
hygromycin
HuCk
0.5
Sac1
1.92
(BamH1)
2.9

FIG 2

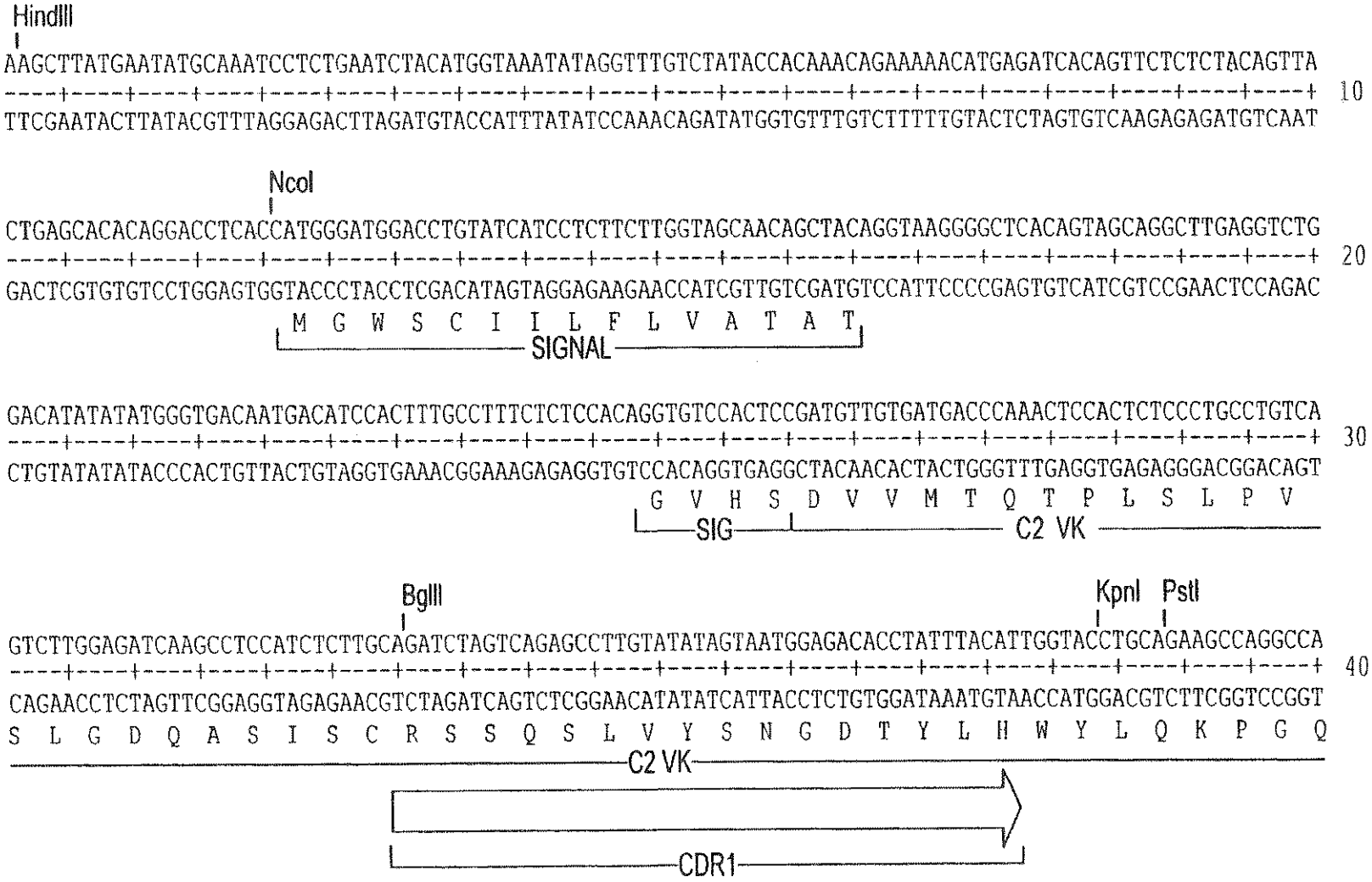

HindIII
AAGCTTATGAATATGCAAATCCTCTGAATCTACATGGTAAATATAGGTTTGTCTATACCACAAACAGAAAAACATGAGATCACAGTTCTCTCTACAGTTA
TTCGAATACTTATACGTTTAGGAGACTTAGATGTACCATTTATATCCAAACAGATATGGTGTTTGTCTTTTTGTACTCTAGTGTCAAGAGAGATGTCAAT
10
NcoI
CTGAGCACACAGGACCTCACCATGGGATGGACCTGTATCATCCTCTTCTTGGTAGCAACAGCTACAGGTAAGGGGCTCACAGTAGCAGGCTTGAGGTCTG
GACTCGTGTGTCCTGGAGTGGTACCCTACCTCGACATAGTAGGAGAAGAACCATCGTTGTCGATGTCCATTCCCCGAGTGTCATCGTCCGAACTCCAGAC
20
M G W S C I I L F L V A T A T
SIGNAL
GACATATATATGGGTGACAATGACATCCACTTTGCCTTTCTCTCCACAGGTGTCCACTCCGATGTTGTGATGACCCAAACTCCACTCTCCCTGCCTGTCA
CTGTATATATACCCACTGTTACTGTAGGTGAAACGGAAAGAGAGGTGTCCACAGGTGAGGCTACAACACTACTGGGTTTGAGGTGAGAGGGACGGACAGT
30
G V H S D V V M T Q T P L S L P V
SIG
C2 VK
BglII
KpnI
PstI
GTCTTGGAGATCAAGCCTCCATCTCTTGCAGATCTAGTCAGAGCCTTGTATATAGTAATGGAGACACCTATTTACATTGGTACCTGCAGAAGCCAGGCCA
CAGAACCTCTAGTTCGGAGGTAGAGAACGTCTAGATCAGTCTCGGAACATATATCATTACCTCTGTGGATAAATGTAACCATGGACGTCTTCGGTCCGGT
40
S L G D Q A S I S C R S S Q S L V Y S N G D T Y L H W Y L Q K P G Q
C2 VK
CDR1

FIG. 3-1

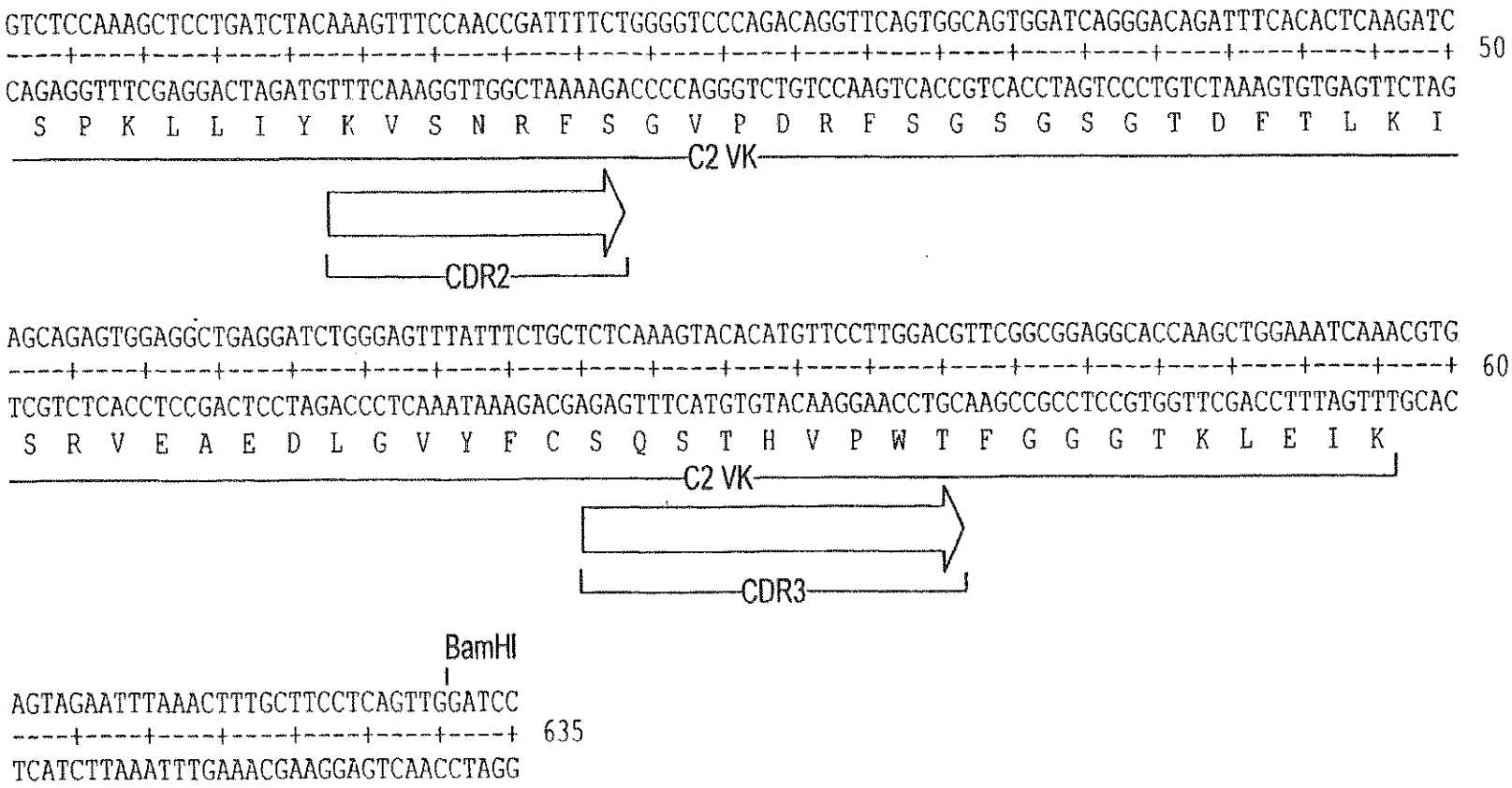

GTCTCCAAAGCTCCTGATCTACAAAGTTTCCAACCGATTTTCTGGGGTCCCAGACAGGTTCAGTGGCAGTGGATCAGGGACAGATTTCACACTCAAGATC
50
CAGAGGTTTCGAGGACTAGATGTTTCAAAGGTTGGCTAAAAGACCCCAGGGTCTGTCCAAGTCACCGTCACCTAGTCCCTGTCTAAAGTGTGAGTTCTAG
S P K L L I Y K V S N R F S G V P D R F S G S G S G T D F T L K I
C2 VK
CDR2
AGCAGAGTGGAGGCTGAGGATCTGGGAGTTTATTTCTGCTCTCAAAGTACACATGTTCCTTGGACGTTCGGCGGAGGCACCAAGCTGGAAATCAAACGTG
60
TCGTCTCACCTCCGACTCCTAGACCCTCAAATAAAGACGAGAGTTTCATGTGTACAAGGAACCTGCAAGCCGCCTCCGTGGTTCGACCTTTAGTTTGCAC
S R V E A E D L G V Y F C S Q S T H V P W T F G G G T K L E I K
C2 VK
CDR3
BamHI
AGTAGAATTTAAACTTTGCTTCCTCAGTTGGATCC
635
TCATCTTAAATTTGAAACGAAGGAGTCAACCTAGG

FIG. 3-2

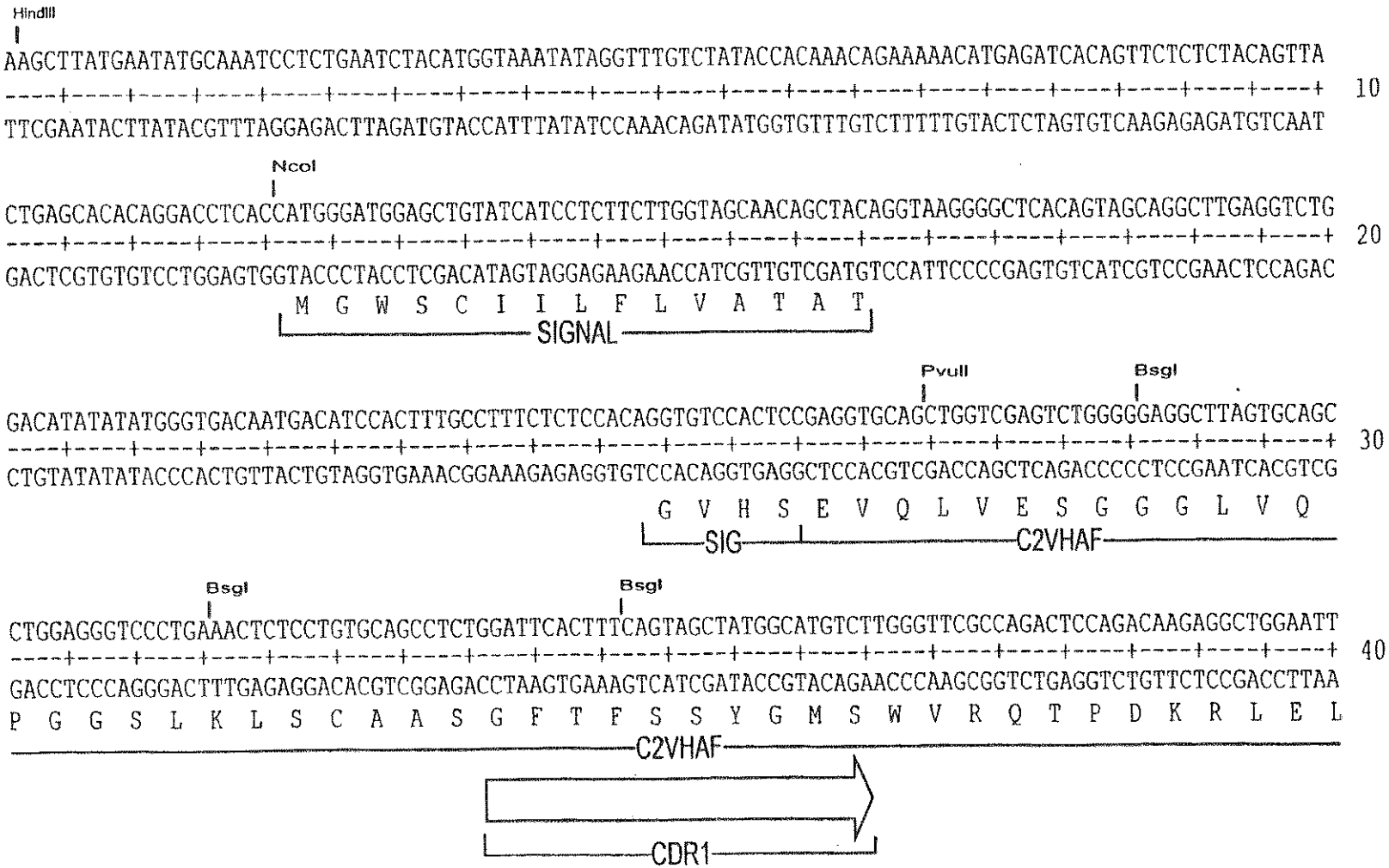

HindIII
AAGCTTATGAATATGCAAATCCTCTGAATCTACATGGTAAATATAGGTTTGTCTATACCACAAACAGAAAAACATGAGATCACAGTTCTCTCTACAGTTA
TTCGAATACTTATACGTTTAGGAGACTTAGATGTACCATTTATATCCAAACAGATATGGTGTTTGTCTTTTTGTACTCTAGTGTCAAGAGAGATGTCAAT
NcoI
CTGAGCACACAGGACCTCACCATGGGATGGAGCTGTATCATCCTCTTCTTGGTAGCAACAGCTACAGGTAAGGGGCTCACAGTAGCAGGCTTGAGGTCTG
GACTCGTGTGTCCTGGAGTGGTACCCTACCTCGACATAGTAGGAGAAGAACCATCGTTGTCGATGTCCATTCCCCGAGTGTCATCGTCCGAACTCCAGAC
M G W S C I I L F L V A T A T
SIGNAL
PvuII
BsgI
GACATATATATGGGTGACAATGACATCCACTTTGCCTTTCTCTCCACAGGTGTCCACTCCGAGGTGCAGCTGGTCGAGTCTGGGGGAGGCTTAGTGCAGC
CTGTATATATACCCACTGTTACTGTAGGTGAAACGGAAAGAGAGGTGTCCACAGGTGAGGCTCCACGTCGACCAGCTCAGACCCCCTCCGAATCACGTCG
G V H S E V Q L V E S G G G L V Q
SIG
C2VHAF
BsgI
BsgI
CTGGAGGGTCCCTGAAACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGTAGCTATGGCATGTCTTGGGTTCGCCAGACTCCAGACAAGAGGCTGGAATT
GACCTCCCAGGGACTTTGAGAGGACACGTCGGAGACCTAAGTGAAAGTCATCGATACCGTACAGAACCCAAGCGGTCTGAGGTCTGTTCTCCGACCTTAA
P G G S L K L S C A A S G F T F S S Y G M S W V R Q T P D K R L E L
C2VHAF
CDR1

FIG. 4-1

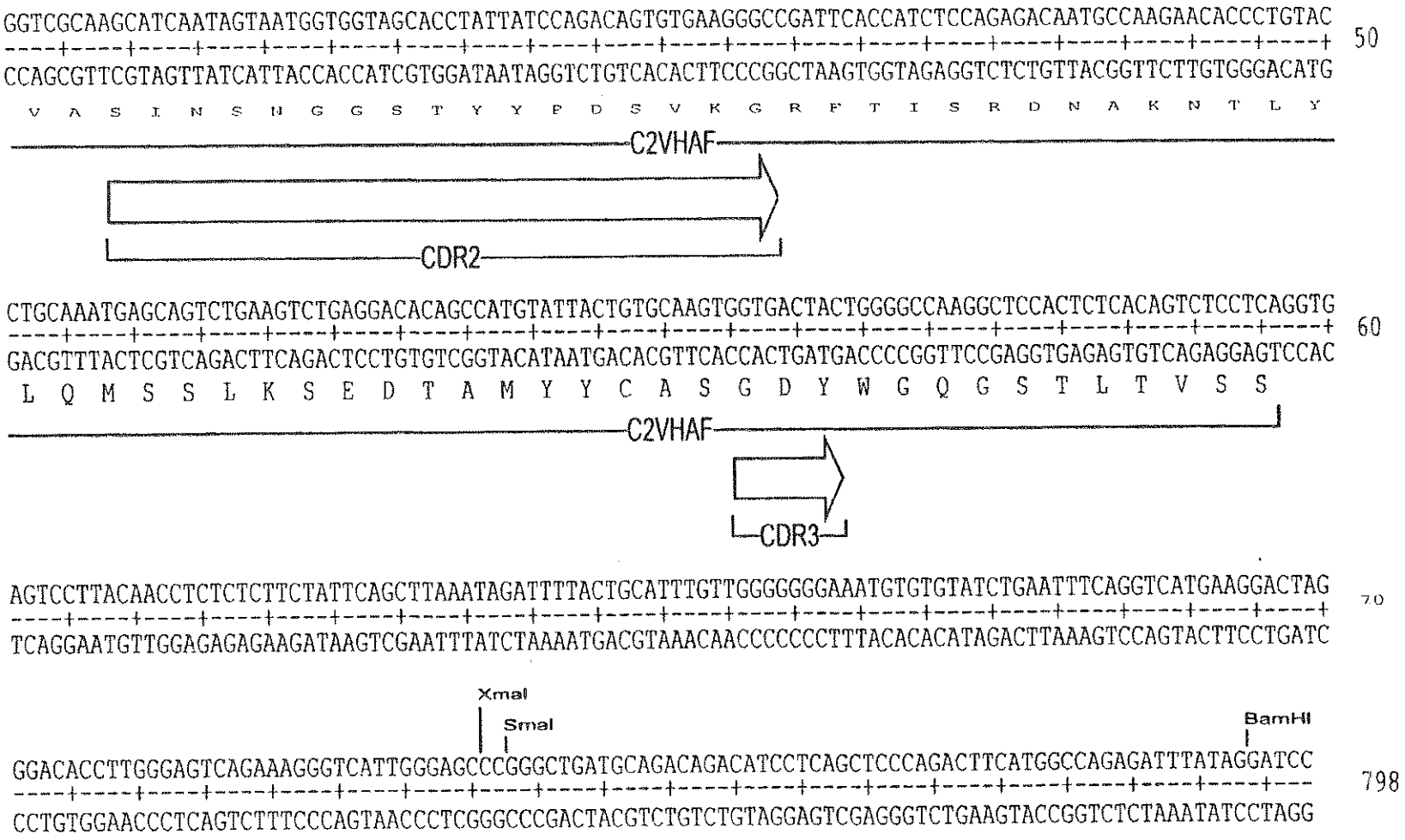

GGTCGCAAGCATCAATAGTAATGGTGGTAGCACCTATTATCCAGACAGTGTGAAGGGCCGATTCACCATCTCCAGAGACAATGCCAAGAACACCCTGTAC
50
CCAGCGTTCGTAGTTATCATTACCACCATCGTGGATAATAGGTCTGTCACACTTCCCGGCTAAGTGGTAGAGGTCTCTGTTACGGTTCTTGTGGGACATG
V A S I N S N G G S T Y Y P D S V K G R F T I S R D N A K N T L Y
C2VHAF
CDR2
CTGCAAATGAGCAGTCTGAAGTCTGAGGACACAGCCATGTATTACTGTGCAAGTGGTGACTACTGGGGCCAAGGCTCCACTCTCACAGTCTCCTCAGGTG
60
GACGTTTACTCGTCAGACTTCAGACTCCTGTGTCGGTACATAATGACACGTTCACCACTGATGACCCCGGTTCCGAGGTGAGAGTGTCAGAGGAGTCCAC
L Q M S S L K S E D T A M Y Y C A S G D Y W G Q G S T L T V S S
C2VHAF
CDR3
AGTCCTTACAACCTCTCTCTTCTATTCAGCTTAAATAGATTTTACTGCATTTGTTGGGGGGGAAATGTGTGTATCTGAATTTCAGGTCATGAAGGACTAG
70
TCAGGAATGTTGGAGAGAGAAGATAAGTCGAATTTATCTAAAATGACGTAAACAACCCCCCCTTTACACACATAGACTTAAAGTCCAGTACTTCCTGATC
XmaI
SmaI
BamHI
GGACACCTTGGGAGTCAGAAAGGGTCATTGGGAGCCCGGGCTGATGCAGACAGACATCCTCAGCTCCCAGACTTCATGGCCAGAGATTTATAGGATCC
798
CCTGTGGAACCCTCAGTCTTTCCCAGTAACCCTCGGGCCCGACTACGTCTGTCTGTAGGAGTCGAGGGTCTGAAGTACCGGTCTCTAAATATCCTAGG

FIG. 4-2

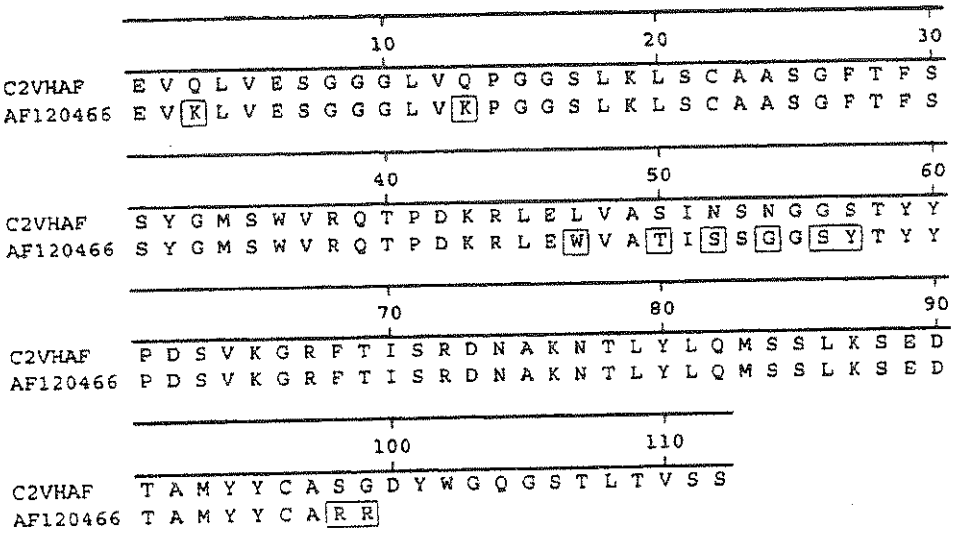

10 20 30
C2VHAF E V Q L V E S G G G L V Q P G G S L K L S C A A S G F T F S
AF120466 E V K L V E S G G G L V K P G G S L K L S C A A S G F T F S
40 50 60
C2VHAF S Y G M S W V R Q T P D K R L E L V A S I N S N G G S T Y Y
AF120466 S Y G M S W V R Q T P D K R L E W V A T I S S G G S Y T Y Y
70 80 90
C2VHAF P D S V K G R F T I S R D N A K N T L Y L Q M S S L K S E D
AF120466 P D S V K G R F T I S R D N A K N T L Y L Q M S S L K S E D
100 110
C2VHAF T A M Y Y C A S G D Y W G Q G S T L T V S S
AF120466 T A M Y Y C A R R

**FIG 5**

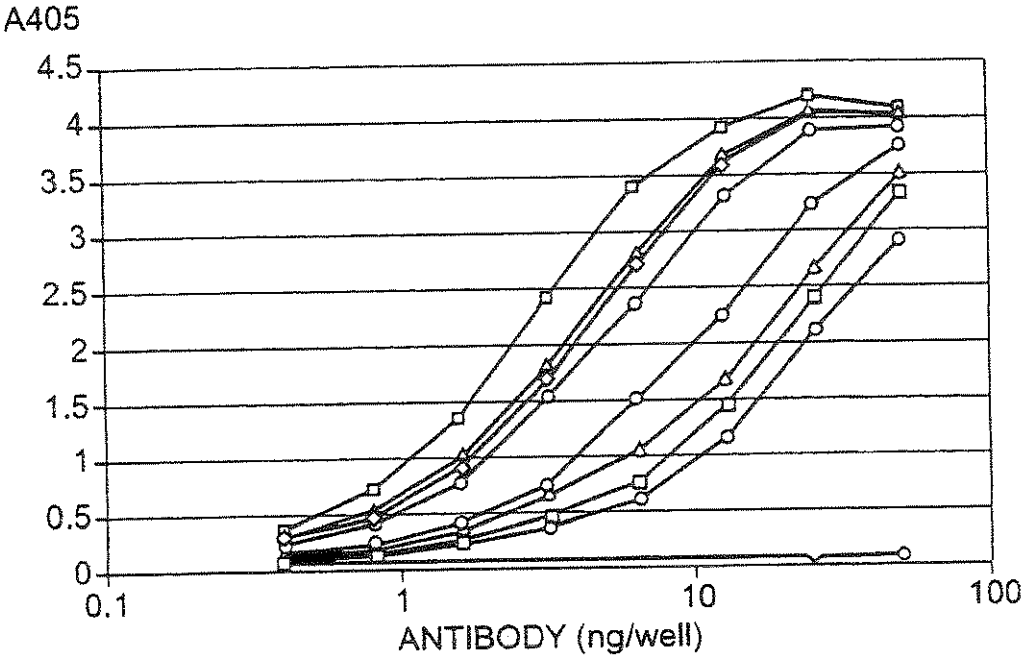

A405
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
0.1
1
10
100
ANTIBODY (ng/well)
NEGATIVE CONTROL
CHIMERIC ch VHAF/CHVK
CHIMERIC AT/HuIgG4
CHIMERIC B HuIgG4
HuVHv2/HuVKv1
HuVHv2/HuVKv2
HuVHv2/HuVKv3
HuVHv2/HuVKv4
HuVHv4/HuVKv1
HuVHv4/HuVKv2
HuVHv4/HuVKv3
HuVHv4/HuVKv4

*FIG. 6*

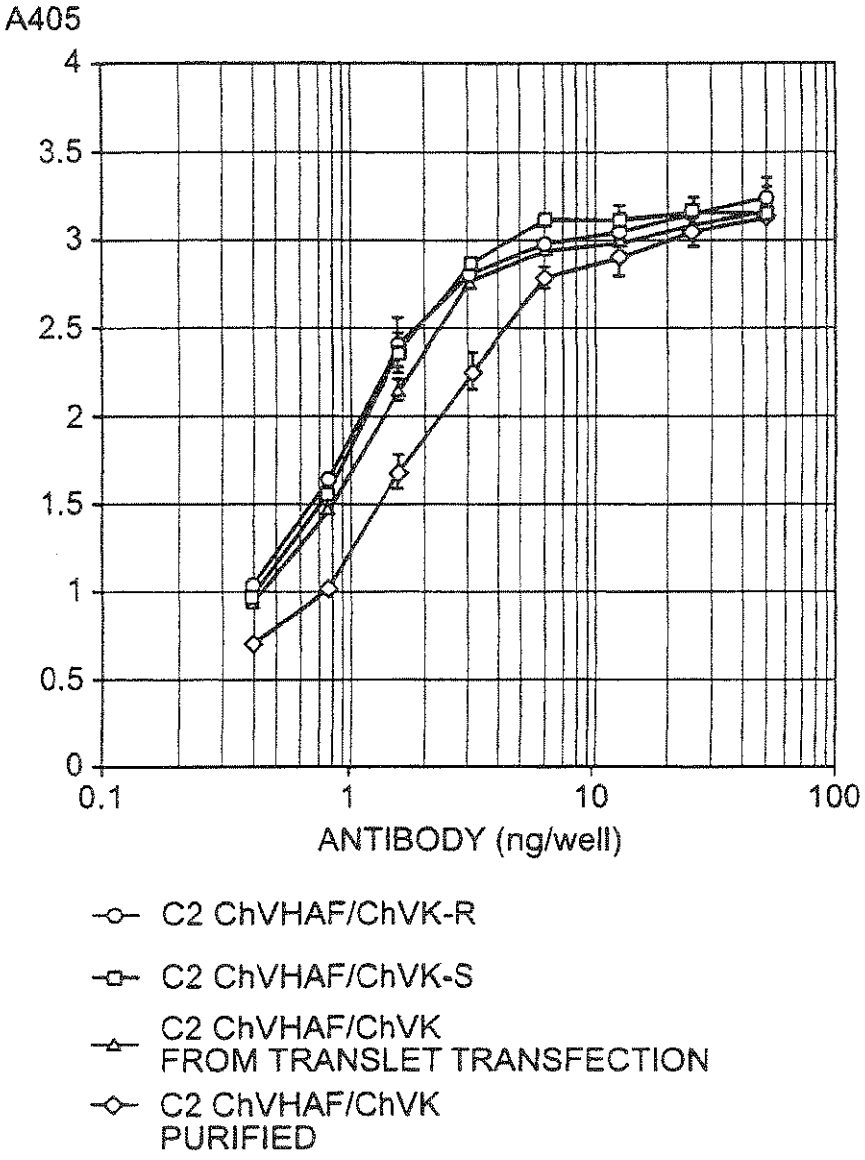

A405
4
3.5
3
2.5
2
1.5
1
0.5
0
0.1
1
10
100
ANTIBODY (ng/well)
C2 ChVHAF/ChVK-R
C2 ChVHAF/ChVK-S
C2 ChVHAF/ChVK
FROM TRANSLET TRANSFECTION
C2 ChVHAF/ChVK
PURIFIED

*FIG. 7*

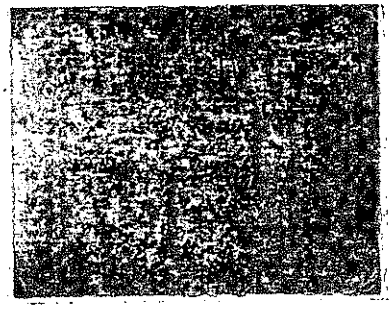
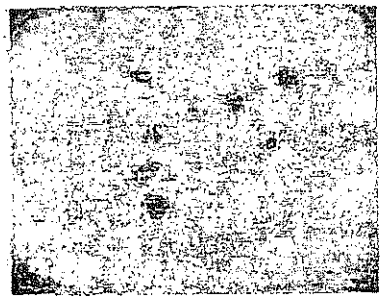
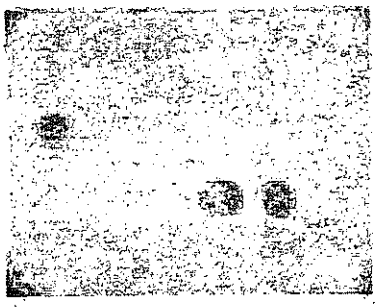
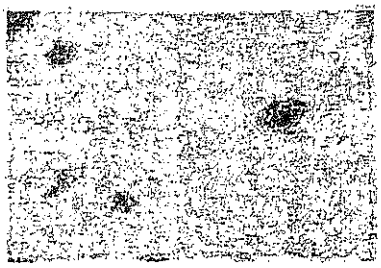
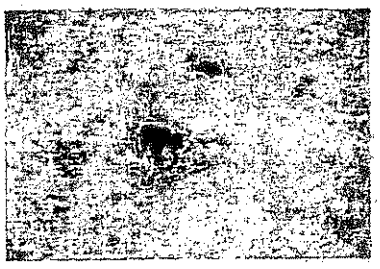
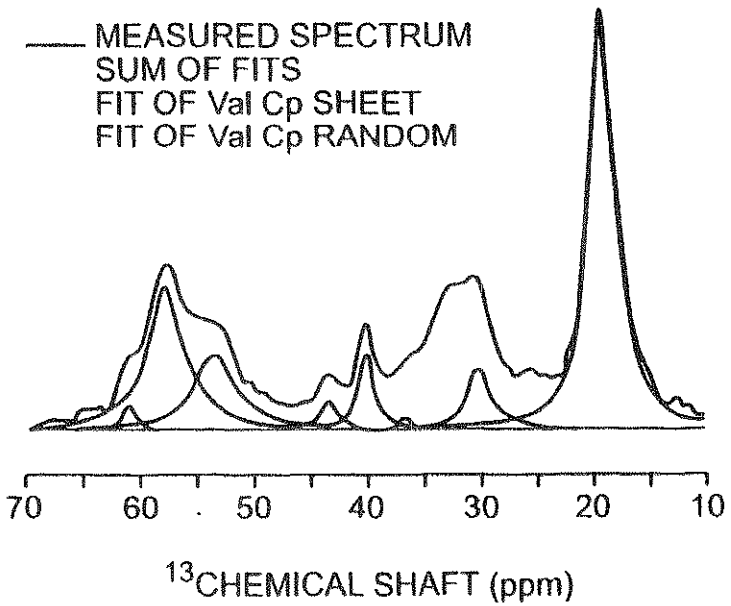
| | C: Antibody hC2 | A: Chimeric antibody |
|---|---|---|
| Control patient |  |  |
| | Temporal neocortex region I, 40 x | CA4 (Cornu ammonis region 4), 40 x |
| AD patient |  |  |
| | Temporal neocortex region I, 40 x | Temporal neocortex region I, 40 x |
| preAD patient |  |  |
| | Temporal neocortex region I, 40 x | Temporal neocortex region I, 40 x |

FIG. 8



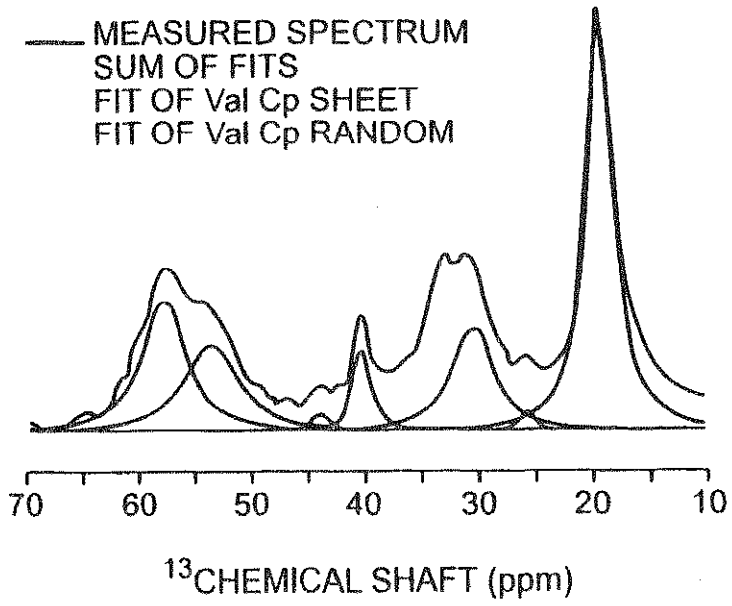




*FIG. 9A*

| RESONANCE | PBS | | | MOUSE C2 | | |
|---|---|---|---|---|---|---|
| | δ ISO (ppm) | FWHH (Hz) | % INTEGRAL INTENSITY | δ ISO (ppm) | FWHH (Hz) | % INTEGRAL INTENSITY |
| Val Cβ -SHEET | 32.60 | 479 | 81.7 | 33.09 | 366 | 53.5 |
| Val Cβ -RANDOM | 30.27 | 200 | 18.3 | 30.27 | 340 | 46.5 |

*FIG. 9B*

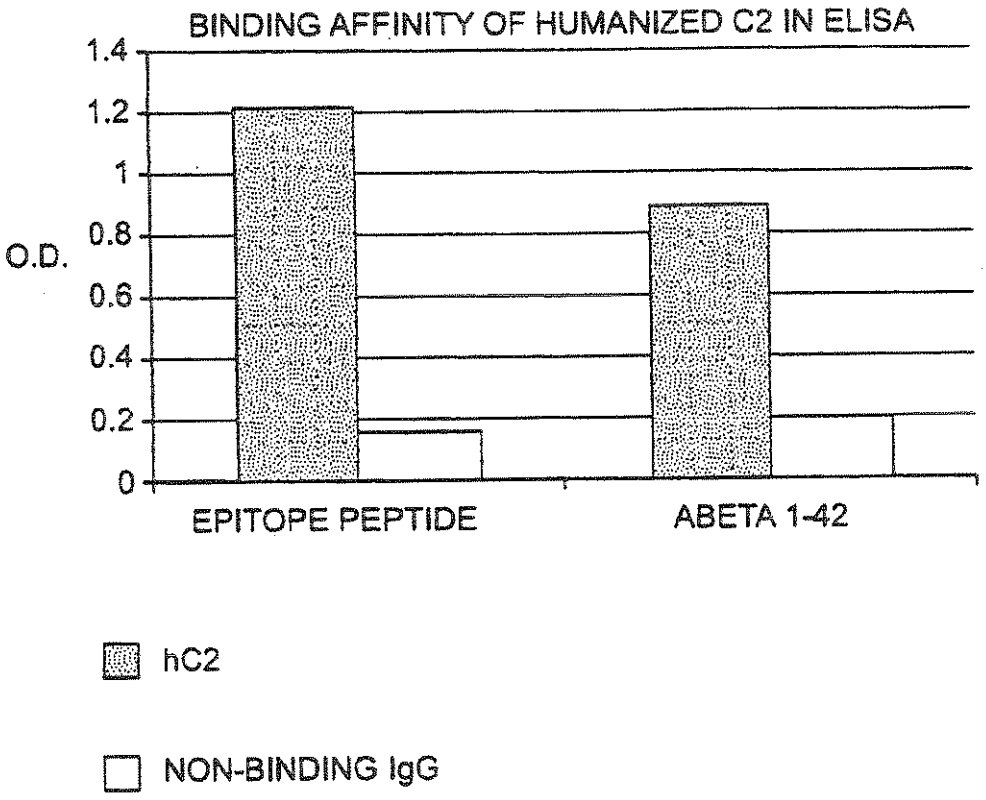

BINDING AFFINITY OF HUMANIZED C2 IN ELISA
O.D.
1.4
1.2
1
0.8
0.6
0.4
0.2
0
EPITOPE PEPTIDE
ABETA 1-42
hC2
NON-BINDING IgG

FIG. 10

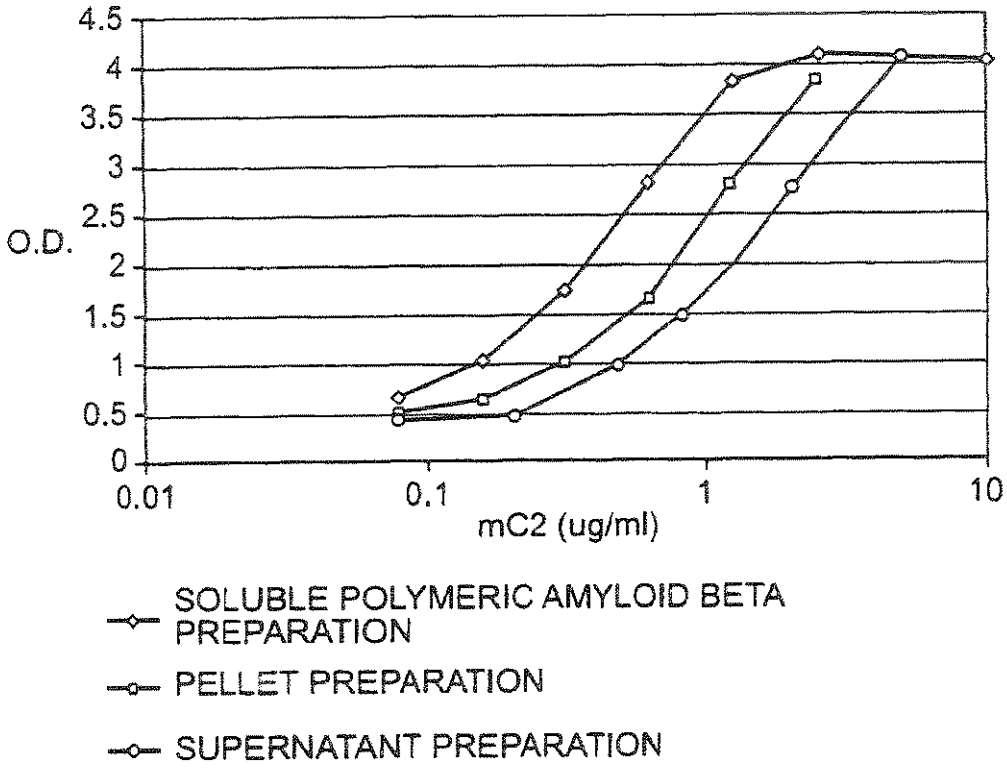

4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
O.D.
0.01
0.1
1
10
mC2 (ug/ml)
SOLUBLE POLYMERIC AMYLOID BETA PREPARATION
PELLET PREPARATION
SUPERNATANT PREPARATION

*FIG. 11*

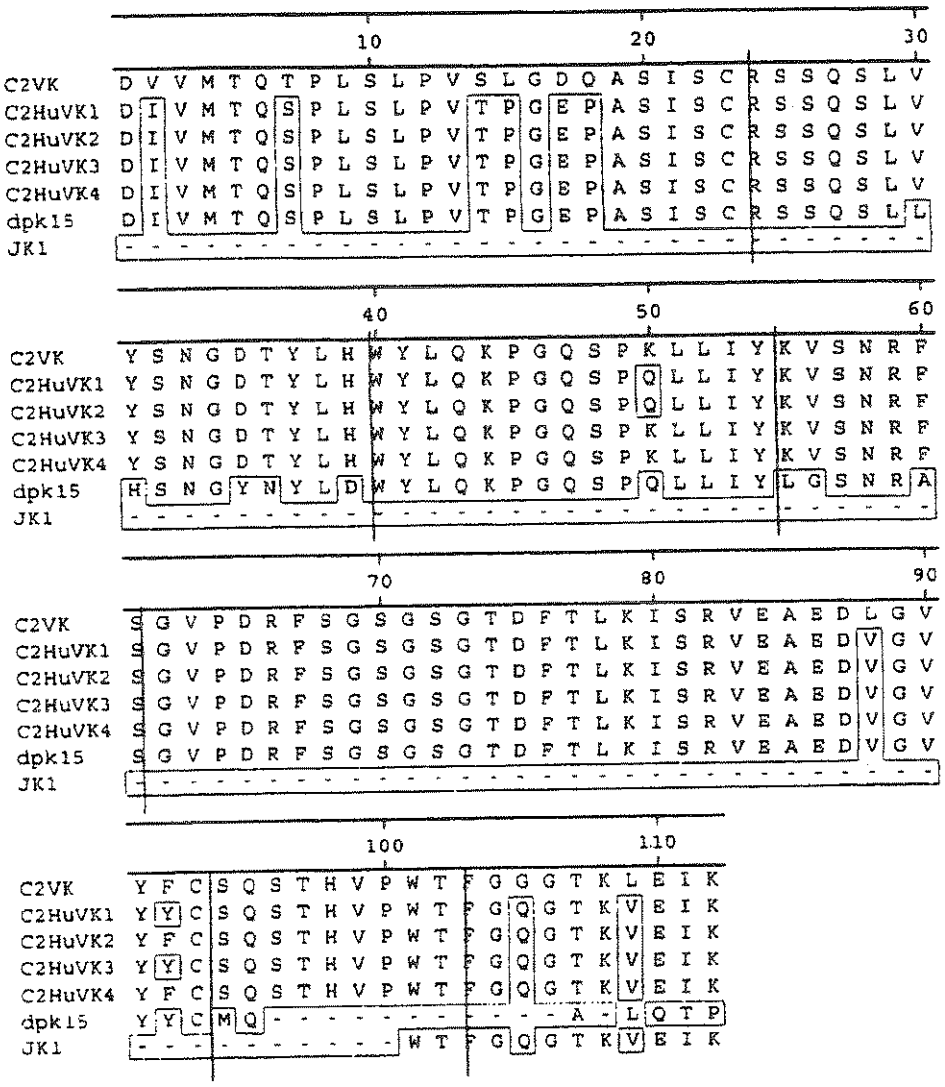

10 20 30
C2VK D V V M T Q T P L S L P V S L G D Q A S I S C R S S Q S L V
C2HuVK1 D I V M T Q S P L S L P V T P G E P A S I S C R S S Q S L V
C2HuVK2 D I V M T Q S P L S L P V T P G E P A S I S C R S S Q S L V
C2HuVK3 D I V M T Q S P L S L P V T P G E P A S I S C R S S Q S L V
C2HuVK4 D I V M T Q S P L S L P V T P G E P A S I S C R S S Q S L V
dpk15 D I V M T Q S P L S L P V T P G E P A S I S C R S S Q S L L
JK1
40 50 60
C2VK Y S N G D T Y L H W Y L Q K P G Q S P K L L I Y K V S N R F
C2HuVK1 Y S N G D T Y L H W Y L Q K P G Q S P Q L L I Y K V S N R F
C2HuVK2 Y S N G D T Y L H W Y L Q K P G Q S P Q L L I Y K V S N R F
C2HuVK3 Y S N G D T Y L H W Y L Q K P G Q S P K L L I Y K V S N R F
C2HuVK4 Y S N G D T Y L H W Y L Q K P G Q S P Q L L I Y L G S N R A
dpk15 H S N G Y N Y L D W Y L Q K P G Q S P Q L L I Y L G S N R A
JK1
70 80 90
C2VK S G V P D R F S G S G S G T D F T L K I S R V E A E D L G V
C2HuVK1 S G V P D R F S G S G S G T D F T L K I S R V E A E D V G V
C2HuVK2 S G V P D R F S G S G S G T D F T L K I S R V E A E D V G V
C2HuVK3 S G V P D R F S G S G S G T D F T L K I S R V E A E D V G V
C2HuVK4 S G V P D R F S G S G S G T D F T L K I S R V E A E D V G V
dpk15 S G V P D R F S G S G S G T D F T L K I S R V E A E D V G V
JK1
100 110
C2VK Y F C S Q S T H V P W T F G G G T K L E I K
C2HuVK1 Y Y C S Q S T H V P W T F G Q G T K V E I K
C2HuVK2 Y F C S Q S T H V P W T F G Q G T K V E I K
C2HuVK3 Y Y C S Q S T H V P W T F G Q G T K V E I K
C2HuVK4 Y F C S Q S T H V P W T F G Q G T K V E I K
dpk15 Y Y C M Q - - - - - - - - - - A - L Q T P
JK1 - - - - - - - - - W T F G Q G T K V E I K

FIG 12.

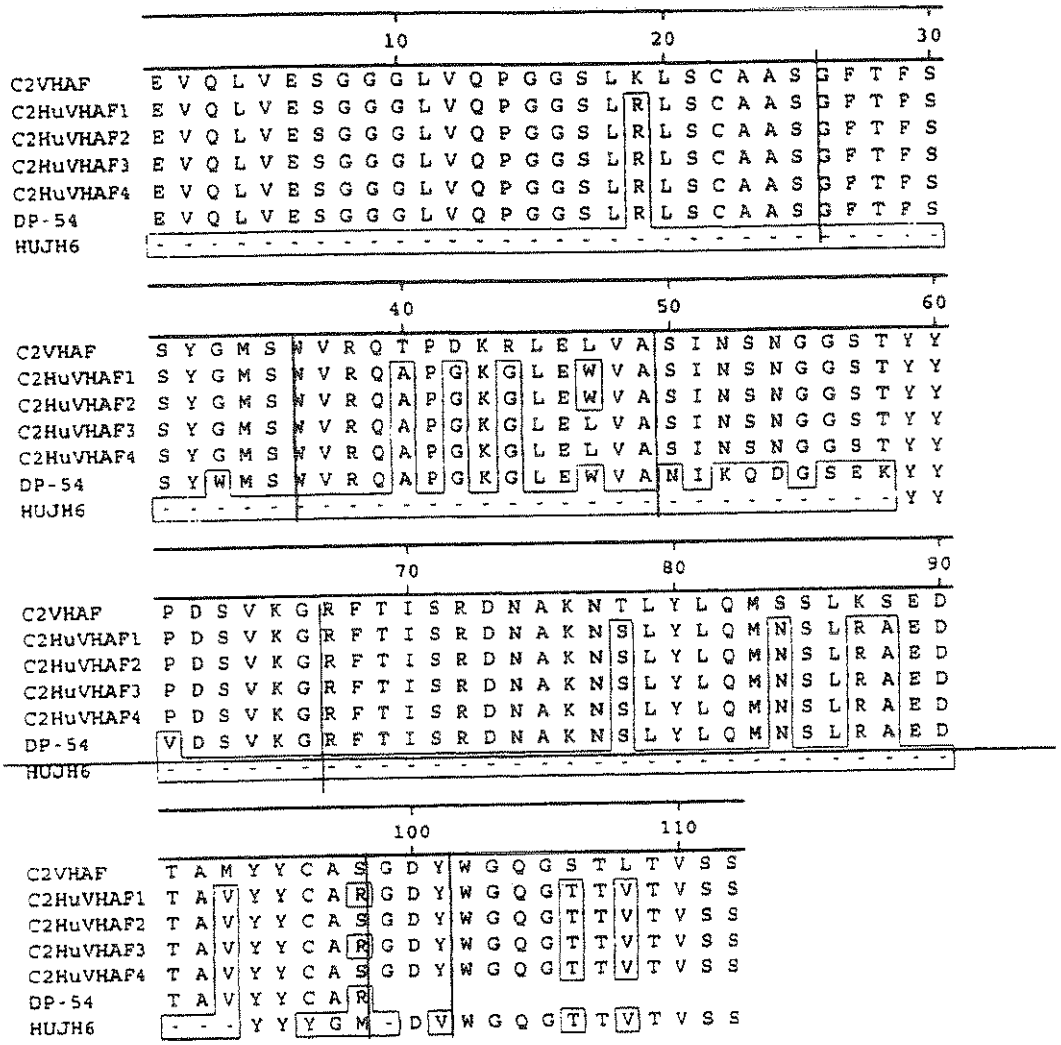

10 20 30
C2VHAF E V Q L V E S G G G L V Q P G G S L K L S C A A S G F T F S
C2HuVHAF1 E V Q L V E S G G G L V Q P G G S L R L S C A A S G F T F S
C2HuVHAF2 E V Q L V E S G G G L V Q P G G S L R L S C A A S G F T F S
C2HuVHAF3 E V Q L V E S G G G L V Q P G G S L R L S C A A S G F T F S
C2HuVHAF4 E V Q L V E S G G G L V Q P G G S L R L S C A A S G F T F S
DP-54 E V Q L V E S G G G L V Q P G G S L R L S C A A S G F T F S
HUJH6 - - - - - - - - - - - - - - - - - - - - - - - - - - - -
40 50 60
C2VHAF S Y G M S W V R Q T P D K R L E L V A S I N S N G G S T Y Y
C2HuVHAF1 S Y G M S W V R Q A P G K G L E W V A S I N S N G G S T Y Y
C2HuVHAF2 S Y G M S W V R Q A P G K G L E W V A S I N S N G G S T Y Y
C2HuVHAF3 S Y G M S W V R Q A P G K G L E L V A S I N S N G G S T Y Y
C2HuVHAF4 S Y G M S W V R Q A P G K G L E L V A S I N S N G G S T Y Y
DP-54 S Y W M S W V R Q A P G K G L E W V A N I K Q D G S E K Y Y
HUJH6 - - - - - - - - - - - - - - - - - - - - - - - - - - Y Y
70 80 90
C2VHAF P D S V K G R F T I S R D N A K N T L Y L Q M S S L K S E D
C2HuVHAF1 P D S V K G R F T I S R D N A K N S L Y L Q M N S L R A E D
C2HuVHAF2 P D S V K G R F T I S R D N A K N S L Y L Q M N S L R A E D
C2HuVHAF3 P D S V K G R F T I S R D N A K N S L Y L Q M N S L R A E D
C2HuVHAF4 P D S V K G R F T I S R D N A K N S L Y L Q M N S L R A E D
DP-54 V D S V K G R F T I S R D N A K N S L Y L Q M N S L R A E D
HUJH6 - - - - - - - - - - - - - - - - - - - - - - - - - - - -
100 110
C2VHAF T A M Y Y C A S G D Y W G Q G S T L T V S S
C2HuVHAF1 T A V Y Y C A R G D Y W G Q G T T V T V S S
C2HuVHAF2 T A V Y Y C A S G D Y W G Q G T T V T V S S
C2HuVHAF3 T A V Y Y C A R G D Y W G Q G T T V T V S S
C2HuVHAF4 T A V Y Y C A S G D Y W G Q G T T V T V S S
DP-54 T A V Y Y C A R
HUJH6 - - - Y Y Y G M - D V W G Q G T T V T V S S

FIG 13.

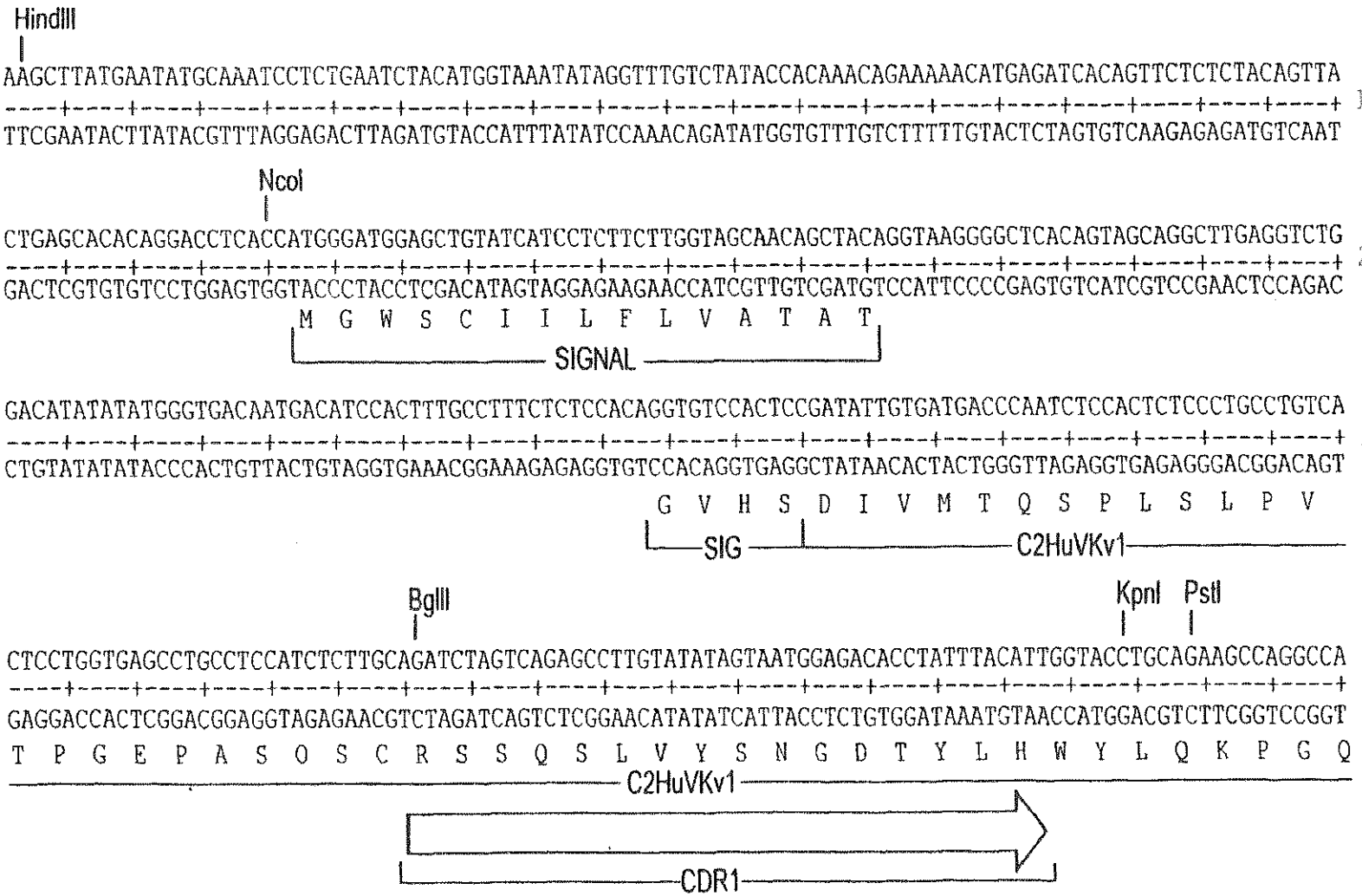

HindIII
AAGCTTATGAATATGCAAATCCTCTGAATCTACATGGTAAATATAGGTTTGTCTATACCACAAACAGAAAAACATGAGATCACAGTTCTCTCTACAGTTA
TTCGAATACTTATACGTTTAGGAGACTTAGATGTACCATTTATATCCAAACAGATATGGTGTTTGTCTTTTTGTACTCTAGTGTCAAGAGAGATGTCAAT
10
NcoI
CTGAGCACACAGGACCTCACCATGGGATGGAGCTGTATCATCCTCTTCTTGGTAGCAACAGCTACAGGTAAGGGGCTCACAGTAGCAGGCTTGAGGTCTG
GACTCGTGTGTCCTGGAGTGGTACCCTACCTCGACATAGTAGGAGAAGAACCATCGTTGTCGATGTCCATTCCCCGAGTGTCATCGTCCGAACTCCAGAC
20
M G W S C I I L F L V A T A T
SIGNAL
GACATATATATGGGTGACAATGACATCCACTTTGCCTTTCTCTCCACAGGTGTCCACTCCGATATTGTGATGACCCAATCTCCACTCTCCCTGCCTGTCA
CTGTATATATACCCACTGTTACTGTAGGTGAAACGGAAAGAGAGGTGTCCACAGGTGAGGCTATAACACTACTGGGTTAGAGGTGAGAGGGACGGACAGT
30
G V H S D I V M T Q S P L S L P V
SIG
C2HuVKv1
BglII
KpnI
PstI
CTCCTGGTGAGCCTGCCTCCATCTCTTGCAGATCTAGTCAGAGCCTTGTATATAGTAATGGAGACACCTATTTACATTGGTACCTGCAGAAGCCAGGCCA
GAGGACCACTCGGACGGAGGTAGAGAACGTCTAGATCAGTCTCGGAACATATATCATTACCTCTGTGGATAAATGTAACCATGGACGTCTTCGGTCCGGT
40
T P G E P A S Q S C R S S Q S L V Y S N G D T Y L H W Y L Q K P G Q
C2HuVKv1
CDR1

FIG. 14-1

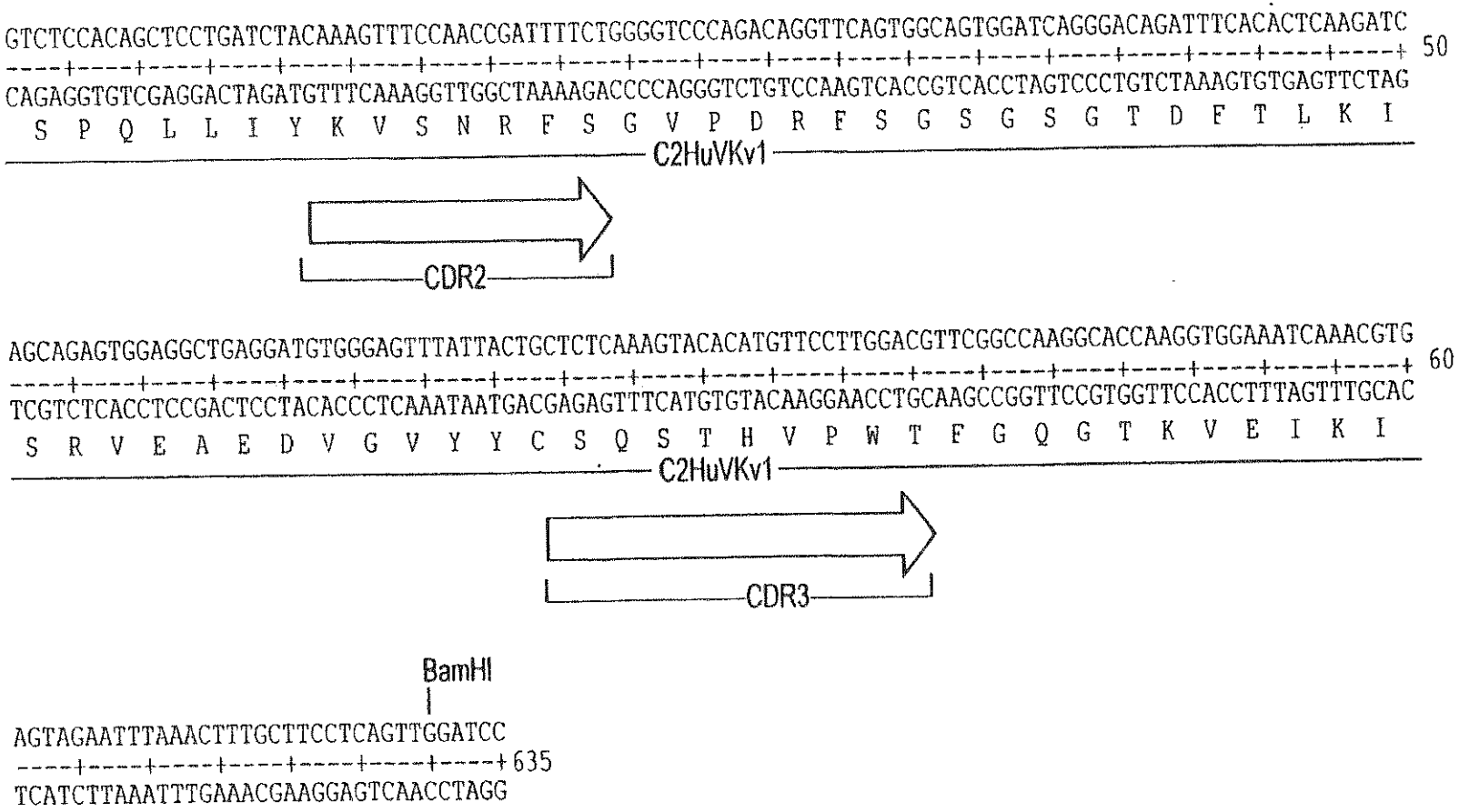

GTCTCCACAGCTCCTGATCTACAAAGTTTCCAACCGATTTTCTGGGGTCCCAGACAGGTTCAGTGGCAGTGGATCAGGGACAGATTTCACACTCAAGATC
50
CAGAGGTGTCGAGGACTAGATGTTTCAAAGGTTGGCTAAAAGACCCCAGGGTCTGTCCAAGTCACCGTCACCTAGTCCCTGTCTAAAGTGTGAGTTCTAG
S P Q L L I Y K V S N R F S G V P D R F S G S G S G T D F T L K I
C2HuVKv1
CDR2
AGCAGAGTGGAGGCTGAGGATGTGGGAGTTTATTACTGCTCTCAAAGTACACATGTTCCTTGGACGTTCGGCCAAGGCACCAAGGTGGAAATCAAACGTG
60
TCGTCTCACCTCCGACTCCTACACCCTCAAATAATGACGAGAGTTTCATGTGTACAAGGAACCTGCAAGCCGGTTCCGTGGTTCCACCTTTAGTTTGCAC
S R V E A E D V G V Y Y C S Q S T H V P W T F G Q G T K V E I K I
C2HuVKv1
CDR3
BamHI
AGTAGAATTTAAACTTTGCTTCCTCAGTTGGATCC
635
TCATCTTAAATTTGAAACGAAGGAGTCAACCTAGG

FIG. 14-2


BamHI
BglII
GGATCCTGGCAGAGTCTCACAGATGCTTCTGAGACAACATTTGCTTTCAAAAAATGAACCACACACATCCTAAAGATCTCAGCCACTTCCCATGTTTCAT
100
CCTAGGACCGTCTCAGAGTGTCTACGAAGACTCTGTTGTAAACGAAAGTTTTTTACTTGGTGTGTGTAGGATTTCTAGAGTCGGTGAAGGGTACAAAGTA
TTTATGTTACAGCAAACATCACAACAATCATTCCTACAGATCACCACTGCATGTGATCAATAAAATAGTTTTTGCAACAATGGTACTTATGATAATCATC
200
AAATACAATGTCGTTTGTAGTGTTGTTAGTAAGGATGTCTAGTGGTGACGTACACTAGTTATTTTATCAAAAACGTTGTTACCATGAATACTATTAGTAG
TTTTATTGTTTACAAATACTGCTTTACAATAGTTATTCGGTTGCACTGTTCATATTAGATTTCCAATTAGCTCACTTAGGAACATAAGTCCCTCGAACAG
300
AAAATAACAAATGTTTATGACGAAATGTTATCAATAAGCCAACGTGACAAGTATAATCTAAAGGTTAATCGAGTGAATCCTTGTATTCAGGGAGCTTGTC
CTCAGTCATCTTTTTCATTCCTGTTTCTATCCCCTACATCTCTTTCCTTTGCAGACGACTATCTCCTACACTGAAACAGGAAAGCTAGCTTTTTTTTTTC
400
GAGTCAGTAGAAAAAGTAAGGACAAAGATAGGGGATGTAGAGAAAGGAAACGTCTGCTGATAGAGGATGTGACTTTGTCCTTTCGATCGAAAAAAAAAAG
AGTGCTATTTAATTATTTCAATATCCTCTCATCAAATGTATTTAAATAACAAAAGCTCAACCAAAAAGAAAGAAATATGTAATTCTTTCAGAGTAAAAAT
500
TCACGATAAATTAATAAAGTTATAGGAGAGTAGTTTACATAAATTTATTGTTTTCGAGTTGGTTTTTCTTTCTTTATACATTAAGAAAGTCTCATTTTTA
CACACCCATGACCTGGCCACTGAGGGCTTGATCAATTCACTTTGAATTTGGCATTAAATACCATTAAGGTATATTAACTGATTTTAAAATAAGATATATT
600
GTGTGGGTACTCGACCGGTGACTCCCGAACTAGTTAAGTGAAACTTAAACCGTAATTTATGGTAATTCCATATAATTGACTAAAATTTTATTCTATATAA
CGTGACCATGTTTTTAACTTTCAAAAATGTAGCTGCCAGTGTGTGATTTTATTTCAGTTGTACAAAATATCTAAACCTATAGCAATGTGATTAATAAAAA
700
GCACTGGTACAAAAATTGAAAGTTTTTACATCGACGGTCACACACTAAAATAAAGTCAACATGTTTTATAGATTTGGATATCGTTACACTAATTATTTTT

FIG. 15-1


CTTAAACATATTTTCCAGTACCTTAATTCTGTGATAGGAAAATTTTAATCTGAGTATTTTAATTTCATAATCTCTAAAATAGTTTAATGATTTGTCATTG
800
GAATTTGTATAAAAGGTCATGGAATTAAGACACTATCCTTTTAAAATTAGACTCATAAAATTAAAGTATTAGAGATTTTATCAAATTACTAAACAGTAAC
PvuII
TGTTGCTGTCGTTTACCCCAGCTGATCTCAAAAGTGATATTTAAGGAGATTATTTTGGTCTGCAACAACTTGATAGGACTATTTTAGGGCCTTTTTAAAG
900
ACAACGACAGCAAATGGGGTCGACTAGAGTTTTCACTATAAATTCCTCTAATAAAACCAGACGTTGTTGAACTATCCTGATAAAATCCCGGAAAAATTTC
CTCTATTAAAACTAACTTACAACGATTCAAAACTGTTTTAAACTATTTCAAAATGATTTTAGAGCCTTTTGAAAACTCTTTTAAACACTTTTTAAACTCT
1000
GAGATAATTTTGATTGAATGTTGCTAAGTTTTGACAAAATTTGATAAAGTTTTACTAAAATCTCGGAAAACTTTTGAGAAAATTTGTGAAAAATTTGAGA
EcoRI
ATTAAAACTAATAAGATAACTTGAAATAATTTTCATGTCAAATACATTAACTGTTTAATGTTTAAATGCCAGATGAAAAATGTAAAGCTATCAAGAATTC
1100
TAATTTTGATTATTCTATTGAACTTTATTAAAAGTACAGTTTATGTAATTGACAAATTACAAATTTACGGTCTACTTTTTACATTTCGATAGTTCTTAAG
NcoI
ACCCAGATAGGAGTATCTTCATAGCATGTTTTTCCCTGCTTATTTTCCAGTGATCACATTATTTTGCTACCATGGTTATTTTATACAATTATCTGAAAAA
1200
TGGGTCTATCCTCATAGAAGTATCGTACAAAAAGGGACGAATAAAAGGTCACTAGTGTAATAAAACGATGGTACCAATAAAATATGTTAATAGACTTTTT
AATTAGTTATGAAGATTAAAAGAGAAGAAAATATTAAACATAAGAGATTCAGTCTTTCATGTTGAACTGCTTGGTTAACAGTGAAGTTAGTTTTAAAAAA
1300
TTAATCAATACTTCTAATTTTCTCTTCTTTTATAATTTGTATTCTCTAAGTCAGAAAGTACAACTTGACGAACCAATTGTCACTTCAATCAAAATTTTTT
PvuII
AAAAAAAACTATTTCTGTTATCAGCTGACTTCTCCCTATCTGTTGACTTCTCCCAGCAAAAGATTCTTATTTTACATTTTAACTACTGCTCTCCCACCCA
1400
TTTTTTTTGATAAAGACAATAGTCGACTGAAGAGGGATAGACAACTGAAGAGGGTCGTTTTCTAAGAATAAAATGTAAAATTGATGACGAGAGGGTGGGT

FIG. 15-2

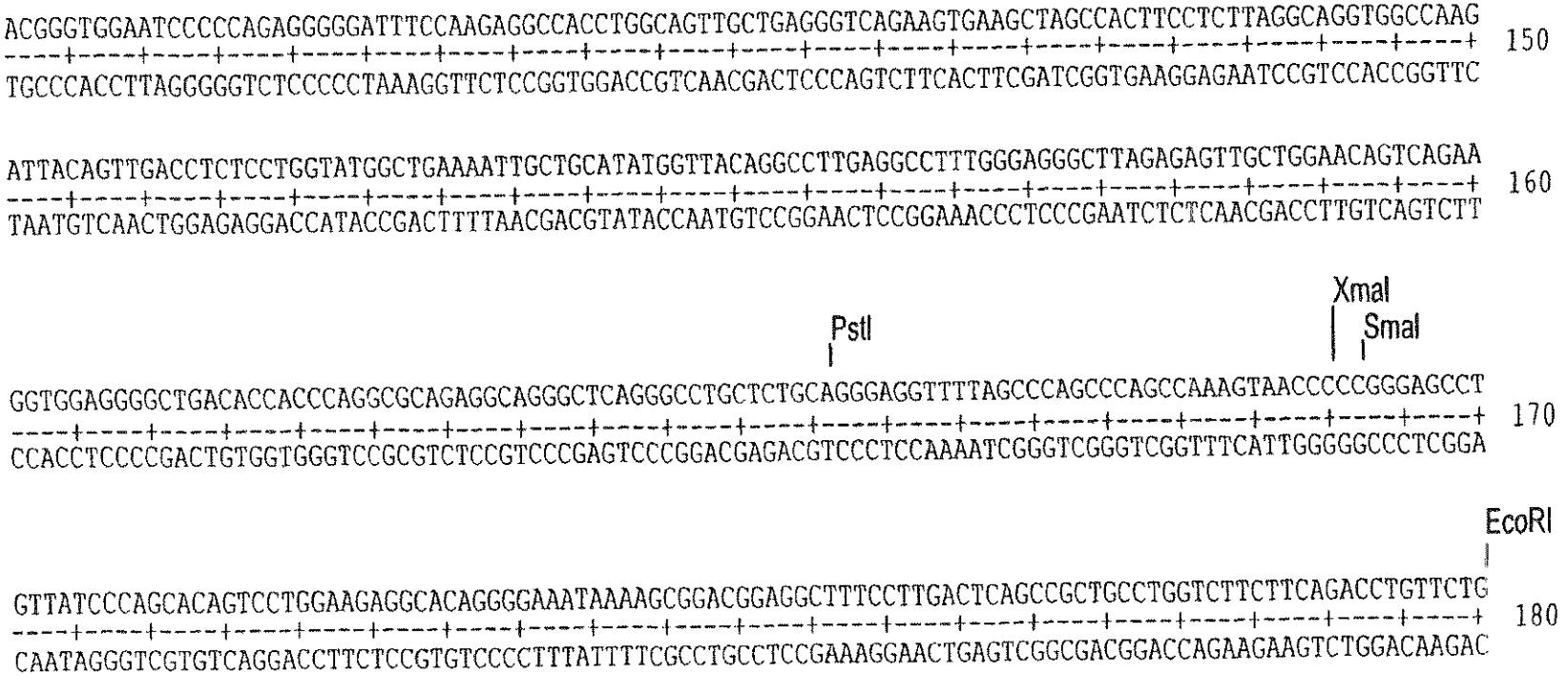

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150
TGCCCACCTTAGGGGGTCTCCCCCTAAAGGTTCTCCGGTGGACCGTCAACGACTCCCAGTCTTCACTTCGATCGGTGAAGGAGAATCCGTCCACCGGTTC
ATTACAGTTGACCTCTCCTGGTATGGCTGAAAATTGCTGCATATGGTTACAGGCCTTGAGGCCTTTGGGAGGGCTTAGAGAGTTGCTGGAACAGTCAGAA
160
TAATGTCAACTGGAGAGGACCATACCGACTTTTAACGACGTATACCAATGTCCGGAACTCCGGAAACCCTCCCGAATCTCTCAACGACCTTGTCAGTCTT
XmaI
PstI
SmaI
GGTGGAGGGGCTGACACCACCCAGGCGCAGAGGCAGGGCTCAGGGCCTGCTCTGCAGGGAGGTTTTAGCCCAGCCCAGCCAAAGTAACCCCCGGGAGCCT
170
CCACCTCCCCGACTGTGGTGGGTCCGCGTCTCCGTCCCGAGTCCCGGACGAGACGTCCCTCCAAAATCGGGTCGGGTCGGTTTCATTGGGGGCCCTCGGA
EcoRI
GTTATCCCAGCACAGTCCTGGAAGAGGCACAGGGGAAATAAAAGCGGACGGAGGCTTTCCTTGACTCAGCCGCTGCCTGGTCTTCTTCAGACCTGTTCTG
180
CAATAGGGTCGTGTCAGGACCTTCTCCGTGTCCCCTTTATTTTCGCCTGCCTCCGAAAGGAACTGAGTCGGCGACGGACCAGAAGAAGTCTGGACAAGAC

FIG. 15-3


SphI
AATTCTAAACTCTGAGGGGGTCGGATGACGTGGCCATTCTTTGCCTAAAGCATTGAGTTTACTGCAAGGTCAGAAAAGCATGCAAAGCCCTCAGAATGGC
TTAAGATTTGAGACTCCCCCAGCCTACTGCACCGGTAAGAAACGGATTTCGTAACTCAAATGACGTTCCAGTCTTTTCGTACGTTTCGGGAGTCTTACCG
190
SacI
TGCAAAGAGCTCCAACAAAACAATTTAGAACTTTATTAAGGAATAGGGGGAAGCTAGGAAGAAACTCAAAACATCAAGATTTTAAATACGCTTCTTGGTC
ACGTTTCTCGAGGTTGTTTTGTTAAATCTTGAAATAATTCCTTATCCCCCTTCGATCCTTCTTTGAGTTTTGTAGTTCTAAAATTTATGCGAAGAACCAG
200
SphI
TCCTTGCTATAATTATCTGGGATAAGCATGCTGTTTTCTGTCTGTCCCTAACATGCCCTGTGATTATCCGCAAACAACACACCCAAGGGCAGAACTTTGT
AGGAACGATATTAATAGACCCTATTCGTACGACAAAAGACAGACAGGGATTGTACGGGACACTAATAGGCGTTTGTTGTGTGGGTTCCCGTCTTGAAACA
210
BsgI
TACTTAAACACCATCCTGTTTGCTTCTTTCCTCAGGAACTGTGGCTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTGAAATCTGGAACT
ATGAATTTGTGGTAGGACAAACGAAGAAAGGAGTCCTTGACACCGACGTGGTAGACAGAAGTAGAAGGGCGGTAGACTACTCGTCAACTTTAGACCTTGA
220
SPLICE
T V A A P S V F I P P P S D E Q L K S G T
HuCK
R

FIG. 15-4

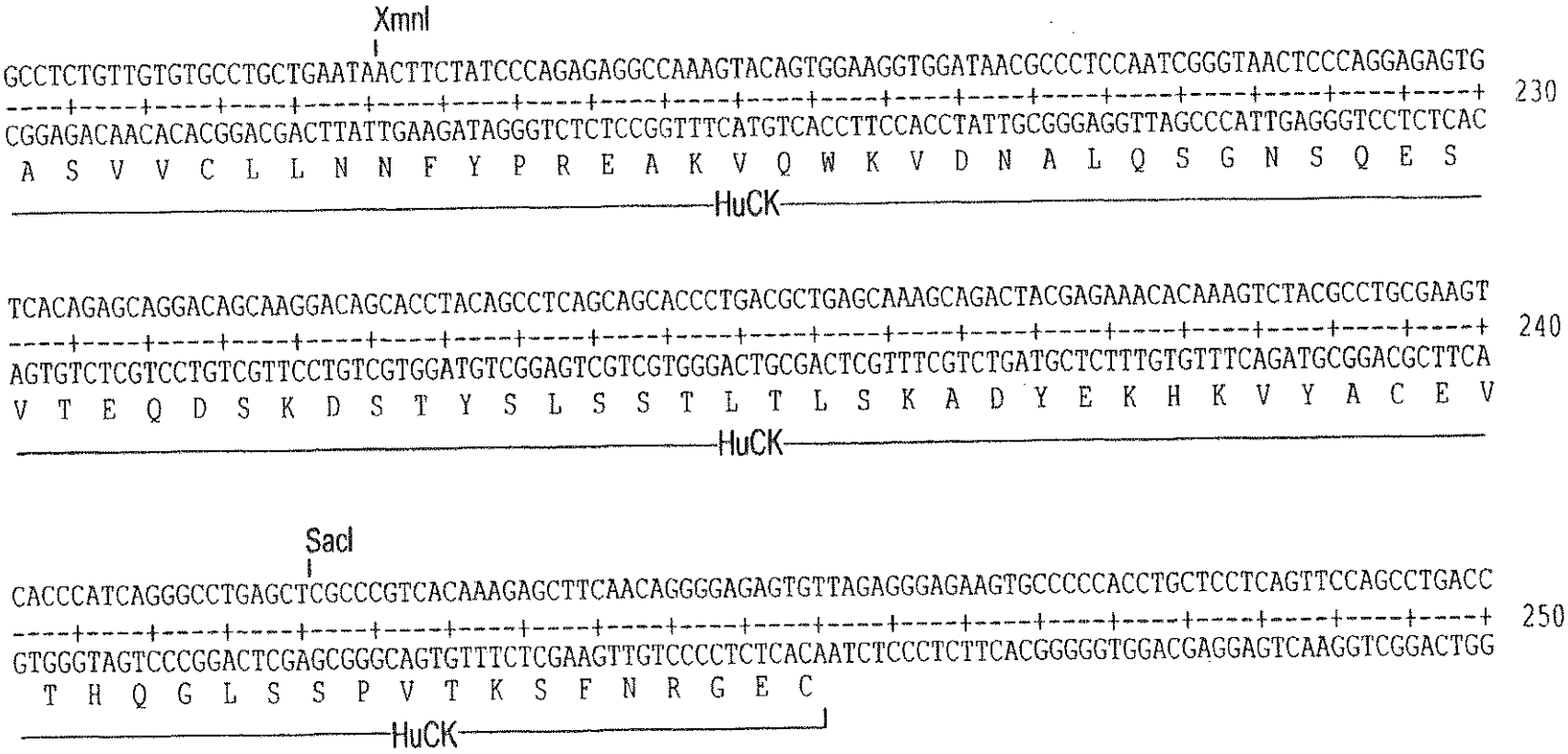

XmnI
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230
CGGAGACAACACACGGACGACTTATTGAAGATAGGGTCTCTCCGGTTTCATGTCACCTTCCACCTATTGCGGGAGGTTAGCCCATTGAGGGTCCTCTCAC
A S V V C L L N N F Y P R E A K V Q W K V D N A L Q S G N S Q E S
HuCK
TCACAGAGCAGGACAGCAAGGACAGCACCTACAGCCTCAGCAGCACCCTGACGCTGAGCAAAGCAGACTACGAGAAACACAAAGTCTACGCCTGCGAAGT
240
AGTGTCTCGTCCTGTCGTTCCTGTCGTGGATGTCGGAGTCGTCGTGGGACTGCGACTCGTTTCGTCTGATGCTCTTTGTGTTTCAGATGCGGACGCTTCA
V T E Q D S K D S T Y S L S S T L T L S K A D Y E K H K V Y A C E V
HuCK
SacI
CACCCATCAGGGCCTGAGCTCGCCCGTCACAAAGAGCTTCAACAGGGGAGAGTGTTAGAGGGAGAAGTGCCCCCACCTGCTCCTCAGTTCCAGCCTGACC
250
GTGGGTAGTCCCGGACTCGAGCGGGCAGTGTTTCTCGAAGTTGTCCCCTCTCACAATCTCCCTCTTCACGGGGGTGGACGAGGAGTCAAGGTCGGACTGG
T H Q G L S S P V T K S F N R G E C
HuCK

FIG. 15-5


CCCTCCCATCCTTTGGCCTCTGACCCTTTTTTCCACAGGGGACCTACCCCTATTGCGGTCCTCCAGCTCATCTTTCACCTCACCCCCCTCCTCCTCCTTGG
260
GGGAGGGTAGGAAACCGGAGACTGGGAAAAAGGTGTCCCCTGGATGGGGATAACGCCAGGAGGTCGAGTAGAAAGTGGAGTGGGGGGAGGAGGAGGAACC
CTTTAATTATGCTAATGTTGGAGGAGAATGAATAAATAAAGTGAATCTTTGCACCTGTGGTTTCTCTCTTTCCTCATTTAATAATTATTATCTGTTGTTT
270
GAAATTAATACGATTACAACCTCCTCTTACTTATTTATTTCACTTAGAAACGTGGACACCAAAGAGAGAAAGGAGTAAATTATTAATAATAGACAACAAA
TACCAACTACTCAATTTCTCTTATAAGGGACTAAATATGTAGTCATCCTAAGGCGCATAACCATTTATAAAAATCATCCTTCATTCTATTTTACCCTATC
280
ATGGTTGATGAGTTAAAGAGAATATTCCCTGATTTATACATCAGTAGGATTCCGCGTATTGGTAAATATTTTTAGTAGGAAGTAAGATAAAATGGGATAG
NcoI
ATCCTCTGCAATACAGTCCTCCCTCAAACCCACAAGCCTTCTGTCCTCACAGTCCCCTGGGCCATGGTAGGAGAGACTTGCTTCCTTGTTTTCCCCTCCT
290
TAGGAGACGTTATGTCAGGAGGGAGTTTGGGTGTTCGGAAGACAGGAGTGTCAGGGGACCCGGTACCATCCTCTCTGAACGAAGGAACAAAAGGGGAGGA
CAGCAAGCCCTCATAGTCCTTTTTAAGGGTGACAGGTCTTACAGTCATATATCCTTTGATTCAATTCCCTGAGAATCAACCAAAGCAAATTTTTCAAAAG
300
GTCGTTCGGGAGTATCAGGAAAAATTCCCACTGTCCAGAATGTCAGTATATAGGAAACTAAGTTAAGGGACTCTTAGTTGGTTTCGTTTAAAAAGTTTTC
AAGAAACCTGCTATAAAGAGAATCATTCATTGCAACATGATATAAAATAACAACACAATAAAAGCAATTAAATAAACAAACAATAGGGAAATGTTTAAGT
310
TTCTTTGGACGATATTTCTCTTAGTAAGTAACGTTGTACTATATTTTATTGTTGTGTTATTTTCGTTAATTTATTTGTTTGTTATCCCTTTACAAATTCA
TCATCATGGTACTTAGACTTAATGGAATGTCATGCCTTATTTACATTTTTAAACAGGTACTGAGGGACTCCTGTCTGCCAAGGGCCGTATTGAGTACTTT
320
AGTAGTACCATGAATCTGAATTACCTTACAGTACGGAATAAATGTAAAAATTTGTCCATGACTCCCTGAGGACAGACGGTTCCCGGCATAACTCATGAAA
CCACAACCTAATTTAATCCACACTATACTGTGAGATTAAAAACATTCATTAAAATGTTGCAAAGGTTCTATAAAGCTGAGAGACAAATATATTCTATAAC
330
GGTGTTGGATTAAATTAGGTGTGATATGACACTCTAATTTTTGTAAGTAATTTTACAACGTTTCCAAGATATTTCGACTCTCTGTTTATATAAGATATTG

FIG. 15-6

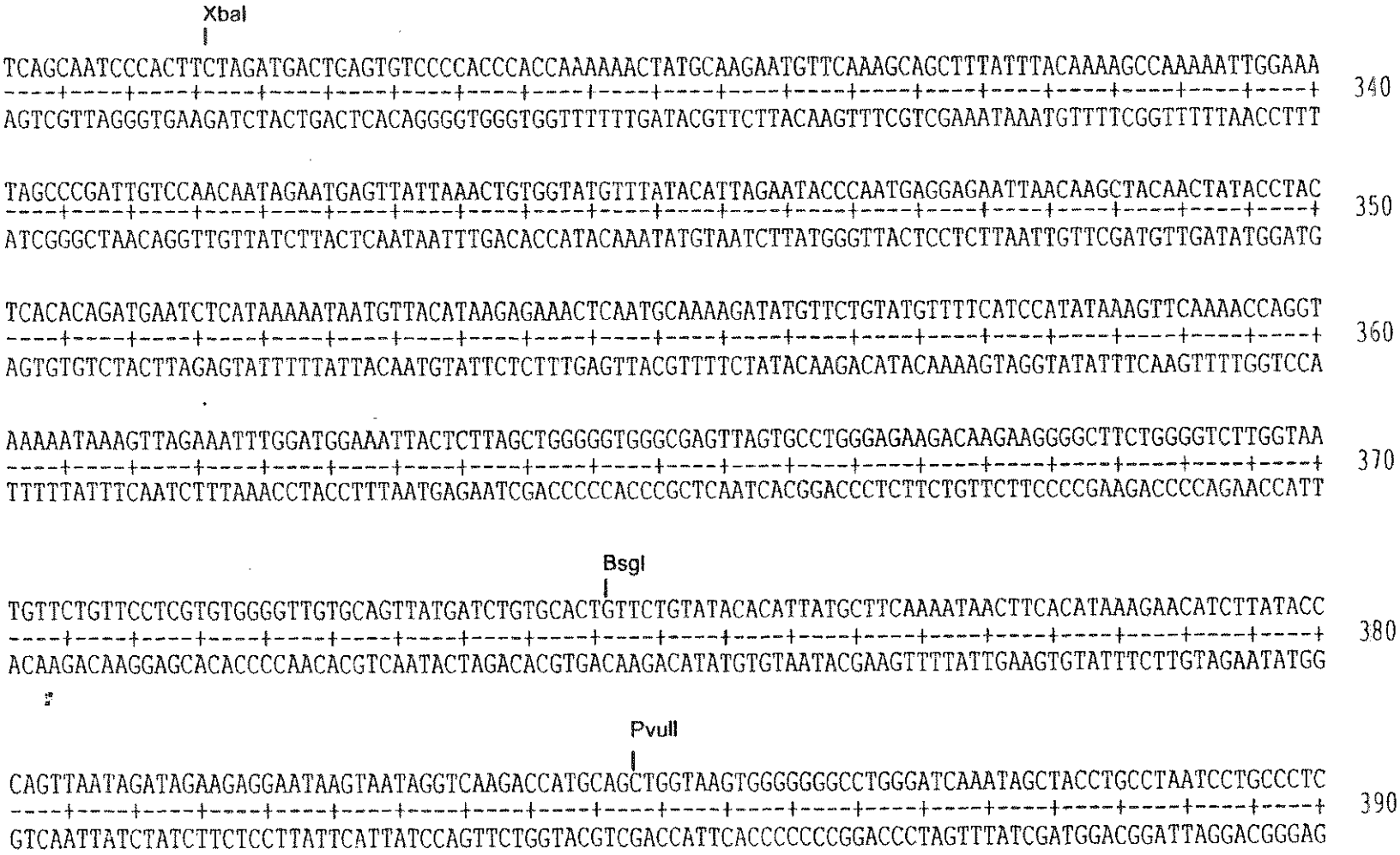

XbaI
TCAGCAATCCCACTTCTAGATGACTGAGTGTCCCCACCCACCAAAAAACTATGCAAGAATGTTCAAAGCAGCTTTATTTACAAAAGCCAAAAATTGGAAA
AGTCGTTAGGGTGAAGATCTACTGACTCACAGGGGTGGGTGGTTTTTTGATACGTTCTTACAAGTTTCGTCGAAATAAATGTTTTCGGTTTTTAACCTTT
340
TAGCCCGATTGTCCAACAATAGAATGAGTTATTAAACTGTGGTATGTTTATACATTAGAATACCCAATGAGGAGAATTAACAAGCTACAACTATACCTAC
ATCGGGCTAACAGGTTGTTATCTTACTCAATAATTTGACACCATACAAATATGTAATCTTATGGGTTACTCCTCTTAATTGTTCGATGTTGATATGGATG
350
TCACACAGATGAATCTCATAAAAATAATGTTACATAAGAGAAACTCAATGCAAAAGATATGTTCTGTATGTTTTCATCCATATAAAGTTCAAAACCAGGT
AGTGTGTCTACTTAGAGTATTTTTATTACAATGTATTCTCTTTGAGTTACGTTTTCTATACAAGACATACAAAAGTAGGTATATTTCAAGTTTTGGTCCA
360
AAAAATAAAGTTAGAAATTTGGATGGAAATTACTCTTAGCTGGGGGTGGGCGAGTTAGTGCCTGGGAGAAGACAAGAAGGGGCTTCTGGGGTCTTGGTAA
TTTTTATTTCAATCTTTAAACCTACCTTTAATGAGAATCGACCCCCACCCGCTCAATCACGGACCCTCTTCTGTTCTTCCCCGAAGACCCCAGAACCATT
370
BsgI
TGTTCTGTTCCTCGTGTGGGGTTGTGCAGTTATGATCTGTGCACTGTTCTGTATACACATTATGCTTCAAAATAACTTCACATAAAGAACATCTTATACC
ACAAGACAAGGAGCACACCCCAACACGTCAATACTAGACACGTGACAAGACATATGTGTAATACGAAGTTTTATTGAAGTGTATTTCTTGTAGAATATGG
380
PvuII
CAGTTAATAGATAGAAGAGGAATAAGTAATAGGTCAAGACCATGCAGCTGGTAAGTGGGGGGGCCTGGGATCAAATAGCTACCTGCCTAATCCTGCCCTC
GTCAATTATCTATCTTCTCCTTATTCATTATCCAGTTCTGGTACGTCGACCATTCACCCCCCCGGACCCTAGTTTATCGATGGACGGATTAGGACGGGAG
390

FIG. 15-7


TTGAGCCCTGAATGAGTCTGCCTTCCAGGGCTCAAGGTGCTCAACAAAACAACAGGCCTGCTATTTTCCTGGCATCTGTGCCCTGTTTGGCTAGCTAGGA
400
AACTCGGGACTTACTCAGACGGAAGGTCCCGAGTTCCACGAGTTGTTTTGTTGTCCGGACGATAAAAGGACCGTAGACACGGGACAAACCGATCGATCCT
GCACACATACATAGAAATTAAATGAAACAGACCTTCAGCAAGGGGACAGAGGACAGAATTAACCTTGCCCAGACACTGGAAACCCATGTATGAACACTCA
410
CGTGTGTATGTATCTTTAATTTACTTTGTCTGGAAGTCGTTCCCCTGTCTCCTGTCTTAATTGGAACGGGTCTGTGACCTTTGGGTACATACTTGTGAGT
CATGTTTGGGAAGGGGGAAGGGCACATGTAAATGAGGACTCTTCCTCATTCTATGGGGCACTCTGGCCCTGCCCCTCTCAGCTACTCATCCATCCAACAC
420
GTACAAACCCTTCCCCCTTCCCGTGTACATTTACTCCTGAGAAGGAGTAAGATACCCCGTGAGACCGGGACGGGGAGAGTCGATGAGTAGGTAGGTTGTG
XmnI
ACCTTTCTAAGTACCTCTCTCTGCCTACACTCTGAAGGGGTTCAGGAGTAACTAACACAGCATCCCTTCCCTCAAATGACTGACCATCCCTTTGTCCTGC
430
TGGAAAGATTCATGGAGAGAGACGGATGTGAGACTTCCCCAAGTCCTCATTGATTGTGTCGTAGGGAAGGGAGTTTACTGACTGGTAGGGAAACAGGACG
TTTGTTTTTCTTTCCAGTCAGTACTGGGAAAGTGGGGAAGGACAGTCATGGAAAAACTACATAAGGAAGCACCTTGCCCTTCTGCCTCTTGAGAATGTTG
440
AAACAAAAAGAAAGGTCAGTCATGACCCTTTCACCCCTTCCTGTCAGTACCTTTTTGATGTATTCCTTCGTGGAACGGGAAGACGGAGAACTCTTACAAC
ATGAGTATCAAATCTTTCAAACTTTGGAGGTTTGAGTAGGGGTGAGACTCAGTAATGTCCCTTCCAATGACATGAACTTGCTCACTCATCCCTGGGGGCC
450
TACTCATAGTTTAGAAAGTTTGAAACCTCCAAACTCATCCCCACTCTGAGTCATTACAGGGAAGGTTACTGTACTTGAACGAGTGAGTAGGGACCCCCGG
EcoRI
AAATTGAACAATCAAAGGCAGGCATAATCCAGTTATGAATTCAAACCTTCTTCTCAGAAGATAACACTCTGAAGGGAAACCCACCCATAACCTAAGCAAG
460
TTTAACTTGTTAGTTTCCGTCCGTATTAGGTCAATACTTAAGTTTGGAAGAAGAGTCTTCTATTGTGAGACTTCCCTTTGGGTGGGTATTGGATTCGTTC
PstI
TGAAGACAGGTGCTGCAGGTGGAATTGTGTCCTTCAAAAAGGTATGCTCAACTCCTTGCTCTTGGTACTCATAAATGGGTCACATAAATGTGACTTTATT
470
ACTTCTGTCCACGACGTCCACCTTAACACAGGAAGTTTTTCCATACGAGTTGAGGAACGAGAACCATGAGTATTTACCCAGTGTATTTACACTGAAATAA

FIG. 15-8


TGGAAATAGGGTCTTTGCAGAGGTAATCAAGTCAAAATTAGGTCATACTGAAATGTTTGTGAGGATGCGGTGAAAATGGATCATTCATATATTGCTGGTG
480
ACCTTTATCCCAGAAACGTCTCCATTAGTTCAGTTTTAATCCAGTATGACTTTACAAACACTCCTACGCCACTTTTACCTAGTAAGTATATAACGACCAC
XbaI
GGAATATAAAAGGGTATAGCTACTCTAGAAAATAGTTGTCAGTTTCTTGAAAAACTAAACAAAAGACACCTACCATATGACCCAGGAATTGTACTCCTTG
490
CCTTATATTTTCCCATATCGATGAGATCTTTTATCAACAGTCAAAGAACTTTTTGATTTGTTTTCTGTGGATGGTATACTGGGTCCTTAACATGAGGAAC
GGAATTTACCCCCAGGAAATAAAAACTTATGTCCACACAGAACCCATACATGATTGTTCACAGCAGCTTTATTTGTTGTAGCCAAAGCTAGAAAGAGCCA
500
CCTTAAATGGGGGTCCTTTATTTTTGAATACAGGTGTGTCTTGGGTATGTACTAACAAGTGTCGTCGAAATAAACAACATCGGTTTCGATCTTTCTCGGT
ACCCATCCCTCAATAGGCAACTAGCCTAACAAATTGTAATATATCCATGCCATAGAATGCTATGAGGCAATAAAAAGGAACGAAGTGTTCATACAGAGAA
510
TGGGTAGGGAGTTATCCGTTGATCGGATTGTTTAACATTATATAGGTACGGTATCTTACGATACTCCGTTATTTTTCCTTGCTTCACAAGTATGTCTCTT
CTGGAGTGATTCTGAAGGACTTTCTACTGAGTGAAAAAAGCCAATCTGAAAGGGTCACATACCATGTGATTCCTTTTATGTAACATTGTTGAAGTGACAA
520
GACCTCACTAAGACTTCCTGAAAGATGACTCACTTTTTTCGGTTAGACTTTCCCAGTGTATGGTACACTAAGGAAAATACATTGTAACAACTTCACTGTT

FIG. 15-9

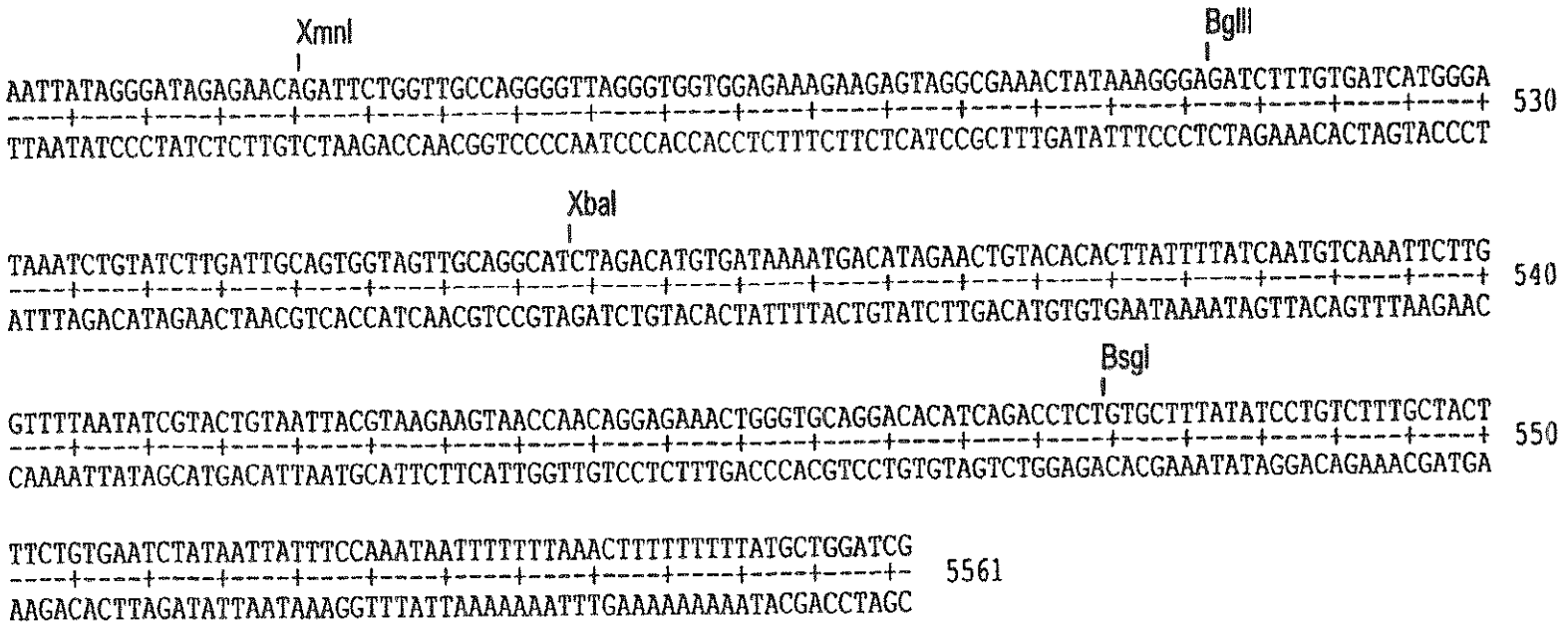

XmnI
BglII
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530
TTAATATCCCTATCTCTTGTCTAAGACCAACGGTCCCCAATCCCACCACCTCTTTCTTCTCATCCGCTTTGATATTTCCCTCTAGAAACACTAGTACCCT
XbaI
TAAATCTGTATCTTGATTGCAGTGGTAGTTGCAGGCATCTAGACATGTGATAAAATGACATAGAACTGTACACACTTATTTTATCAATGTCAAATTCTTG
540
ATTTAGACATAGAACTAACGTCACCATCAACGTCCGTAGATCTGTACACTATTTTACTGTATCTTGACATGTGTGAATAAAATAGTTACAGTTTAAGAAC
BsgI
GTTTTAATATCGTACTGTAATTACGTAAGAAGTAACCAACAGGAGAAACTGGGTGCAGGACACATCAGACCTCTGTGCTTTATATCCTGTCTTTGCTACT
550
CAAAATTATAGCATGACATTAATGCATTCTTCATTGGTTGTCCTCTTTGACCCACGTCCTGTGTAGTCTGGAGACACGAAATATAGGACAGAAACGATGA
TTCTGTGAATCTATAATTATTTCCAAATAATTTTTTTAAACTTTTTTTTTATGCTGGATCG
5561
AAGACACTTAGATATTAATAAAGGTTTATTAAAAAAATTTGAAAAAAAAATACGACCTAGC

FIG. 15-10

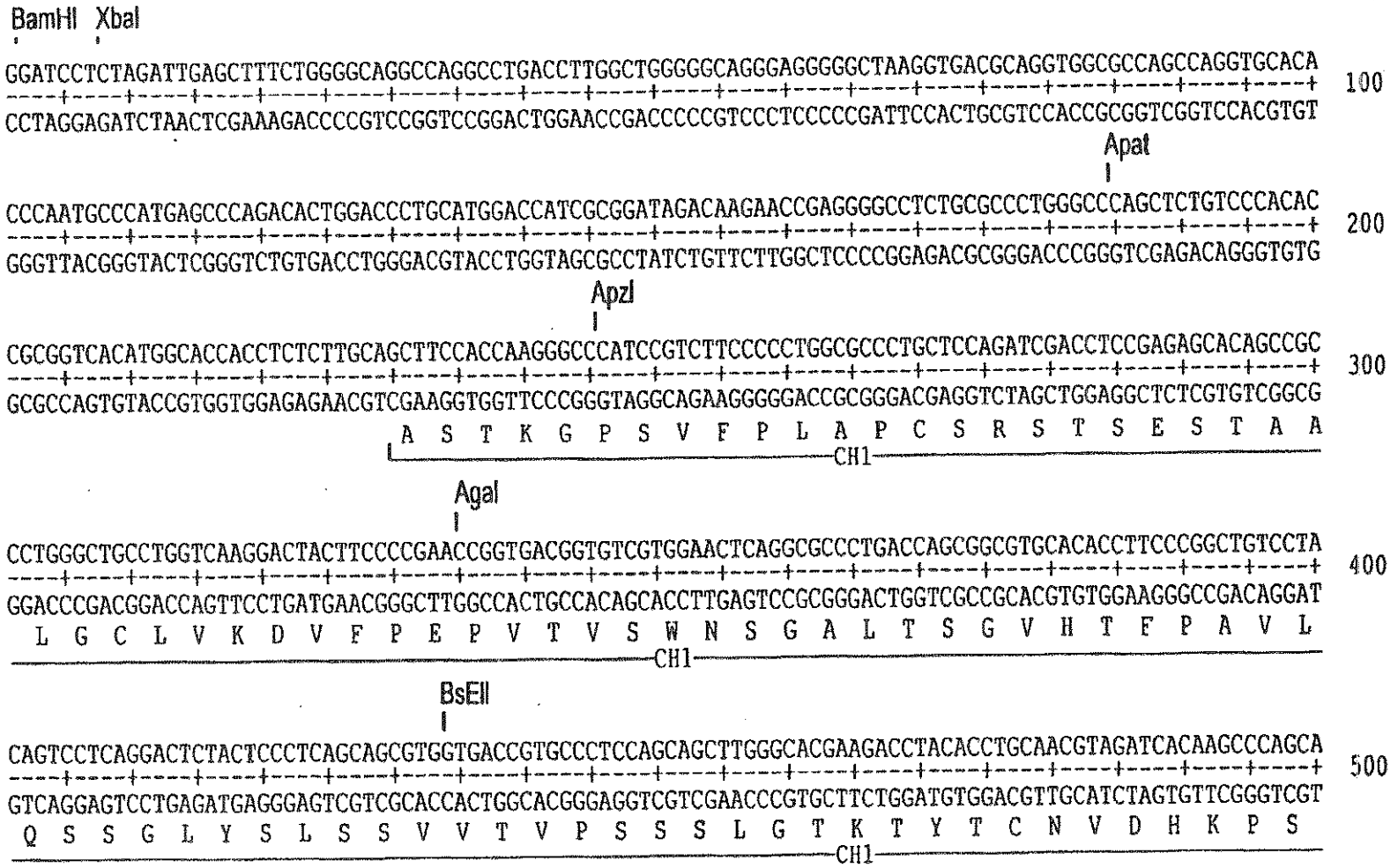

BamHI XbaI
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CCTAGGAGATCTAACTCGAAAGACCCCGTCCGGTCCGGACTGGAACCGACCCCCGTCCCTCCCCCGATTCCACTGCGTCCACCGCGGTCGGTCCACGTGT
100
ApaI
CCCAATGCCCATGAGCCCAGACACTGGACCCTGCATGGACCATCGCGGATAGACAAGAACCGAGGGGCCTCTGCGCCCTGGGCCCAGCTCTGTCCCACAC
GGGTTACGGGTACTCGGGTCTGTGACCTGGGACGTACCTGGTAGCGCCTATCTGTTCTTGGCTCCCCGGAGACGCGGGACCCGGGTCGAGACAGGGTGTG
200
ApzI
CGCGGTCACATGGCACCACCTCTCTTGCAGCTTCCACCAAGGGCCCATCCGTCTTCCCCCTGGCGCCCTGCTCCAGATCGACCTCCGAGAGCACAGCCGC
GCGCCAGTGTACCGTGGTGGAGAGAACGTCGAAGGTGGTTCCCGGGTAGGCAGAAGGGGGACCGCGGGACGAGGTCTAGCTGGAGGCTCTCGTGTCGGCG
300
A S T K G P S V F P L A P C S R S T S E S T A A
CH1
AgaI
CCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAACCGGTGACGGTGTCGTGGAACTCAGGCGCCCTGACCAGCGGCGTGCACACCTTCCCGGCTGTCCTA
GGACCCGACGGACCAGTTCCTGATGAACGGGCTTGGCCACTGCCACAGCACCTTGAGTCCGCGGGACTGGTCGCCGCACGTGTGGAAGGGCCGACAGGAT
400
L G C L V K D V F P E P V T V S W N S G A L T S G V H T F P A V L
CH1
BsEII
CAGTCCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGCTTGGGCACGAAGACCTACACCTGCAACGTAGATCACAAGCCCAGCA
GTCAGGAGTCCTGAGATGAGGGAGTCGTCGCACCACTGGCACGGGAGGTCGTCGAACCCGTGCTTCTGGATGTGGACGTTGCATCTAGTGTTCGGGTCGT
500
Q S S G L Y S L S S V V T V P S S S L G T K T Y T C N V D H K P S
CH1

FIG. 16-1

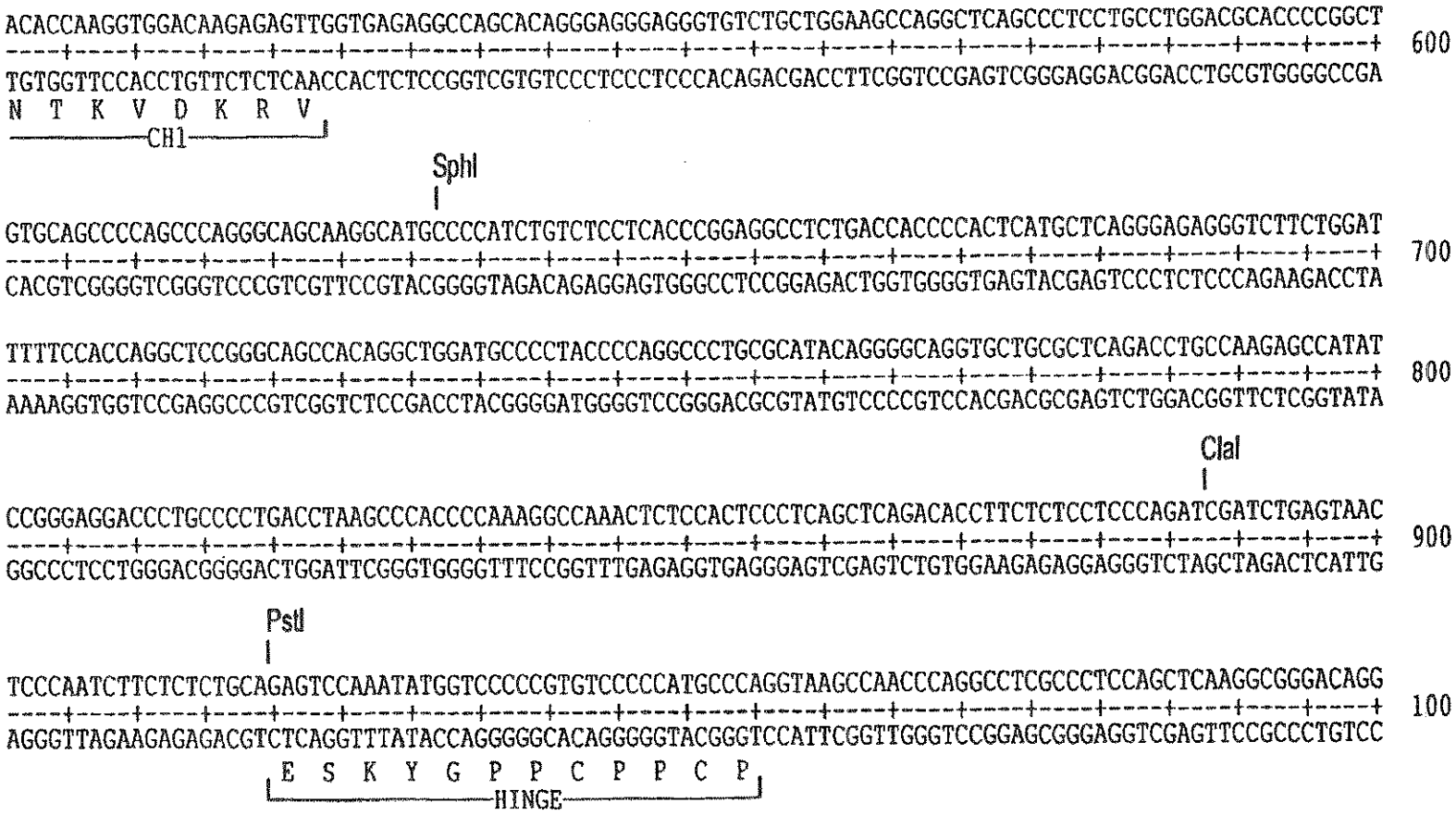

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600
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N T K V D K R V
CH1
SphI
GTGCAGCCCCAGCCCAGGGCAGCAAGGCATGCCCCATCTGTCTCCTCACCCGGAGGCCTCTGACCACCCCACTCATGCTCAGGGAGAGGGTCTTCTGGAT
700
CACGTCGGGGTCGGGTCCCGTCGTTCCGTACGGGGTAGACAGAGGAGTGGGCCTCCGGAGACTGGTGGGGTGAGTACGAGTCCCTCTCCCAGAAGACCTA
TTTTCCACCAGGCTCCGGGCAGCCACAGGCTGGATGCCCCTACCCCAGGCCCTGCGCATACAGGGGCAGGTGCTGCGCTCAGACCTGCCAAGAGCCATAT
800
AAAAGGTGGTCCGAGGCCCGTCGGTCTCCGACCTACGGGGATGGGGTCCGGGACGCGTATGTCCCCGTCCACGACGCGAGTCTGGACGGTTCTCGGTATA
ClaI
CCGGGAGGACCCTGCCCCTGACCTAAGCCCACCCCAAAGGCCAAACTCTCCACTCCCTCAGCTCAGACACCTTCTCTCCTCCCAGATCGATCTGAGTAAC
900
GGCCCTCCTGGGACGGGGACTGGATTCGGGTGGGGTTTCCGGTTTGAGAGGTGAGGGAGTCGAGTCTGTGGAAGAGAGGAGGGTCTAGCTAGACTCATTG
PstI
TCCCAATCTTCTCTCTGCAGAGTCCAAATATGGTCCCCCGTGTCCCCCATGCCCAGGTAAGCCAACCCAGGCCTCGCCCTCCAGCTCAAGGCGGGACAGG
100
AGGGTTAGAAGAGAGACGTCTCAGGTTTATACCAGGGGGCACAGGGGGTACGGGTCCATTCGGTTGGGTCCGGAGCGGGAGGTCGAGTTCCGCCCTGTCC
E S K Y G P P C P P C P
HINGE

FIG. 16-2

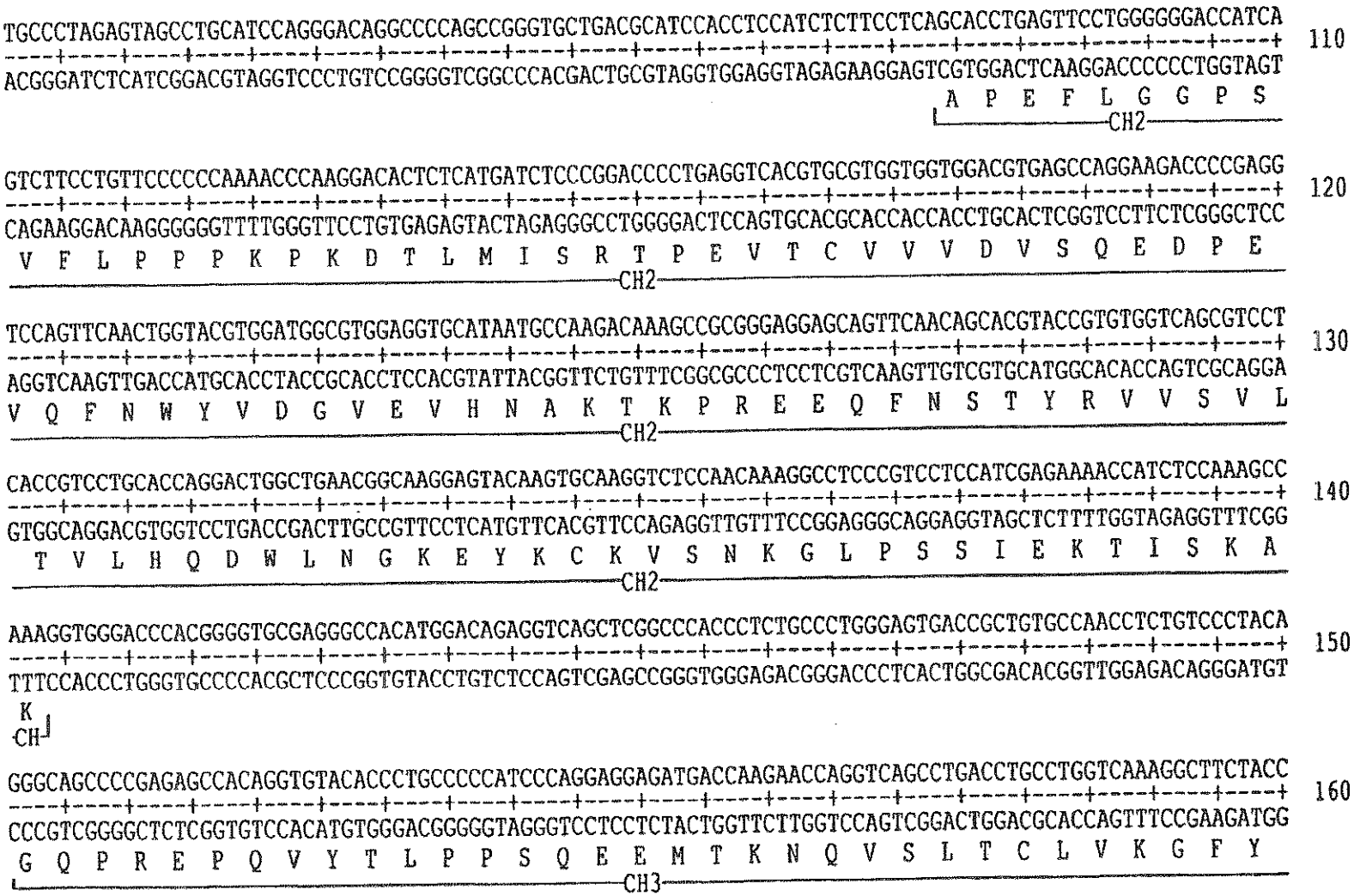

TGCCCTAGAGTAGCCTGCATCCAGGGACAGGCCCCAGCCGGGTGCTGACGCATCCACCTCCATCTCTTCCTCAGCACCTGAGTTCCTGGGGGGACCATCA
110
ACGGGATCTCATCGGACGTAGGTCCCTGTCCGGGGTCGGCCCACGACTGCGTAGGTGGAGGTAGAGAAGGAGTCGTGGACTCAAGGACCCCCCTGGTAGT
A P E F L G G P S
CH2
GTCTTCCTGTTCCCCCCAAAACCCAAGGACACTCTCATGATCTCCCGGACCCCTGAGGTCACGTGCGTGGTGGTGGACGTGAGCCAGGAAGACCCCGAGG
120
CAGAAGGACAAGGGGGGTTTTGGGTTCCTGTGAGAGTACTAGAGGGCCTGGGGACTCCAGTGCACGCACCACCACCTGCACTCGGTCCTTCTCGGGCTCC
V F L P P P K P K D T L M I S R T P E V T C V V V D V S Q E D P E
CH2
TCCAGTTCAACTGGTACGTGGATGGCGTGGAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTTCAACAGCACGTACCGTGTGGTCAGCGTCCT
130
AGGTCAAGTTGACCATGCACCTACCGCACCTCCACGTATTACGGTTCTGTTTCGGCGCCCTCCTCGTCAAGTTGTCGTGCATGGCACACCAGTCGCAGGA
V Q F N W Y V D G V E V H N A K T K P R E E Q F N S T Y R V V S V L
CH2
CACCGTCCTGCACCAGGACTGGCTGAACGGCAAGGAGTACAAGTGCAAGGTCTCCAACAAAGGCCTCCCGTCCTCCATCGAGAAAACCATCTCCAAAGCC
140
GTGGCAGGACGTGGTCCTGACCGACTTGCCGTTCCTCATGTTCACGTTCCAGAGGTTGTTTCCGGAGGGCAGGAGGTAGCTCTTTTGGTAGAGGTTTCGG
T V L H Q D W L N G K E Y K C K V S N K G L P S S I E K T I S K A
CH2
AAAGGTGGGACCCACGGGGTGCGAGGGCCACATGGACAGAGGTCAGCTCGGCCCACCCTCTGCCCTGGGAGTGACCGCTGTGCCAACCTCTGTCCCTACA
150
TTTCCACCCTGGGTGCCCCACGCTCCCGGTGTACCTGTCTCCAGTCGAGCCGGGTGGGAGACGGGACCCTCACTGGCGACACGGTTGGAGACAGGGATGT
K
CH
GGGCAGCCCCGAGAGCCACAGGTGTACACCCTGCCCCCATCCCAGGAGGAGATGACCAAGAACCAGGTCAGCCTGACCTGCCTGGTCAAAGGCTTCTACC
160
CCCGTCGGGGCTCTCGGTGTCCACATGTGGGACGGGGGTAGGGTCCTCCTCTACTGGTTCTTGGTCCAGTCGGACTGGACGCACCAGTTTCCGAAGATGG
G Q P R E P Q V Y T L P P S Q E E M T K N Q V S L T C L V K G F Y
CH3

FIG. 16-3

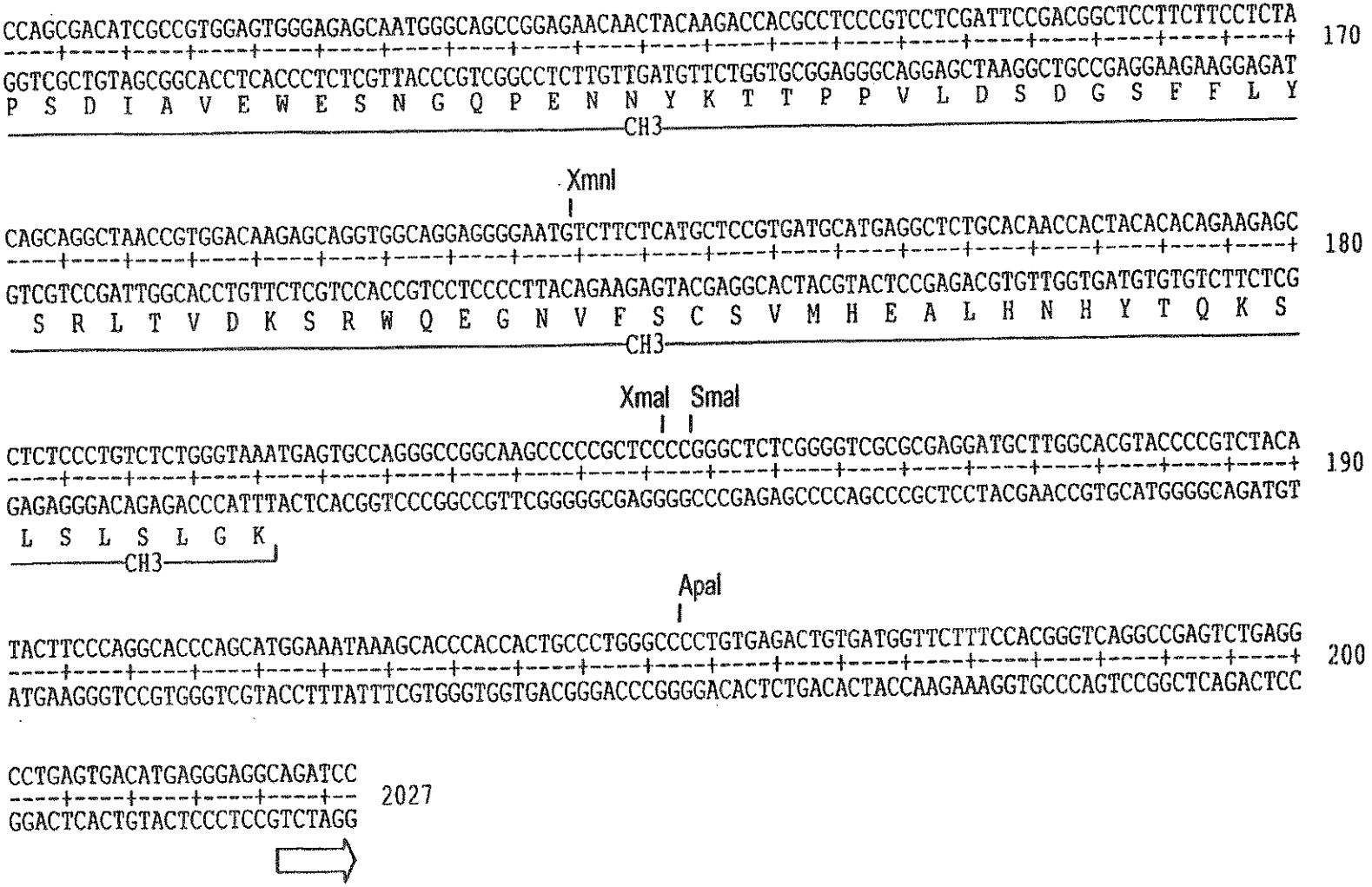

CCAGCGACATCGCCGTGGAGTGGGAGAGCAATGGGCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTCCTCGATTCCGACGGCTCCTTCTTCCTCTA
170
GGTCGCTGTAGCGGCACCTCACCCTCTCGTTACCCGTCGGCCTCTTGTTGATGTTCTGGTGCGGAGGGCAGGAGCTAAGGCTGCCGAGGAAGAAGGAGAT
P S D I A V E W E S N G Q P E N N Y K T T P P V L D S D G S F F L Y
CH3
XmnI
CAGCAGGCTAACCGTGGACAAGAGCAGGTGGCAGGAGGGGAATGTCTTCTCATGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACACAGAAGAGC
180
GTCGTCCGATTGGCACCTGTTCTCGTCCACCGTCCTCCCCTTACAGAAGAGTACGAGGCACTACGTACTCCGAGACGTGTTGGTGATGTGTGTCTTCTCG
S R L T V D K S R W Q E G N V F S C S V M H E A L H N H Y T Q K S
CH3
XmaI SmaI
CTCTCCCTGTCTCTGGGTAAATGAGTGCCAGGGCCGGCAAGCCCCCGCTCCCCGGGCTCTCGGGGTCGCGCGAGGATGCTTGGCACGTACCCCGTCTACA
190
GAGAGGGACAGAGACCCATTTACTCACGGTCCCGGCCGTTCGGGGGCGAGGGGCCCGAGAGCCCCAGCCCGCTCCTACGAACCGTGCATGGGGCAGATGT
L S L S L G K
CH3
ApaI
TACTTCCCAGGCACCCAGCATGGAAATAAAGCACCCACCACTGCCCTGGGCCCCTGTGAGACTGTGATGGTTCTTTCCACGGGTCAGGCCGAGTCTGAGG
200
ATGAAGGGTCCGTGGGTCGTACCTTTATTTCGTGGGTGGTGACGGGACCCGGGGACACTCTGACACTACCAAGAAAGGTGCCCAGTCCGGCTCAGACTCC
CCTGAGTGACATGAGGGAGGCAGATCC
2027
GGACTCACTGTACTCCCTCCGTCTAGG

FIG. 16-4

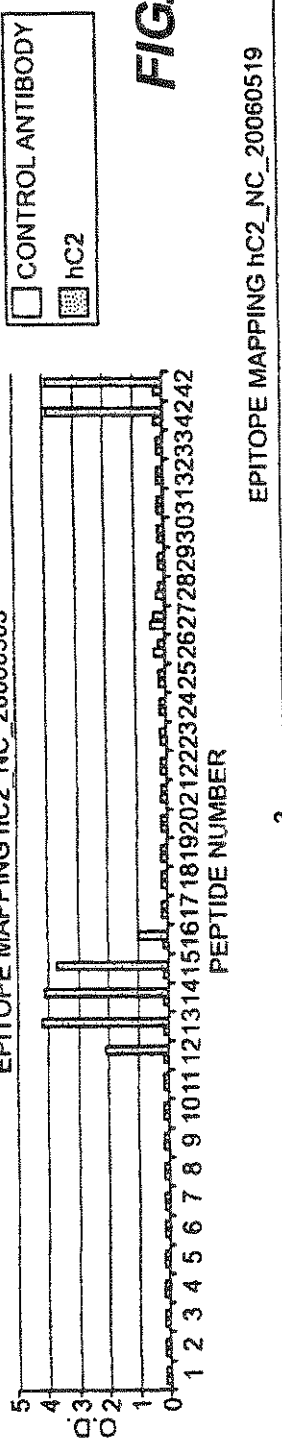



FIG. 17A

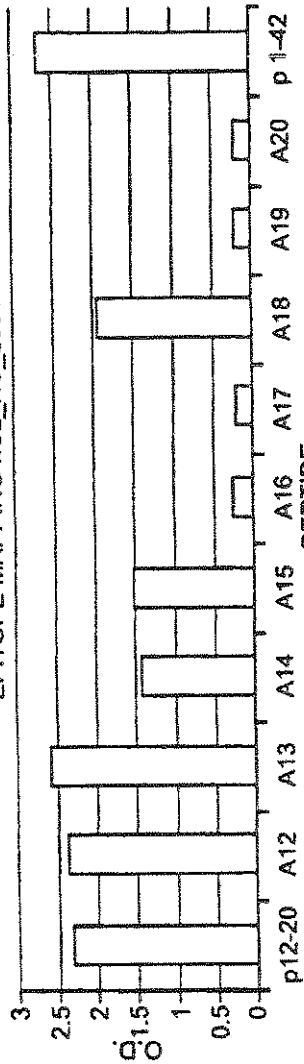



FIG. 17B

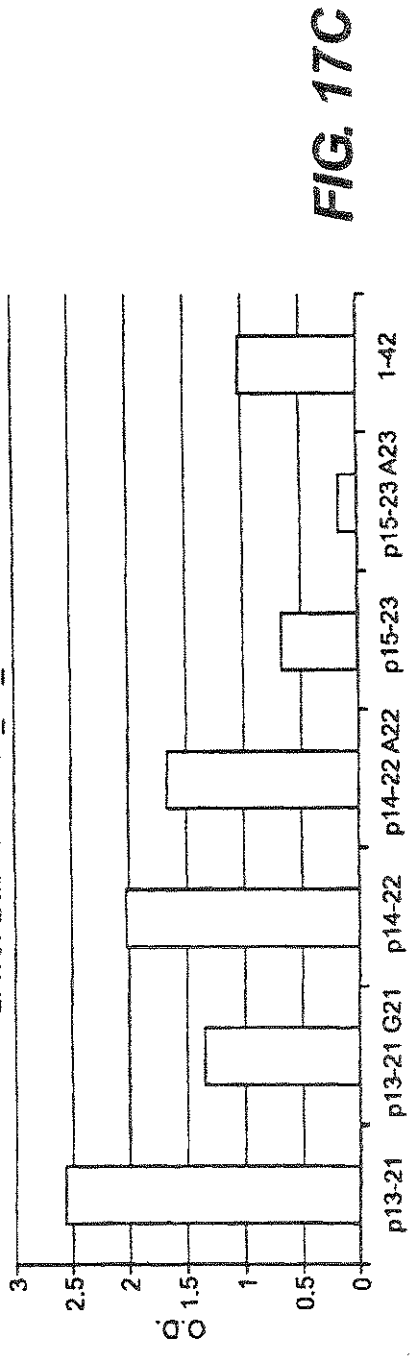



FIG. 17C

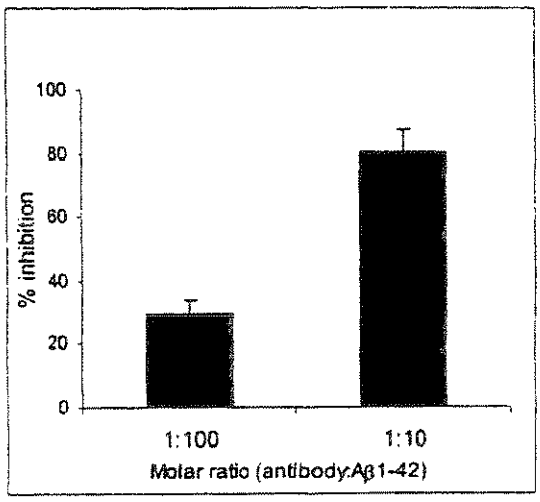

100
80
60
40
20
0
% inhibition
1:100
1:10
Molar ratio (antibody:Aβ1-42)

Fig 18

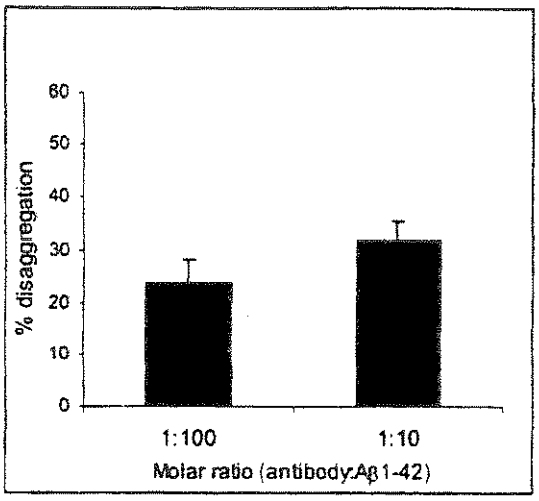

60
50
40
30
20
10
0
% disaggregation
1:100
1:10
Molar ratio (antibody:Aβ1-42)

FIG 19

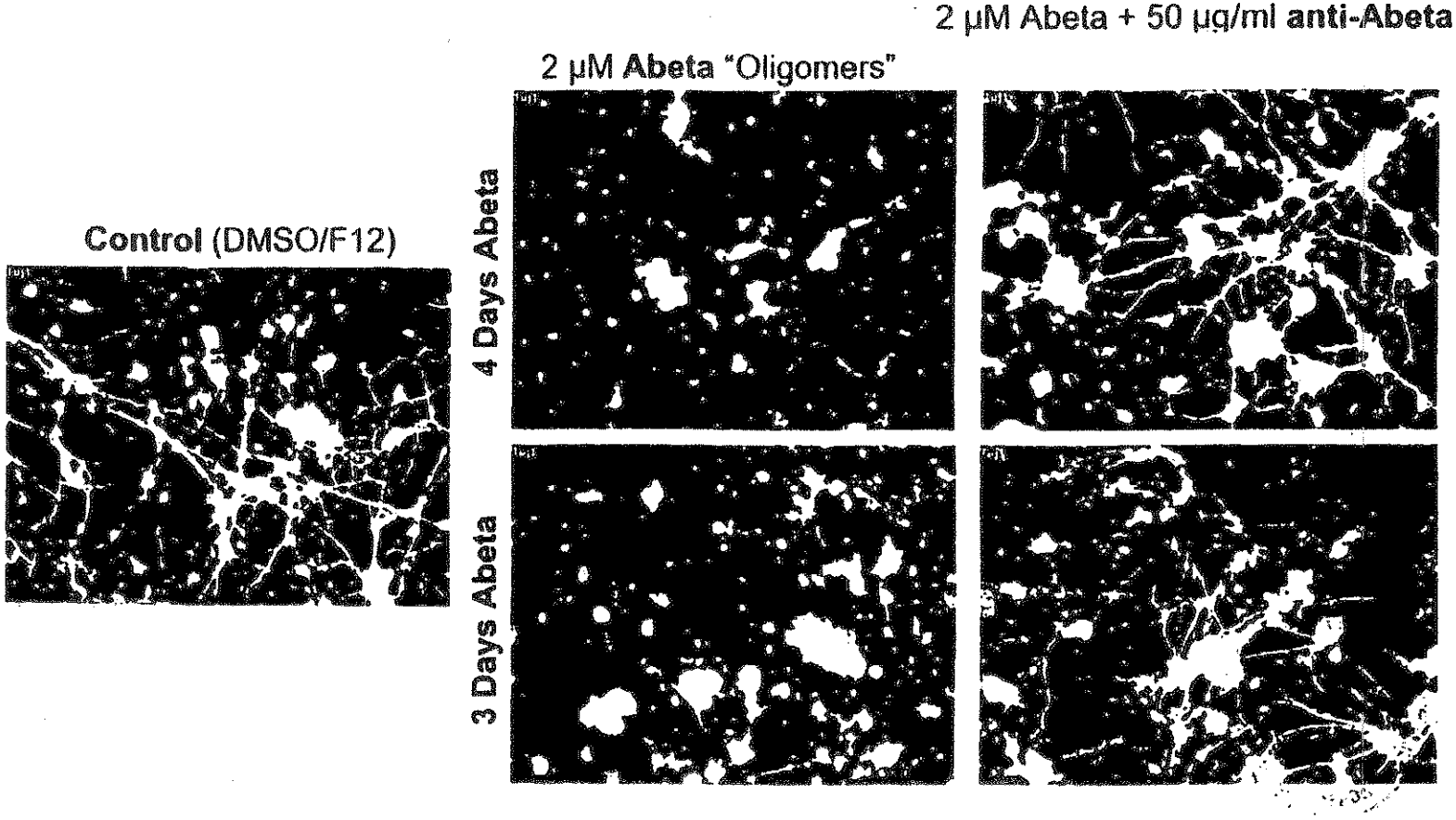

2 µM Abeta + 50 µg/ml anti-Abeta
2 µM Abeta "Oligomers"
Control (DMSO/F12)
4 Days Abeta
3 Days Abeta

FIG 20