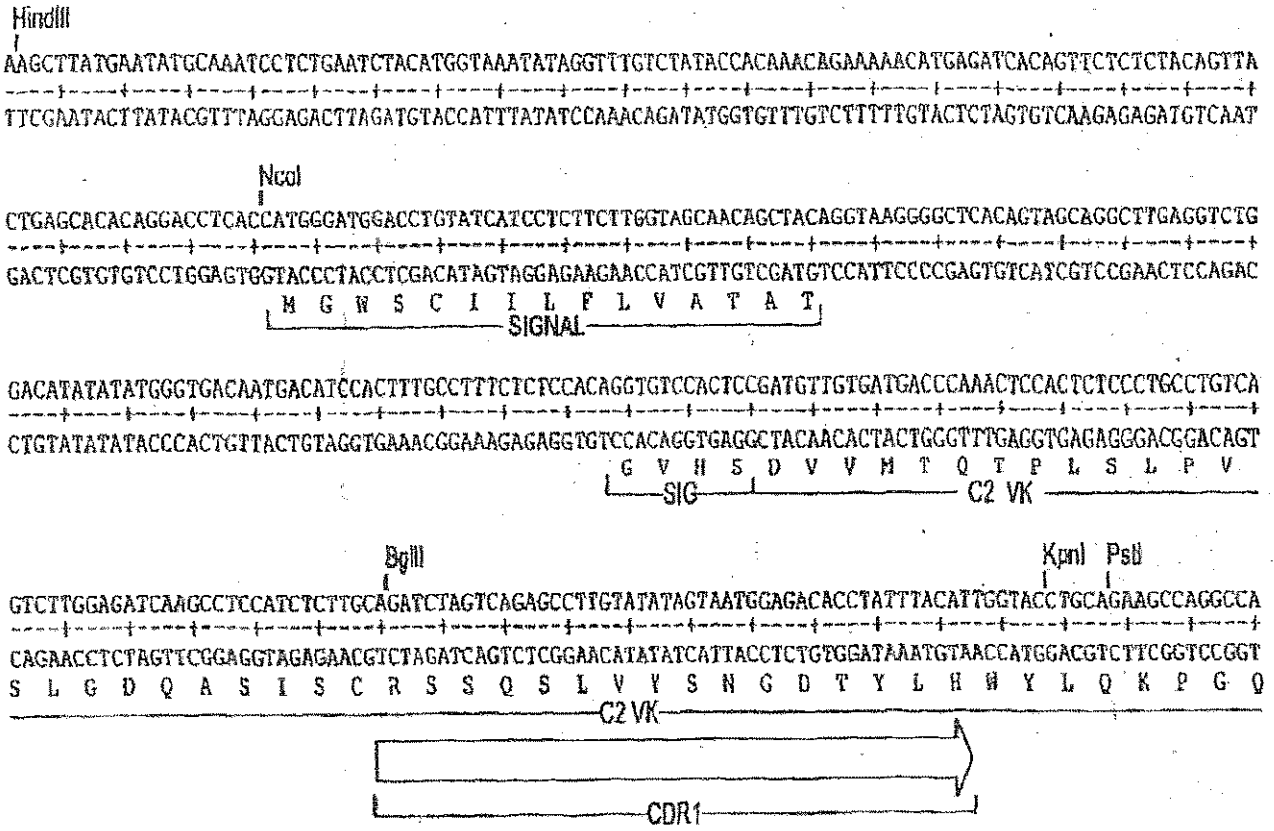

HindIII
AAGCTTATGAATATGCAAATCCTCTGAATCTACATGGTAAATATAGGTTTGTCTATACCACAAACAGAAAAACATGAGATCACAGTTCTCTCTACAGTTA
TTCGAATACTTATACGTTTAGGAGACTTAGATGTACCATTTATATCCAAACAGATATGGTGTTTGTCTTTTTGTACTCTAGTGTCAAGAGAGATGTCAAT
10
NcoI
CTGAGCACACAGGACCTCACCATGGGATGGACCTGTATCATCCTCTTCTTGGTAGCAACAGCTACAGGTAAGGGGCTCACAGTAGCAGGCTTGAGGTCTG
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. 1-1

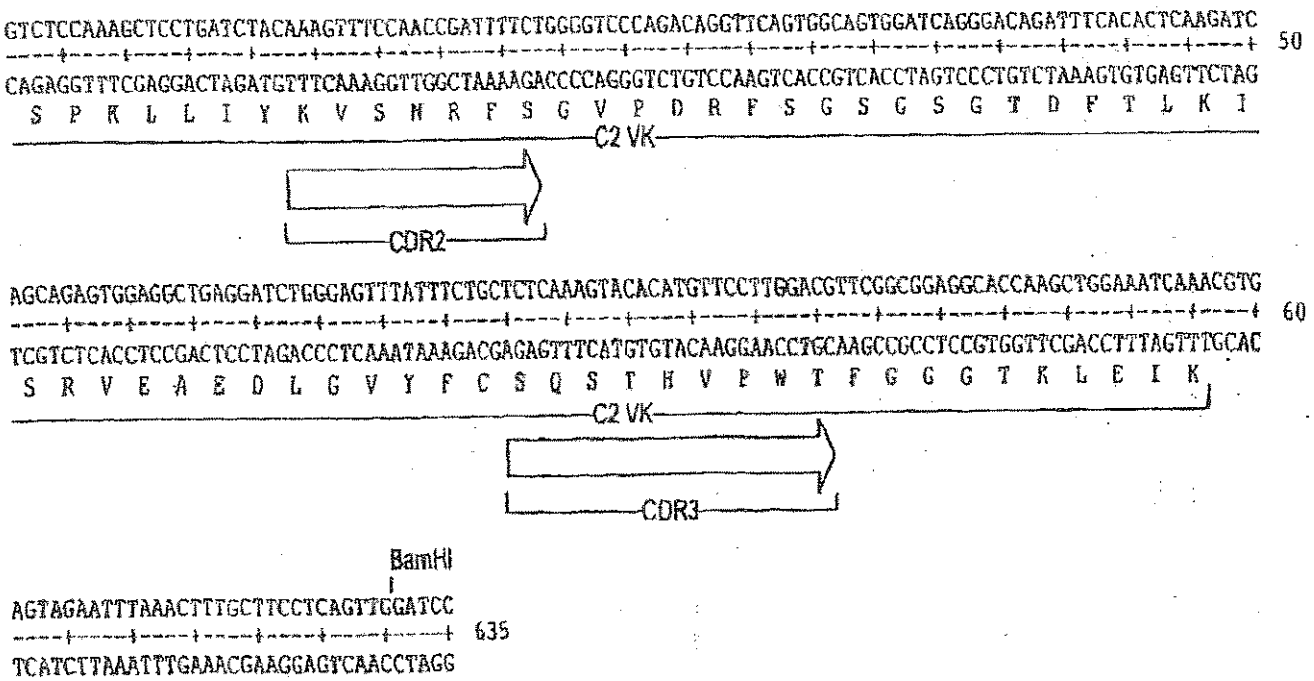

GTCTCCAAAGCTCCTGATCTACAAAGTTTCCAACCGATTTTCTGGGGTCCCAGACAGGTTCAGTGGCAGTGGATCAGGGACAGATTTCACACTCAAGATC
50
CAGAGGTTTCGAGGACTAGATGTTTCAAAGGTTGGCTAAAAGACCCCAGGGTCTGTCCAAGTCACCGTCACCTAGTCCCTGTCTAAAGTGTGAGTTCTAG
S P K L L I Y K V S N R F S G V P D R F S G S G S G T D F T L K I
C2 VK
CDR2
AGCAGAGTGGAGGCTGAGGATCTGGGAGTTTATTTCTGCTCTCAAAGTACACATGTTCCTTGGACGTTCGGCGGAGGCACCAAGCTGGAAATCAAACGTG
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. 1-2

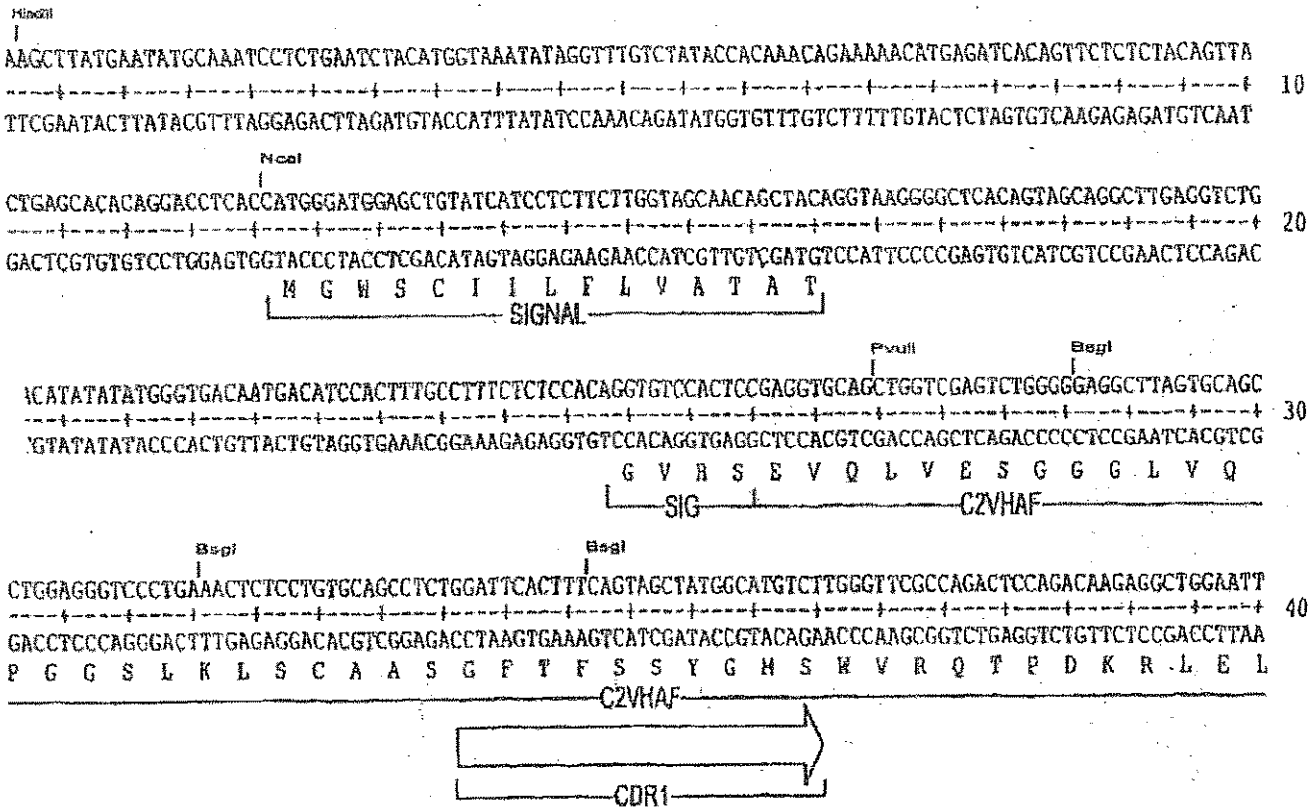

HindIII
AAGCTTATGAATATGCAAATCCTCTGAATCTACATGGTAAATATAGGTTTGTCTATACCACAAACAGAAAAACATGAGATCACAGTTCTCTCTACAGTTA
10
TTCGAATACTTATACGTTTAGGAGACTTAGATGTACCATTTATATCCAAACAGATATGGTGTTTGTCTTTTTGTACTCTAGTGTCAAGAGAGATGTCAAT
NcoI
CTGAGCACACAGGACCTCACCATGGGATGGAGCTGTATCATCCTCTTCTTGGTAGCAACAGCTACAGGTAAGGGGCTCACAGTAGCAGGCTTGAGGTCTG
20
GACTCGTGTGTCCTGGAGTGGTACCCTACCTCGACATAGTAGGAGAAGAACCATCGTTGTCGATGTCCATTCCCCGAGTGTCATCGTCCGAACTCCAGAC
M G W S C I I L F L V A T A T
SIGNAL
PvuII
BsgI
\CATATATATGGGTGACAATGACATCCACTTTGCCTTTCTCTCCACAGGTGTCCACTCCGAGGTGCAGCTGGTCGAGTCTGGGGGAGGCTTAGTGCAGC
30
\GTATATATACCCACTGTTACTGTAGGTGAAACGGAAAGAGAGGTGTCCACAGGTGAGGCTCCACGTCGACCAGCTCAGACCCCCTCCGAATCACGTCG
G V R S E V Q L V E S G G G L V Q
SIG
C2VHAF
BspI
BsgI
CTGGAGGGTCCCTGAAACTCTCCTGTGCAGCCTCTGGATTCACTTTCAGTAGCTATGGCATGTCTTGGGTTCGCCAGACTCCAGACAAGAGGCTGGAATT
40
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. 2-1

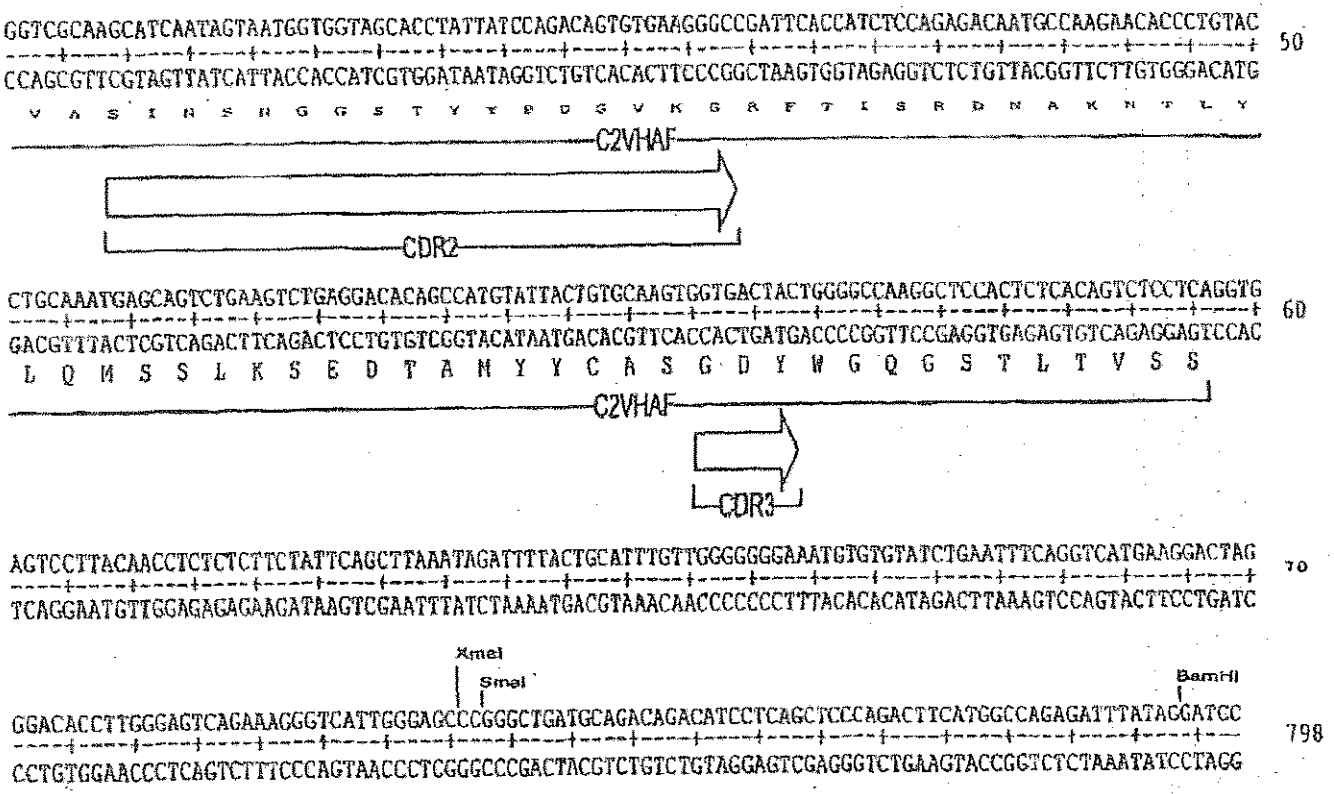

GGTCGCAAGCATCAATAGTAATGGTGGTAGCACCTATTATCCAGACAGTGTGAAGGGCCGATTCACCATCTCCAGAGACAATGCCAAGAACACCCTGTAC
50
CCAGCGTTCGTAGTTATCATTACCACCATCGTGGATAATAGGTCTGTCACACTTCCCGGCTAAGTGGTAGAGGTCTCTGTTACGGTTCTTGTGGGACATG
V A S I N S H G G S T Y Y P D S V K G R F T I S R D N A K N T L Y
C2VHAF
CDR2
CTGCAAATGAGCAGTCTGAAGTCTGAGGACACAGCCATGTATTACTGTGCAAGTGGTGACTACTGGGGCCAAGGCTCCACTCTCACAGTCTCCTCAGGTG
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. 2-2

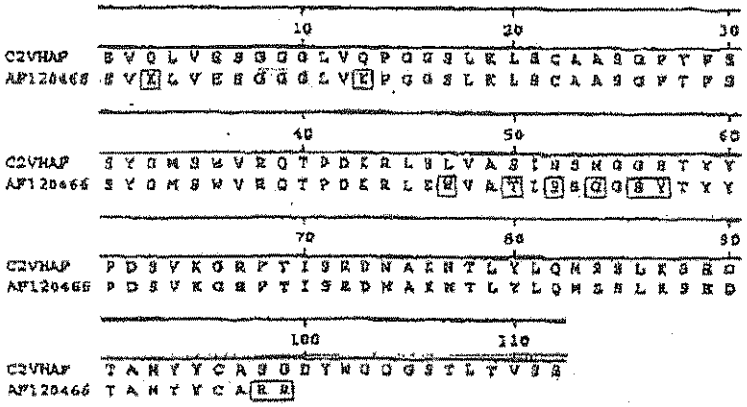


FIG. 3

(Example 5.2)

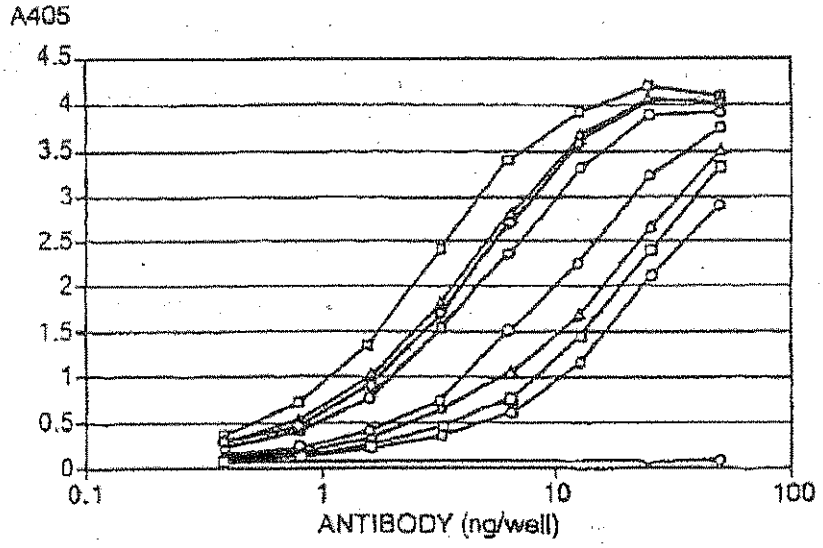

A405
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
0.1
1
10
100
ANTIBODY (ng/well)
NEGATIVE CONTROL
CHIMERIC ch VHAF/CHVK
CHIMERIC AT/HulgG4
CHIMERIC B HulgG4
HuVHv2/HuVKv1
HuVHv2/HuVKv2
HuVHv2/HuVKv3
HuVHv2/HuVKv4
HuVHv4/HuVKv1
HuVHv4/HuVKv2
HuVHv4/HuVKv3
HuVHv4/HuVKv4

FIG. 4

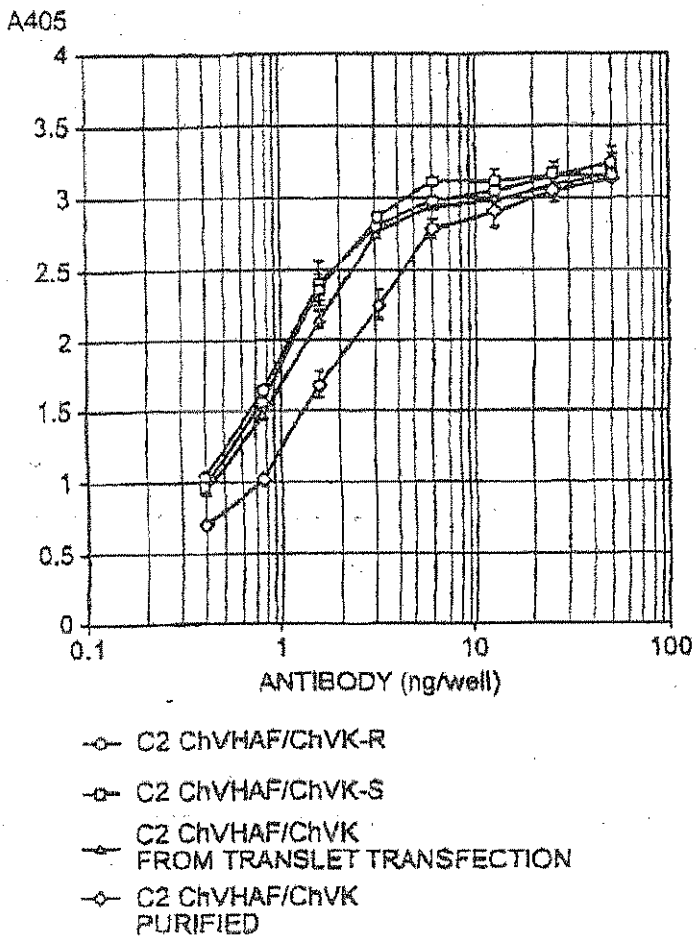

A405
4
3.5
3
2.5
2
1.5
1
0.5
0
0.1
1
10
100
ANTIBODY (ng/well)
C2 ChVHAF/ChVK-R
C2 ChVHAF/ChVK-S
C2 ChVHAF/ChVK FROM TRANSLET TRANSFECTION
C2 ChVHAF/ChVK PURIFIED

FIG. 5

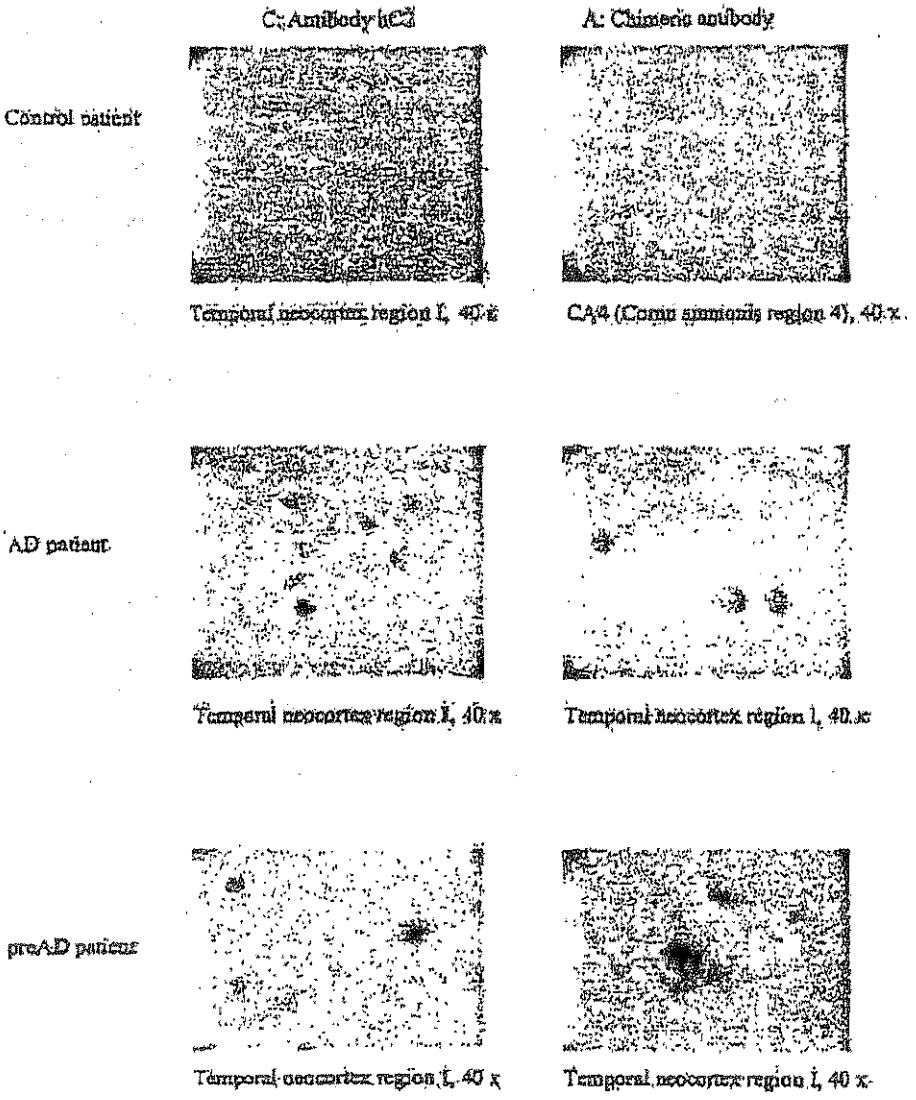

C: Antibody hC3
A: Chimeric antibody
Control patient
Temporal neocortex region I, 40 x
CA4 (Cornu ammonis region 4), 40 x
AD patient
Temporal neocortex region I, 40 x
Temporal neocortex region I, 40 x
preAD patient
Temporal neocortex region I, 40 x
Temporal neocortex region I, 40 x

FIG. 6

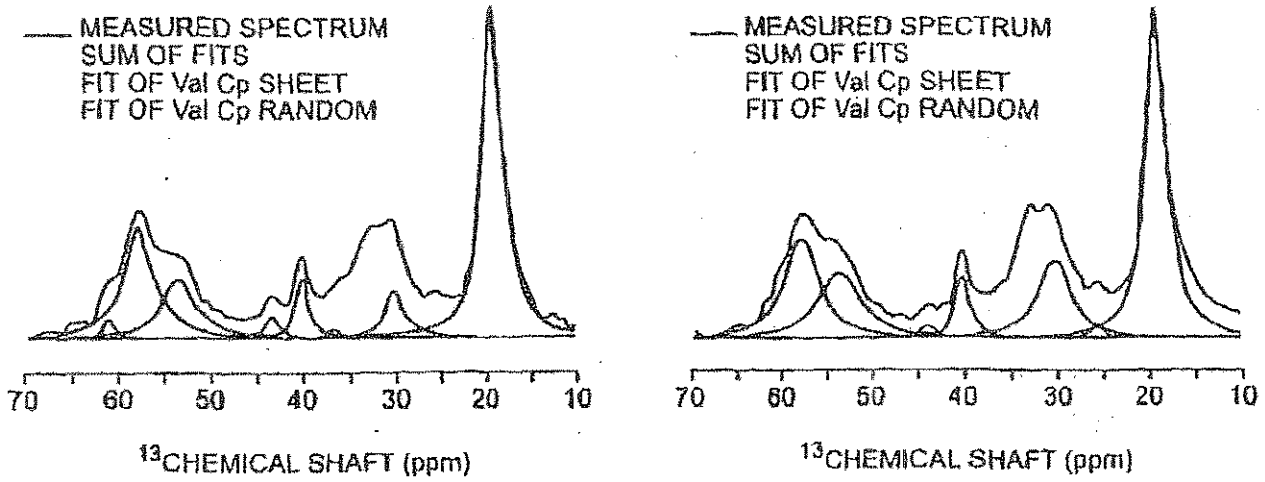


FIG. 7A

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. 7B

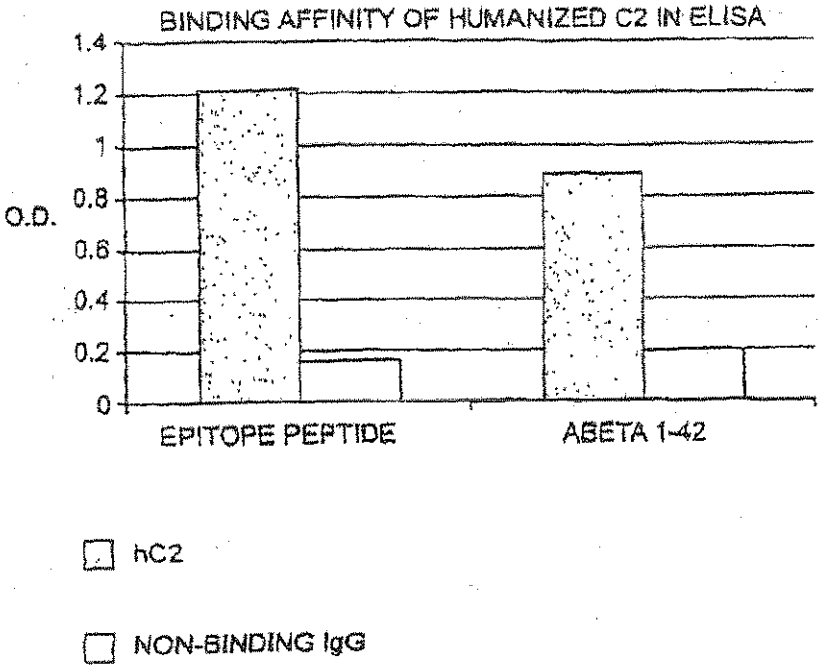

BINDING AFFINITY OF HUMANIZED C2 IN ELISA
O.D.
1.4
1.2
1
0.8
0.6
0.4
0.2
0
EPITOPE PEPTIDE
ABETA 1-42
hC2
NON-BINDING IgG

FIG. 8

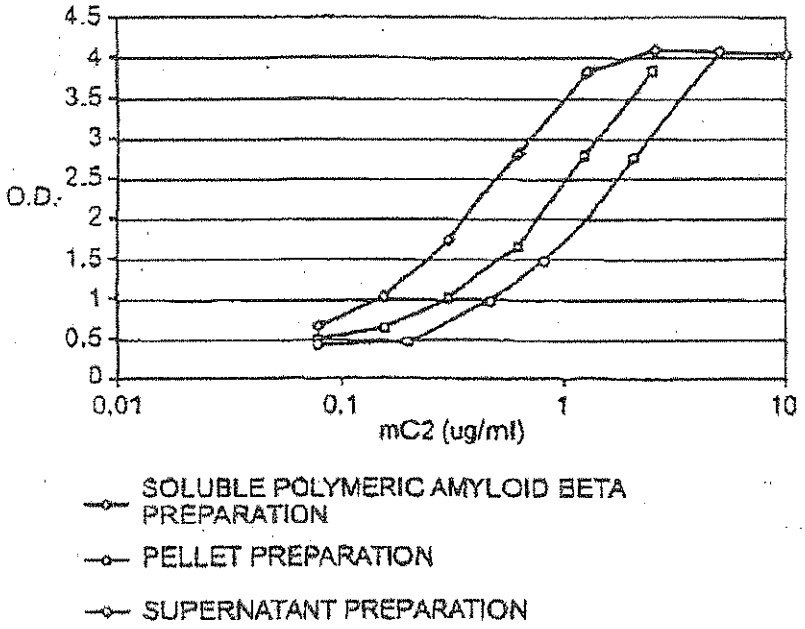

4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
O.D.
0.01
0.1
1
10
mC2 (ug/ml)
SOLUBLE POLYMERIC AMYLOID BETA PREPARATION
PELLET PREPARATION
SUPERNATANT PREPARATION

FIG. 9

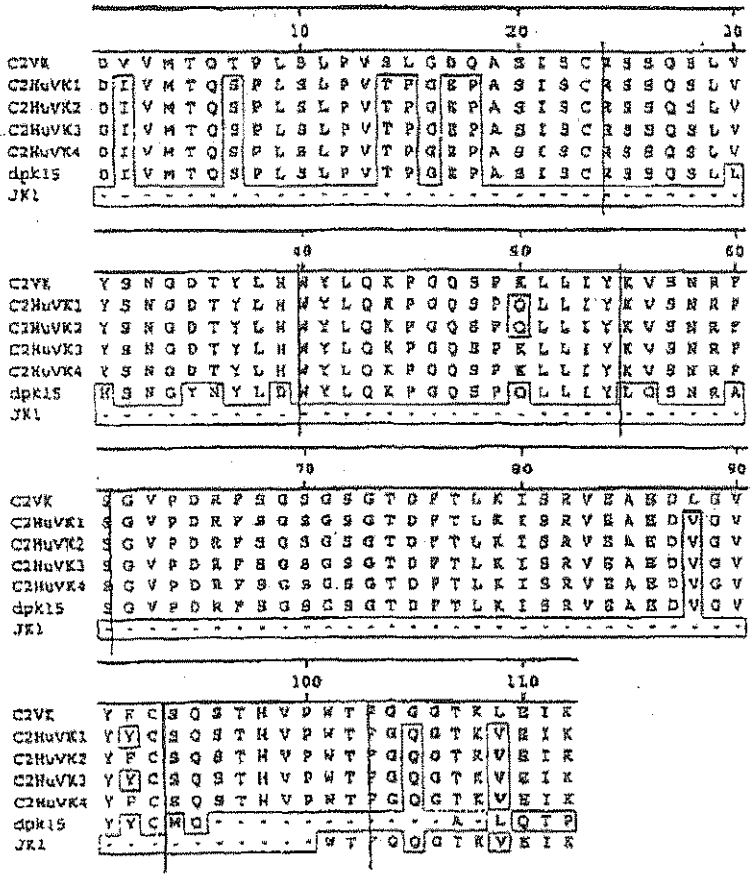


FIG. 10

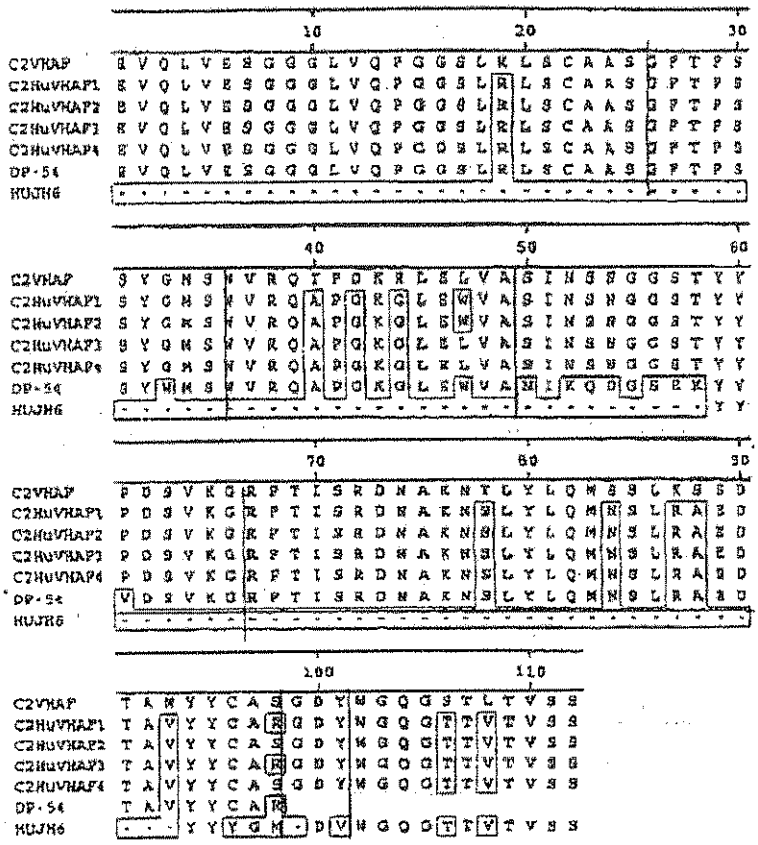


FIG. 11

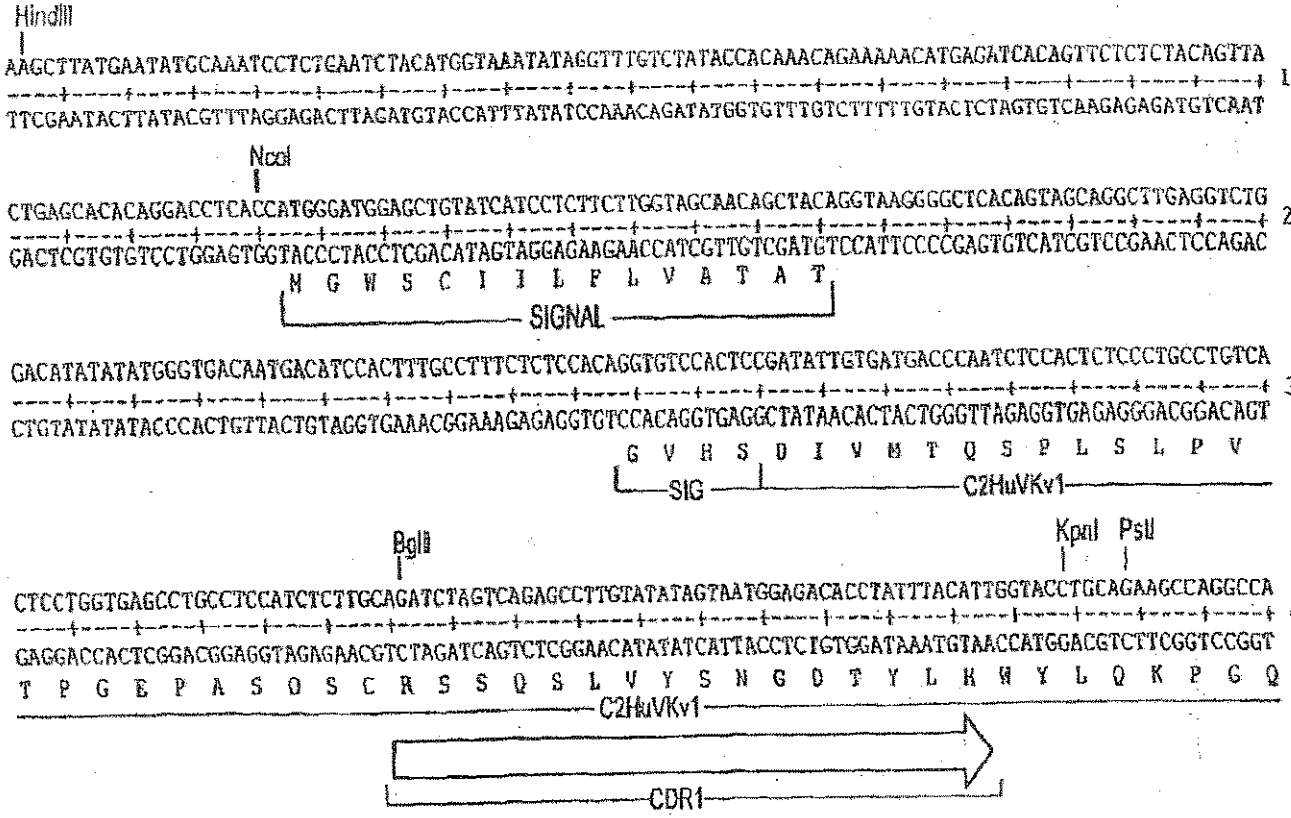

HindIII
AAGCTTATGAATATGCAAATCCTCTGAATCTACATGGTAAATATAGGTTTGTCTATACCACAAACAGAAAAACATGAGATCACAGTTCTCTCTACAGTTA
TTCGAATACTTATACGTTTAGGAGACTTAGATGTACCATTTATATCCAAACAGATATGGTGTTTGTCTTTTTGTACTCTAGTGTCAAGAGAGATGTCAAT
10
NcoI
CTGAGCACACAGGACCTCACCATGGGATGGAGCTGTATCATCCTCTTCTTGGTAGCAACAGCTACAGGTAAGGGGCTCACAGTAGCAGGCTTGAGGTCTG
GACTCGTGTGTCCTGGAGTGGTACCCTACCTCGACATAGTAGGAGAAGAACCATCGTTGTCGATGTCCATTCCCCGAGTGTCATCGTCCGAACTCCAGAC
20
M G W S C I I L F L V A T A T
SIGNAL
GACATATATATGGGTGACAATGACATCCACTTTGCCTTTCTCTCCACAGGTGTCCACTCCGATATTGTGATGACCCAATCTCCACTCTCCCTGCCTGTCA
CTGTATATATATACCCACTGTTACTGTAGGTGAAACGGAAAGAGAGGTGTCCACAGGTGAGGCTATAACACTACTGGGTTAGAGGTGAGAGGGACGGACAGT
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 O 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. 12-1

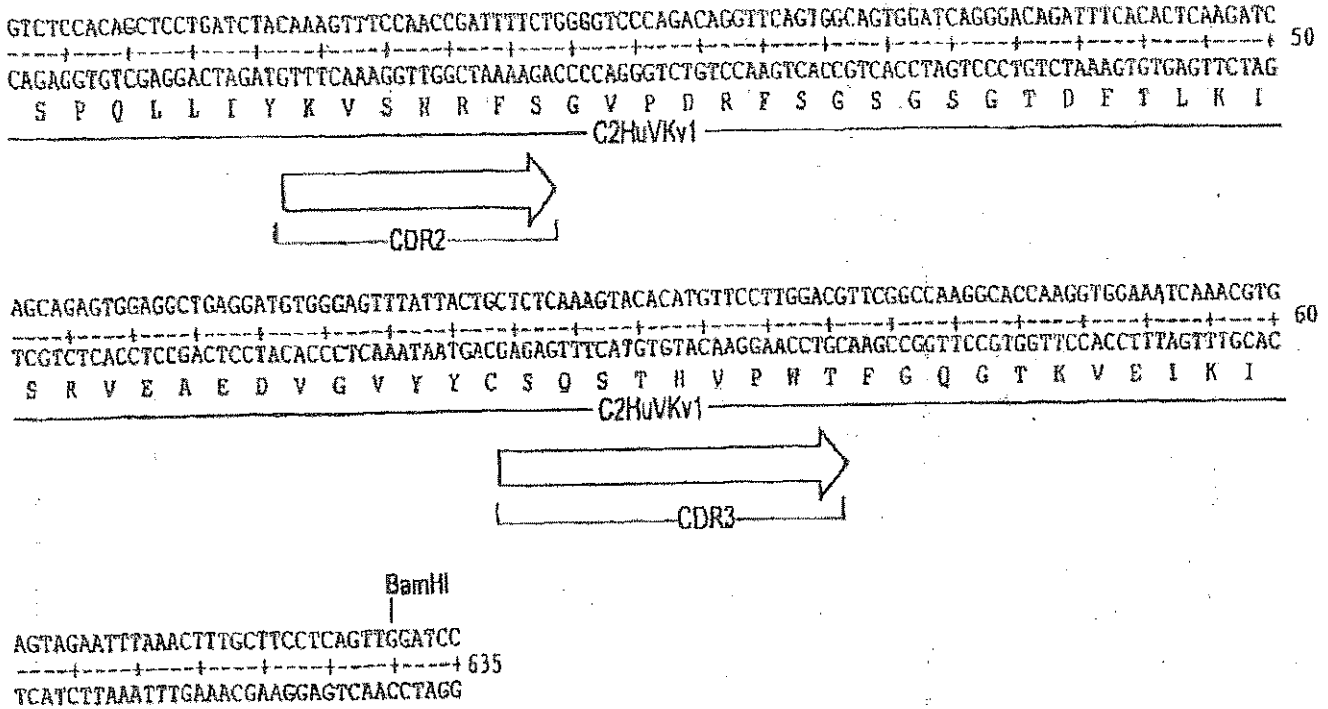

GTCTCCACAGCTCCTGATCTACAAAGTTTCCAACCGATTTTCTGGGGTCCCAGACAGGTTCAGTGGCAGTGGATCAGGGACAGATTTCACACTCAAGATC
50
CAGAGGTGTCGAGGACTAGATGTTTCAAAGGTTGGCTAAAAGACCCCAGGGTCTGTCCAAGTCACCGTCACCTAGTCCCTGTCTAAAGTGTGAGTTCTAG
S P Q L L I Y K V S N R F S G V P D R F S G S G S G T D F T L K I
C2HuVKv1
CDR2
AGCAGAGTGGAGGCTGAGGATGTGGGAGTTTATTACTGCTCTCAAAGTACACATGTTCCTTGGACGTTCGGCCAAGGCACCAAGGTGGAAATCAAACGTG
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. 12-2

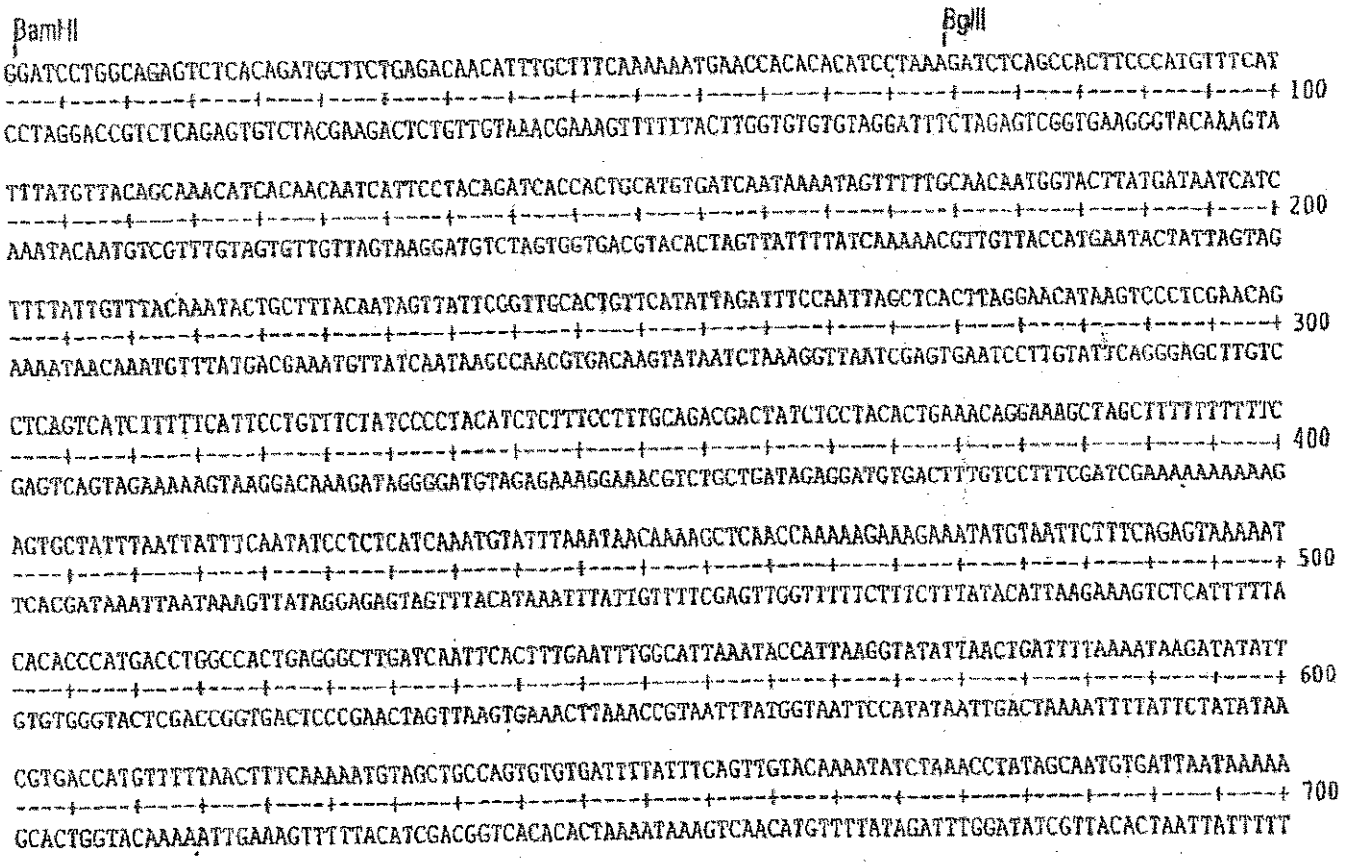

BamHI
BglII
GGATCCTGGCAGAGTCTCACAGATGCTTCTGAGACAACATTTGCTTTCAAAAAATGAACCACACACATCCTAAAGATCTCAGCCACTTCCCATGTTTCAT
CCTAGGACCGTCTCAGAGTGTCTACGAAGACTCTGTTGTAAACGAAAGTTTTTTACTTGGTGTGTGTAGGATTTCTAGAGTCGGTGAAGGGTACAAAGTA
100
TTTATGTTACAGCAAACATCACAACAATCATTCCTACAGATCACCACTGCATGTGATCAATAAAATAGTTTTTGCAACAATGGTACTTATGATAATCATC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

FIG. 13-1

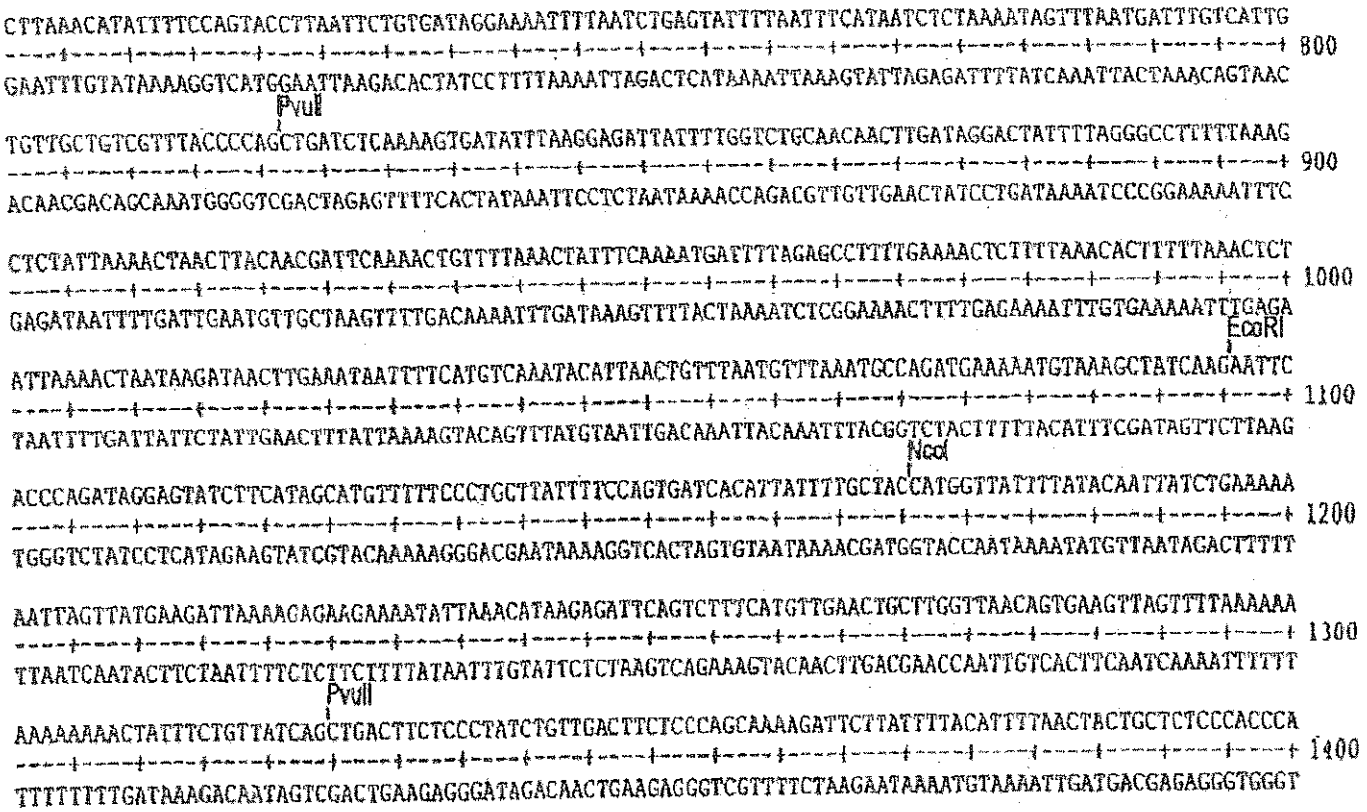

CTTAAACATATTTTCCAGTACCTTAATTCTGTGATAGGAAAATTTTAATCTGAGTATTTTAATTTCATAATCTCTAAAATAGTTTAATGATTTGTCATTG
800
GAATTTGTATAAAAGGTCATGGAATTAAGACACTATCCTTTTAAAATTAGACTCATAAAATTAAAGTATTAGAGATTTTATCAAATTACTAAACAGTAAC
PvuI
TGTTGCTGTCGTTTACCCCAGCTGATCTCAAAAGTGATATTTAAGGAGATTATTTTGGTCTGCAACAACTTGATAGGACTATTTTAGGGCCTTTTTAAAG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

FIG. 13-2

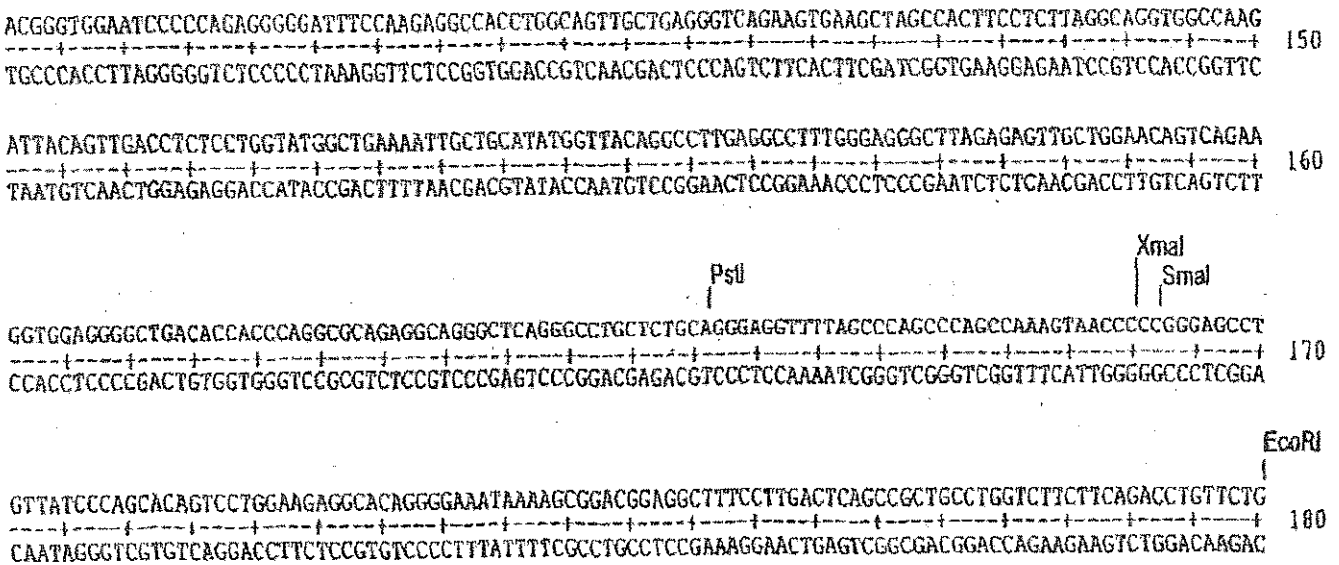

ACGGGTGGAATCCCCCAGAGGGGGATTTCCAAGAGGCCACCTGGCAGTTGCTGAGGGTCAGAAGTGAAGCTAGCCACTTCCTCTTAGGCAGGTGGCCAAG
150
TGCCCACCTTAGGGGGTCTCCCCCTAAAGGTTCTCCGGTGGACCGTCAACGACTCCCAGTCTTCACTTCGATCGGTGAAGGAGAATCCGTCCACCGGTTC
ATTACAGTTGACCTCTCCTGGTATGGCTGAAAATTGCTGCATATGGTTACAGGCCTTGAGGCCTTTGGGAGGGCTTAGAGAGTTGCTGGAACAGTCAGAA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

FIG. 13-3

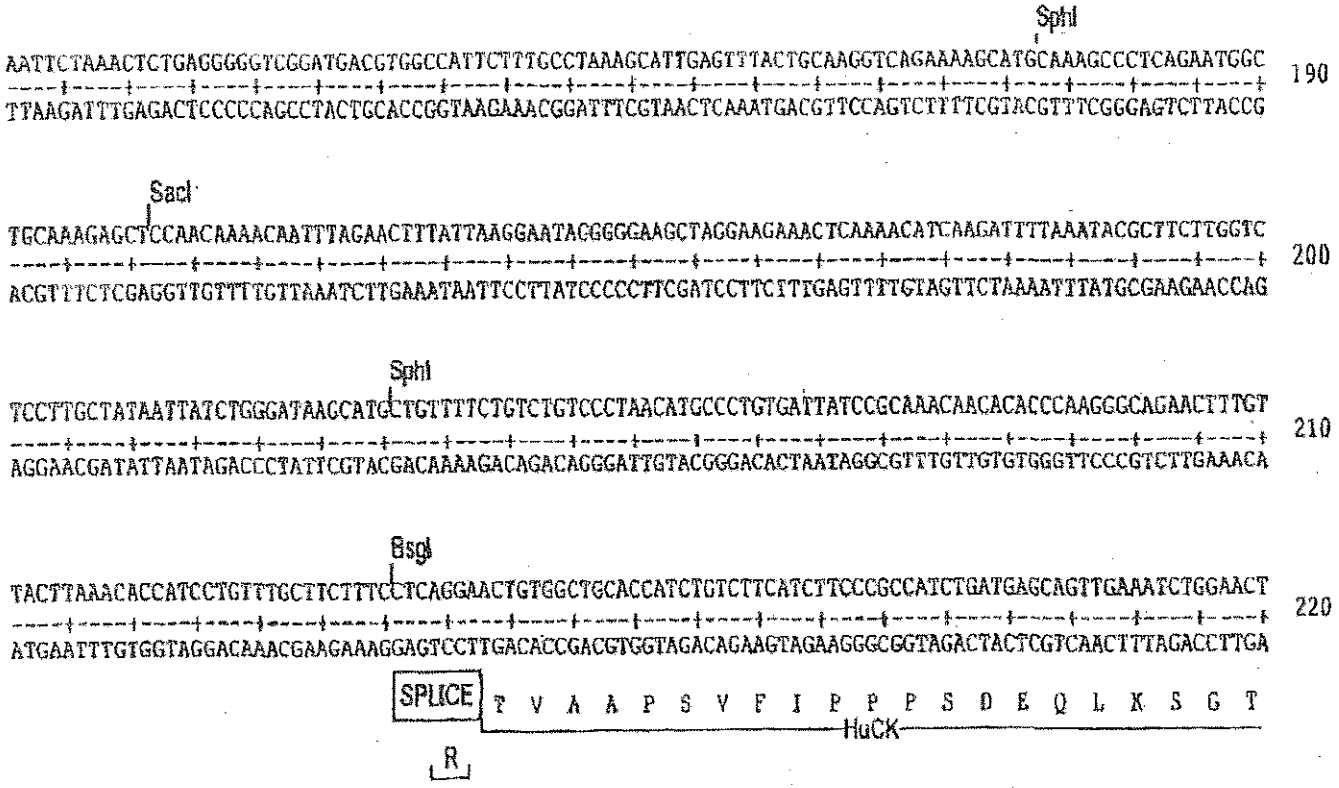

SphI
AATTCTAAACTCTGAGGGGGTCGGATGACGTGGCCATTCTTTGCCTAAAGCATTGAGTTTACTGCAAGGTCAGAAAAGCATGCAAAGCCCTCAGAATGGC
TTAAGATTTGAGACTCCCCCAGCCTACTGCACCGGTAAGAAACGGATTTCGTAACTCAAATGACGTTCCAGTCTTTTCGTACGTTTCGGGAGTCTTACCG
190
SacI
TGCAAAGAGCTCCAACAAAACAATTTAGAACTTTATTAAGGAATACGGGGAAGCTAGGAAGAAACTCAAAACATCAAGATTTTAAATACGCTTCTTGGTC
ACGTTTCTCGAGGTTGTTTTGTTAAATCTTGAAATAATTCCTTATCCCCCTTCGATCCTTCTTGAGTTTTGTAGTTCTAAAATTTATGCGAAGAACCAG
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. 13-4

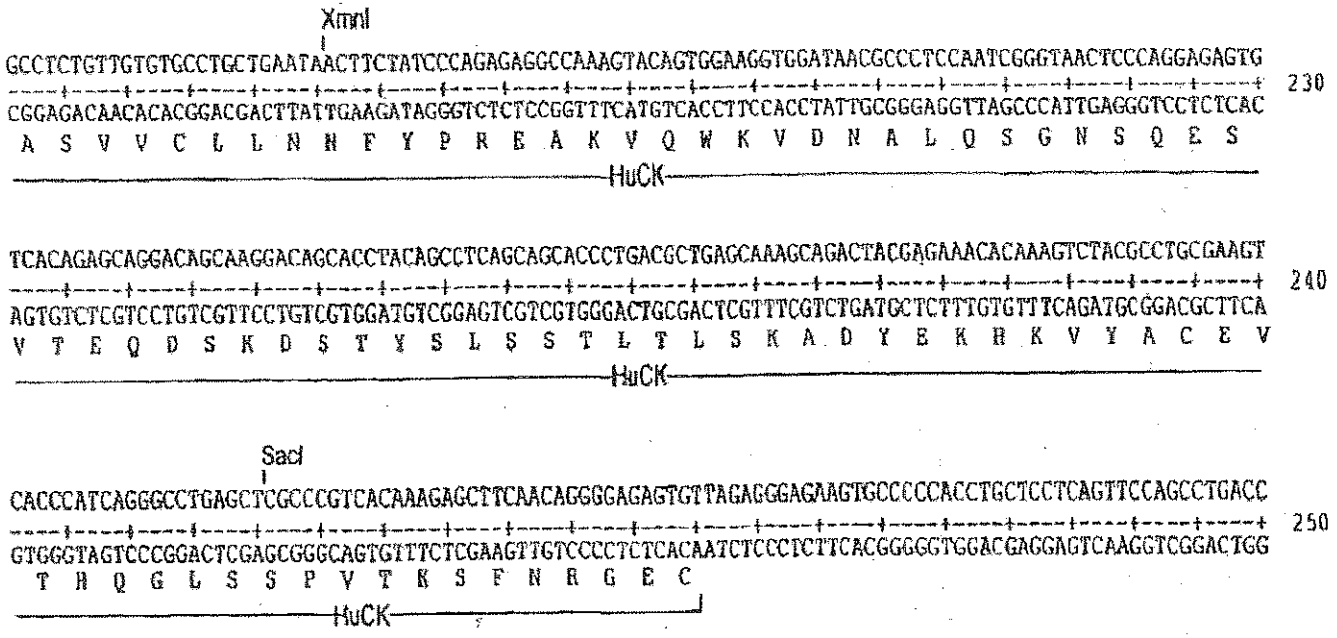

XmnI
GCCTCTGTTGTGTGCCTGCTGAATAACTTCTATCCCAGAGAGGCCAAAGTACAGTGGAAGGTGGATAACGCCCTCCAATCGGGTAACTCCCAGGAGAGTG
CGGAGACAACACACGGACGACTTATTGAAGATAGGGTCTCTCCGGTTTCATGTCACCTTCCACCTATTGCGGGAGGTTAGCCCATTGAGGGTCCTCTCAC
230
A S V V C L L N N F Y P R E A K V Q W K V D N A L Q S G N S Q E S
HuCK
TCACAGAGCAGGACAGCAAGGACAGCACCTACAGCCTCAGCAGCACCCTGACGCTGAGCAAAGCAGACTACGAGAAACACAA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

FIG. 13-5

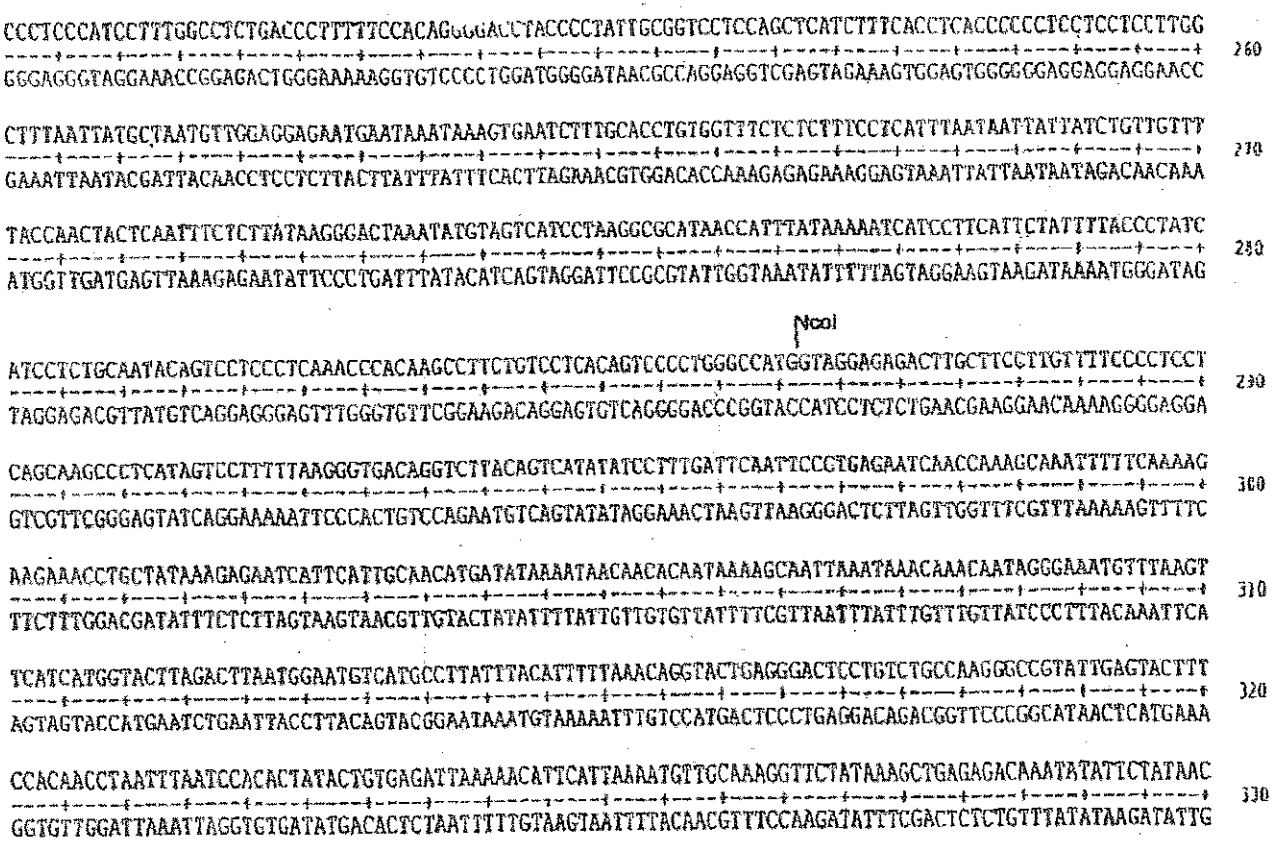


FIG. 13-6

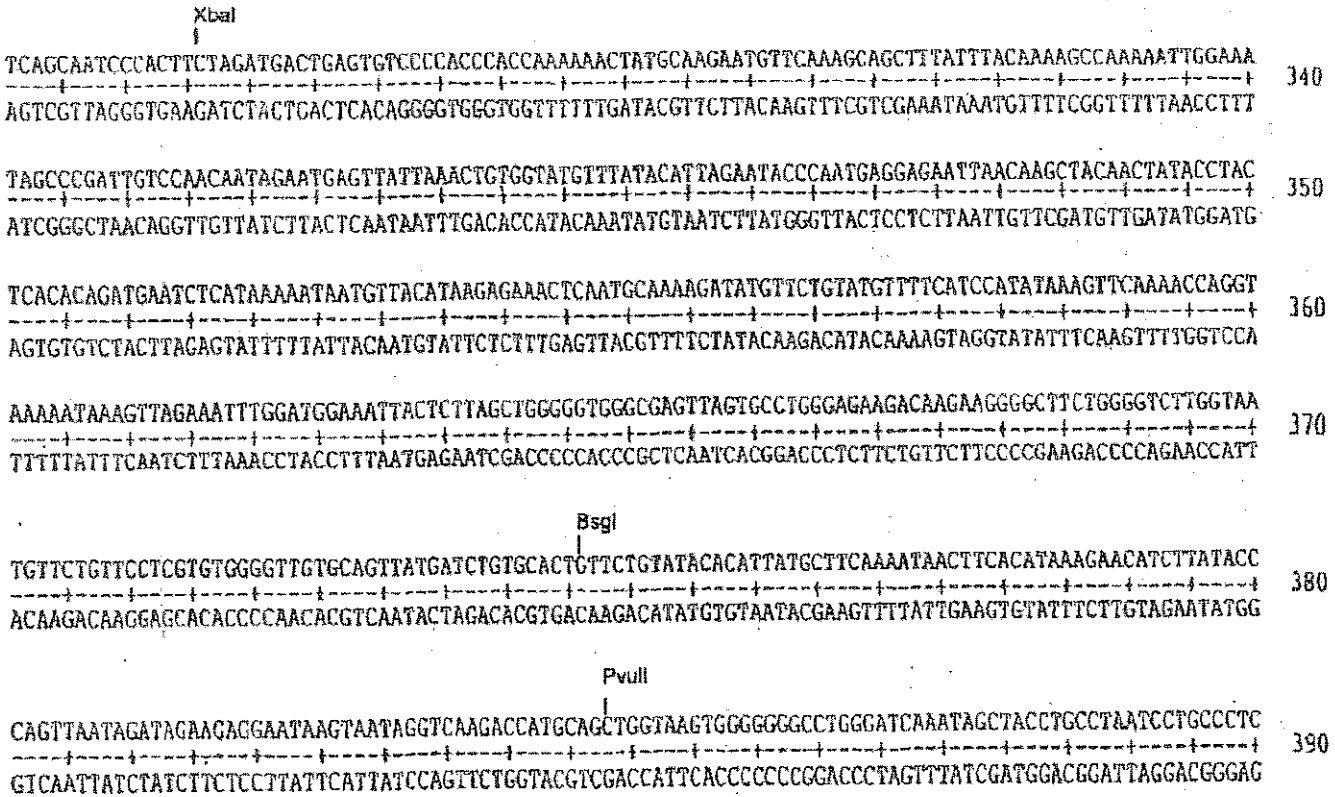

XbaI
TCAGCAATCCCACTTCTAGATGACTGAGTGTCCCCACCCACCAAAAAACTATGCAAGAATGTTCAAAGCAGCTTTATTTACAAAAGCCAAAAATTGGAAA
AGTCGTTAGGGTGAAGATCTACTGACTCACAGGGGTGGGTGGTTTTTTGATACGTTCTTACAAGTTTCGTCGAAATAAATGTTTTCGGTTTTTAACCTTT
340
TAGCCCGATTGTCCAACAATAGAATGAGTTATTAAACTGTGGTATGTTTATACATTAGAATACCCAATGAGGAGAATTAACAAGCTACAACTATACCTAC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

FIG. 13-7


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. 13.8

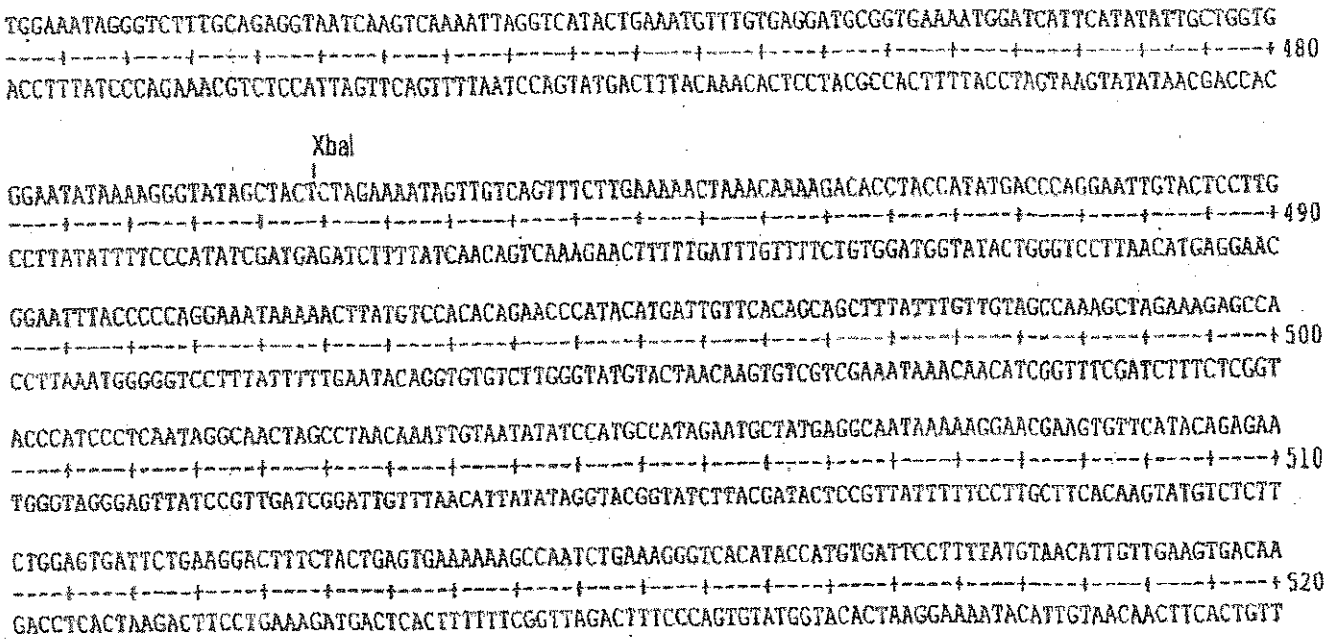

TGGAAATAGGGTCTTTGCAGAGGTAATCAAGTCAAAATTAGGTCATACTGAAATGTTTGTGAGGATGCGGTGAAAATGGATCATTCATATATTGCTGGTG
480
ACCTTTATCCCAGAAACGTCTCCATTAGTTCAGTTTTAATCCAGTATGACTTTACAAACACTCCTACGCCACTTTTACCTAGTAAGTATATAACGACCAC
XbaI
GGAATATAAAAGGGTATAGCTACTCTAGAAAATAGTTGTCAGTTTCTTGAAAAACTAAACAAAAGACACCTACCATATGACCCAGGAATTGTACTCCTTG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

FIG. 13.9

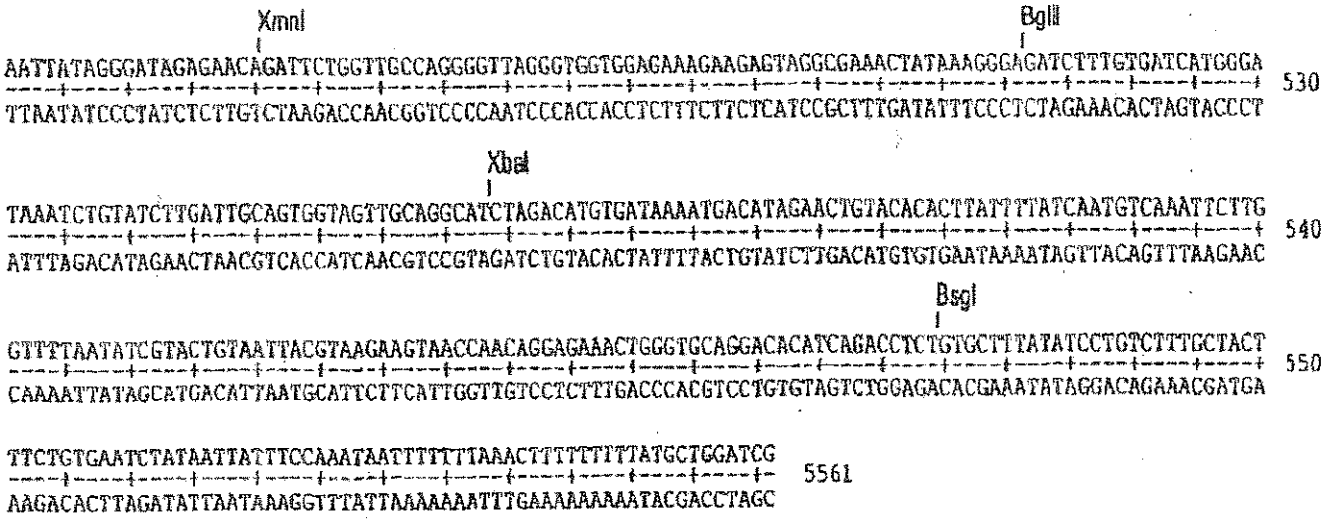

XmnI
BglII
AATTATAGGGATAGAGAACAGATTCTGGTTGCCAGGGGTTAGGGTGGTGGAGAAAGAAGAGTAGGCGAAACTATAAAGGGAGATCTTTGTGATCATGGGA
530
TTAATATCCCTATCTCTTGTCTAAGACCAACGGTCCCCAATCCCACCACCTCTTTCTTCTCATCCGCTTTGATATTTCCCTCTAGAAACACTAGTACCCT
XbaI
TAAATCTGTATCTTGATTGCAGTGGTAGTTGCAGGCATCTAGACATGTGATAAAATGACATAGAACTGTACACACTTATTTTATCAATGTCAAATTCTTG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

FIG. 13.10

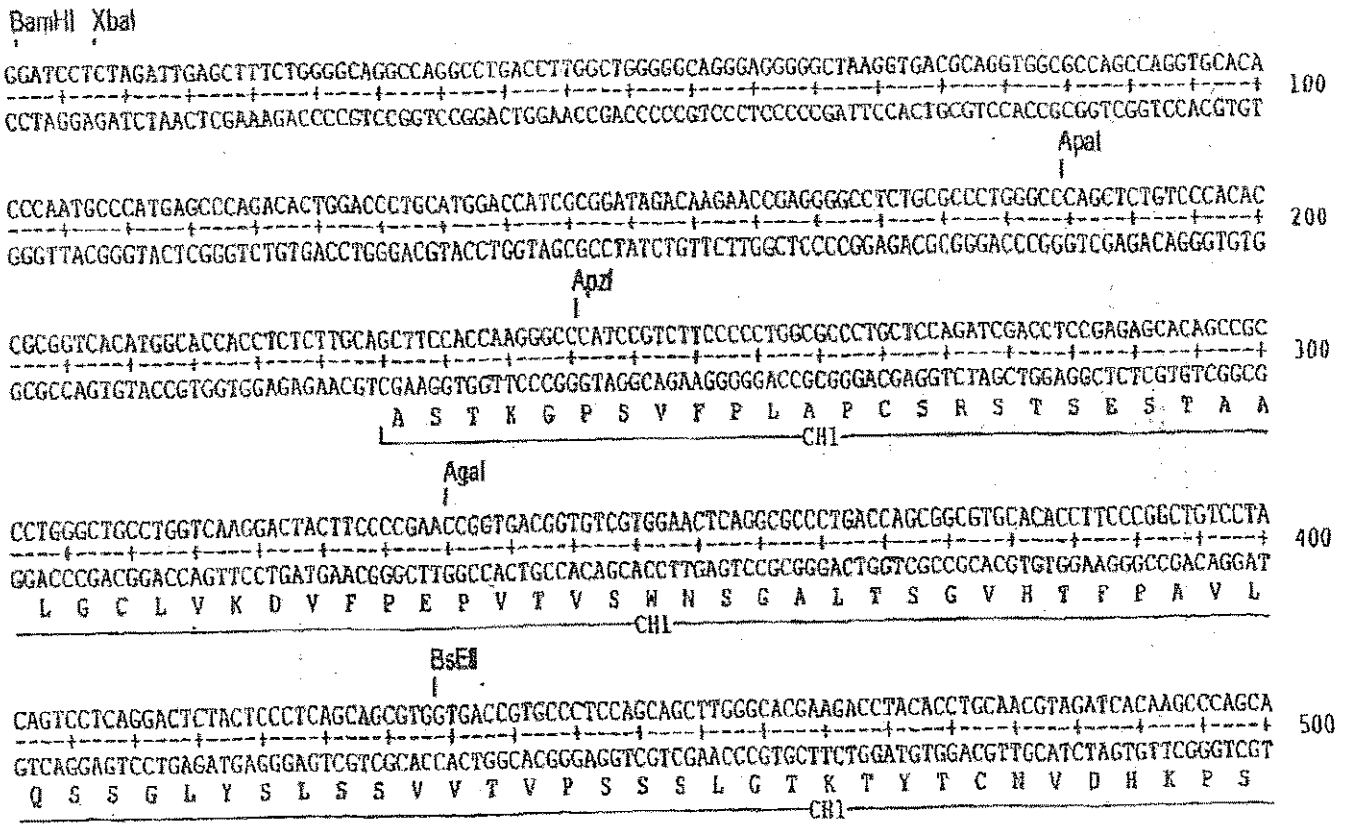

BamHI XbaI
GGATCCTCTAGATTGAGCTTTCTGGGGCAGGCCAGGCCTGACCTTGGCTGGGGGCAGGGAGGGGGCTAAGGTGACGCAGGTGGCGCCAGCCAGGTGCACA
CCTAGGAGATCTAACTCGAAAGACCCCGTCCGGTCCGGACTGGAACCGACCCCCGGTCCCTCCCCCGATTCCACTGCGTCCACCGCGGTCGGTCCACGTGT
100
ApaI
CCCAATGCCCATGAGCCCAGACACTGGACCCTGCATGGACCATCGCGGATAGACAAGAACCGAGGGGCCTCTGCGCCCTGGGCCCAGCTCTGTCCCACAC
GGGTTACGGGTACTCGGGTCTGTGACCTGGGACGTACCTGGTAGCGCCTATCTGTTCTTGGCTCCCCGGAGACGCGGGACCCGGGTCGAGACAGGGTGTG
200
ApaI
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 Y 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. 14-1

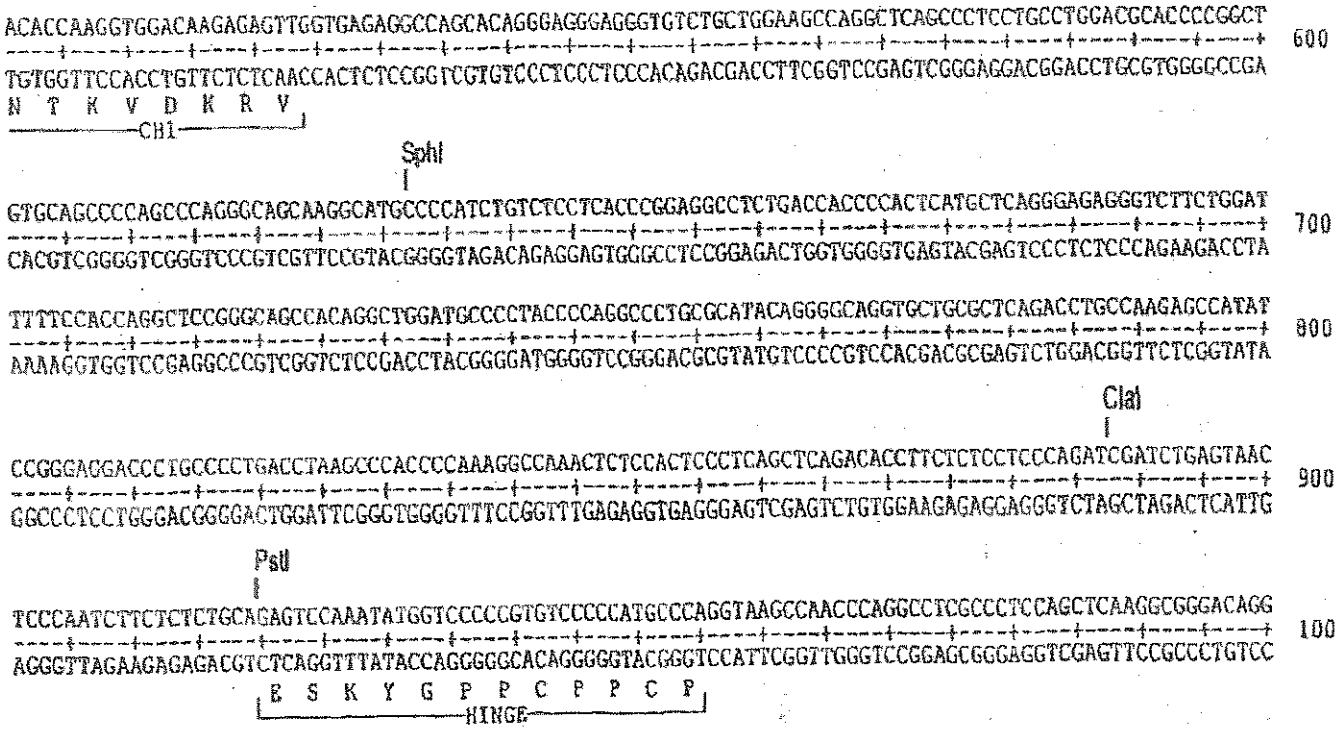

ACACCAAGGTGGACAAGAGAGTTGGTGAGAGGCCAGCACAGGGAGGGAGGGTGTCTGCTGGAAGCCAGGCTCAGCCCTCCTGCCTGGACGCACCCCGGCT
600
TGTGGTTCCACCTGTTCTCTCAACCACTCTCCGGTCGTGTCCCTCCCTCCCACAGACGACCTTCGGTCCGAGTCGGGAGGACGGACCTGCGTGGGGCCGA
N T K V D K R V
CH1
SphI
GTGCAGCCCCAGCCCAGGGCAGCAAGGCATGCCCCATCTGTCTCCTCACCCGGAGGCCTCTGACCACCCCACTCATGCTCAGGGAGAGGGTCTTCTGGAT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

FIG. 14.2

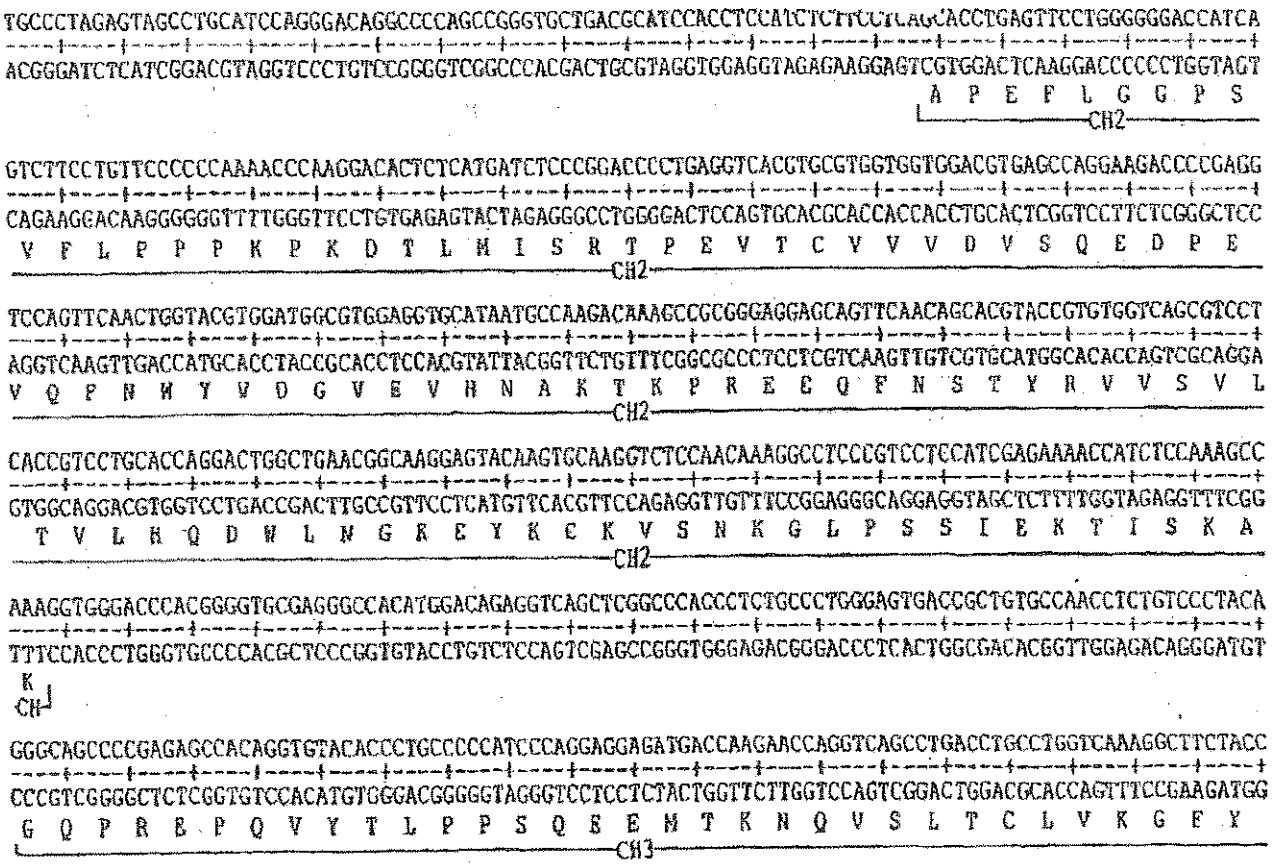

TGCCCTAGAGTAGCCTGCATCCAGGGACAGGCCCCAGCCGGGTGCTGACGCATCCACCTCCATCTCTTCCTCAGCACCTGAGTTCCTGGGGGGACCATCA
ACGGGATCTCATCGGACGTAGGTCCCTGTCCGGGTCGGCCCACGACTGCGTAGGTGGAGGTAGAGAAGGAGTCGTGGACTCAAGGACCCCCCTGGTAGT
110
A P E F L G G P S
CH2
GTCTTCCTGTTCCCCCCAAAACCCAAGGACACTCTCATGATCTCCCGGACCCCTGAGGTCACGTGCGTGGTGGTGGACGTGAGCCAGGAAGACCCCGAGG
CAGAAGGACAAGGGGGGTTTTGGGTTCCTGTGAGAGTACTAGAGGGCCTGGGGACTCCAGTGCACGCACCACCACCTGCACTCGGTCCTTCTCGGGCTCC
120
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
AGGTCAAGTTGACCATGCACCTACCGCACCTCCACGTATTACGGTTCTGTTTCGGCGCCCTCCTCGTCAAGTTGTCGTGCATGGCACACCAGTCGCAGGA
130
V Q P 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
GTGGCAGGACGTGGTCCTGACCGACTTGCCGTTCCTCATGTTCACGTTCCAGAGGTTGTTTCCGGAGGGCAGGAGGTAGCTCTTTGGTAGAGGTTTCGG
140
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
TTTCCACCCTGGGTGCCCCACGCTCCCGGTGTACCTGTCTCCAGTCGAGCCGGGTGGGAGACGGGACCCTCACTGGCGACACGGTTGGAGACAGGGATGT
150
K
CH
GGGCAGCCCCGAGAGCCACAGGTGTACACCCTGCCCCCATCCCAGGAGGAGATGACCAAGAACCAGGTCAGCCTGACCTGCCTGGTCAAAGGCTTCTACC
CCCGTCGGGGCTCTCGGTGTCCACATGTGGGACGGGGGTAGGGTCCTCCTCTACTGGTTCTTGGTCCAGTCGGACTGGACGCACCAGTTTCCGAAGATGG
160
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. 14-3

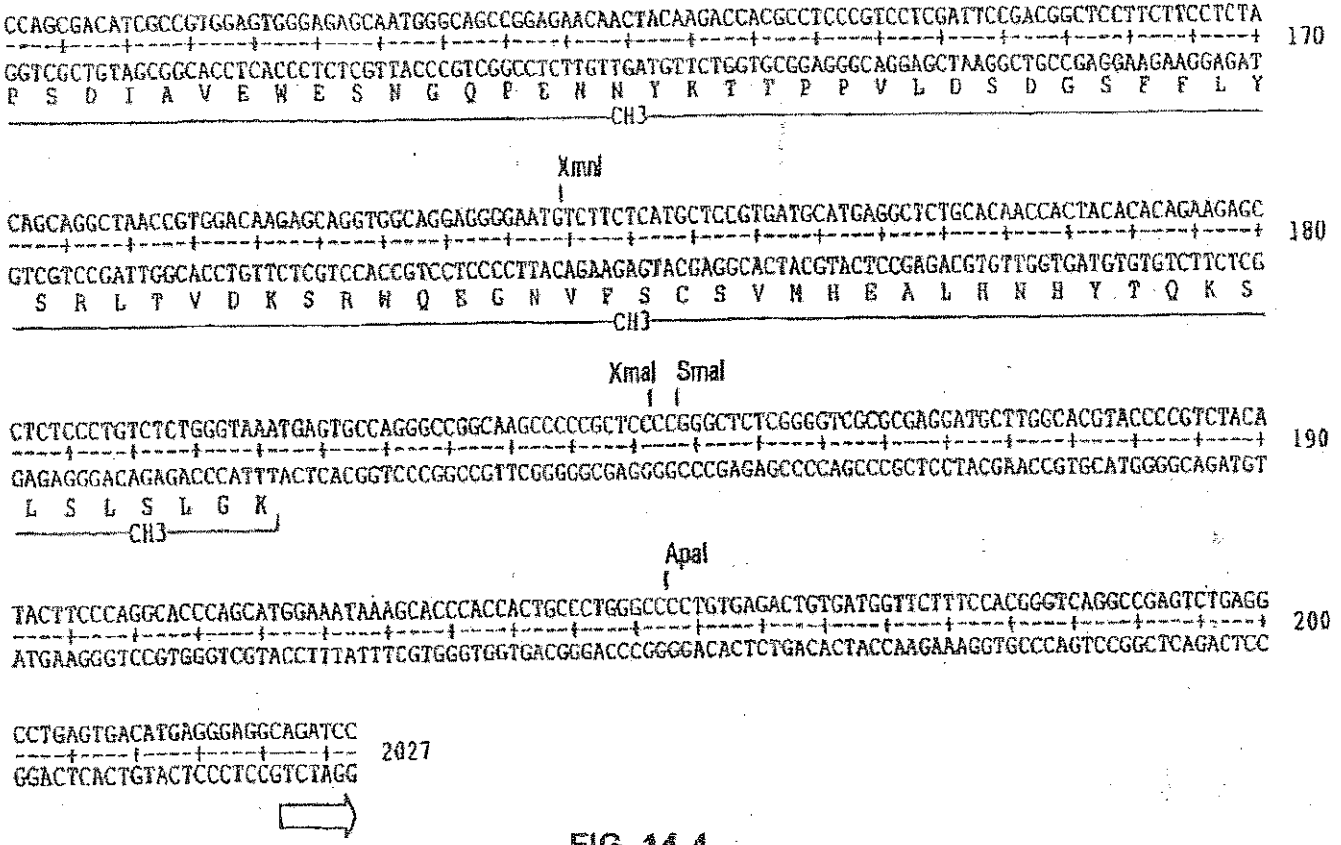

CCAGCGACATCGCCGTGGAGTGGGAGAGCAATGGGCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTCCTCGATTCCGACGGCTCCTTCTTCCTCTA
GGTCGCTGTAGCGGCACCTCACCCTCTCGTTACCCGTCGGCCTCTTGTTGATGTTCTGGTGCGGAGGGCAGGAGCTAAGGCTGCCGAGGAAGAAGGAGAT
P S D I A V E W E S N G Q P E N N Y K T T P P V L D S D G S F F L Y
CH3
XmnI
CAGCAGGCTAACCGTGGACAAGAGCAGGTGGCAGGAGGGGAATGTCTTCTCATGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACACAGAAGAGC
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
GAGAGGGACAGAGACCCATTTACTCACGGTCCCGGCCGTTCGGGGCGAGGGGCCCGAGAGCCCCAGCCCGCTCCTACGAACCGTGCATGGGGCAGATGT
L S L S L G K
CH3
ApaI
TACTTCCCAGGCACCCAGCATGGAAATAAAGCACCCACCACTGCCCTGGGCCCCTGTGAGACTGTGATGGTTCTTTCCACGGGTCAGGCCGAGTCTGAGG
ATGAAGGGTCCGTGGGTCGTACCTTTATTTCGTGGGTGGTGACGGGACCCGGGGACACTCTGACACTACCAAGAAAGGTGCCCAGTCCGGCTCAGACTCC
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2027

FIG. 14-4

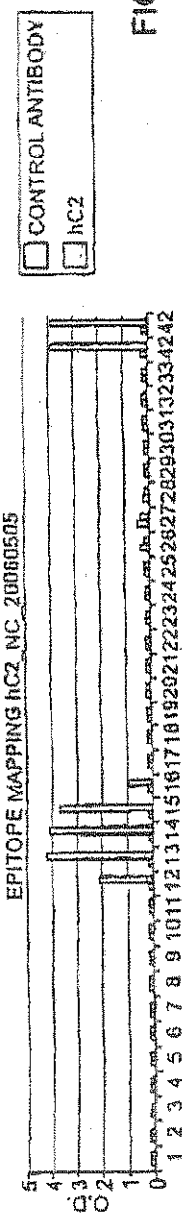


FIG. 15A

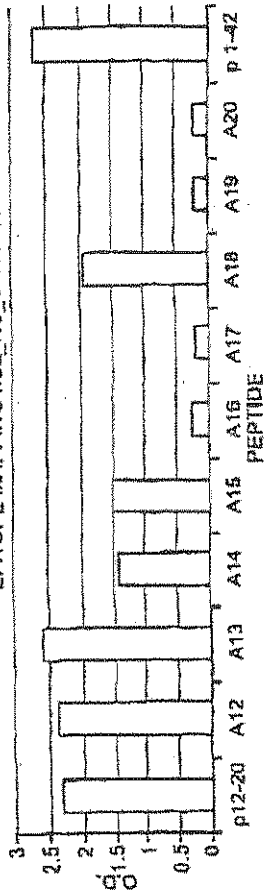


FIG. 15B

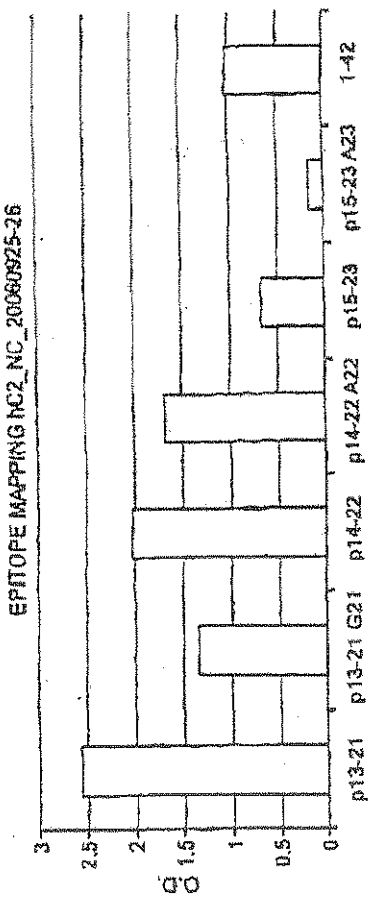


FIG. 15C

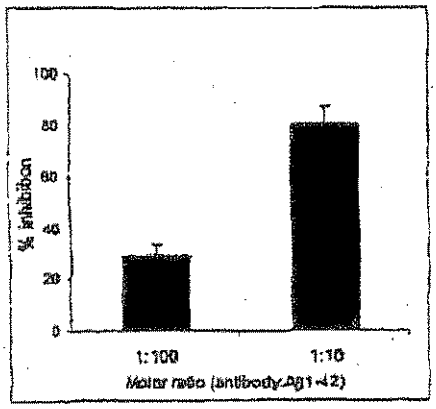

100
80
60
40
20
0
% inhibition
1:100
1:10
Molar ratio (antibody:Ag1-42)

FIG. 16

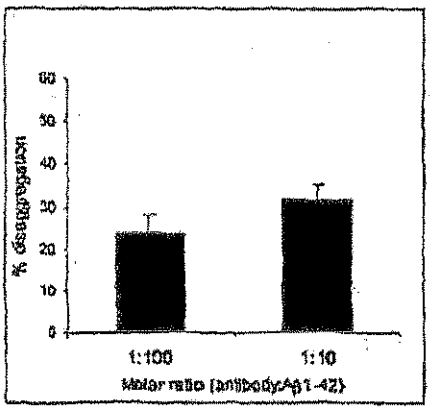

% deaggregation
60
50
40
30
20
10
0
1:100
1:10
Molar ratio (antibody:Aβ1-42)

FIG. 17

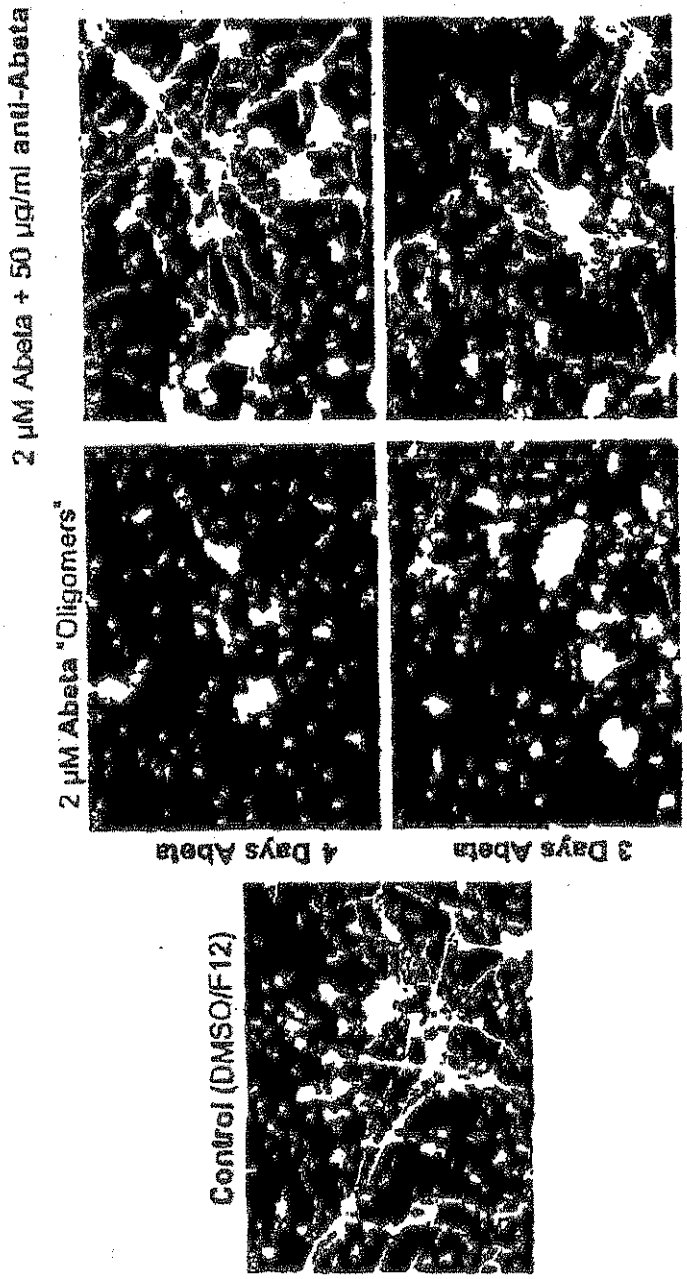

2 µM Abeta + 50 µg/ml anti-Abeta
2 µM Abeta "Oligomers"
4 Days Abeta
3 Days Abeta
Control (DMSO/F12)

FIG. 18