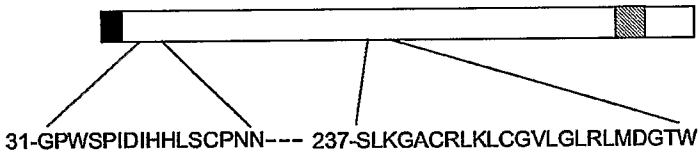
A

		39				245			248	
	I	H	H	L	L	K	L	C	G	V
CVS-11	106-ATA	CAC	CAT	CTC-------730-CTC		AAG	TTA	TGT	GGA	GTT
E57A2	106-ATA	CAC	CAT	CTC-------730-CTC		AAG	TTA	TGT	GAA	GTT
E57A3	106-ATA	CAA	CAT	CTC-------730-CTC		GAG	TTA	TGT	GGA	GTT
E57B1	106-ATA	CAC	CAT	CTC-------730-CTC		GAG	TTA	TGT	GGA	GTT
E57B2	106-ATA	CAC	CAT	CTC-------730-CTC		AAT	TTA	TGT	GGA	GTT
E57B3	106-ATA	CAC	CAT	CTC-------730-CTC		GAG	TTA	TGT	GGA	GTT
E57C3	106-ATA	CAC	CAT	CTC-------730-CTC		AAT	TTA	TGT	GGA	GTT

B



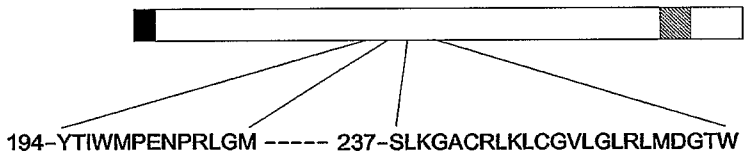
E57A2	GPWSPIDIHHLSCPNN-------	SLKGACRLKLCEVLGLRLMDGTW
E57A3	GPWSPIDIQHLSCPNN-------	SLKGACRLELCGVLGLRLMDGTW
E57B1	GPWSPIDIHHLSCPNN-------	SLKGACRLELCGVLGLRLMDGTW
E57B2	GPWSPIDIHHLSCPNN-------	SLKGACRLNLCGVLGLRLMDGTW
E57B3	GPWSPIDIHHLSCPNN-------	SLKGACRLELCGVLGLRLMDGTW
E57C3	GPWSPIDIHHLSCPNN-------	SLKGACRLNLCGVLGLRLMDGTW

FIGURE 1

A

		201				248		250	
	P	E	N	P	R	C	G	V	L	G
CVS-11	595-CCC	GAG	AAT	CCG	AGA	724-TGT	GGA	GTT	CTT	GGA
EJB2B	595-CCC	GAG	GAT	CCG	AGA	724-TGT	GAA	GTT	CCT	GGA
EJB2C	595-CCC	GAG	GAT	CCG	AGA	724-TGT	GAA	GTT	CCT	GGA
EJB2D	595-CCC	GAG	GAT	CCG	AGA	724-TGT	GGA	GTT	CCT	GGA
EJB2E	595-CCC	GAG	GAT	CCG	AGA	724-TGT	GGA	GTT	CCT	GGA
EJB2F	595-CCC	GAG	GAT	CCG	AGA	724-TGT	GAA	GTT	CCT	GGA
EJB3F	595-CCC	GAG	GAT	CCG	AGA	724-TGT	GGA	GTT	CCT	GGA

B



EJB2B	YTIWMPEDPRLGM	---------	SLKGACRLKLCEVPGLRLMDGTW
EJB2C	YTIWMPEDPRLGM	---------	SLKGACRLKLCEVPGLRLMDGTW
EJB2D	YTIWMPEDPRLGM	---------	SLKGACRLKLCGVPGLRLMDGTW
EJB2E	YTIWMPEDPRLGM	---------	SLKGACRLKLCGVPGLRLMDGTW
EJB2F	YTIWMPEDPRLGM	---------	SLKGACRLKLCEVPGLRLMDGTW
EJB3F	YTIWMPEDPRLGM	---------	SLKGACRLKLCGVPGLRLMDGTW

FIGURE 2

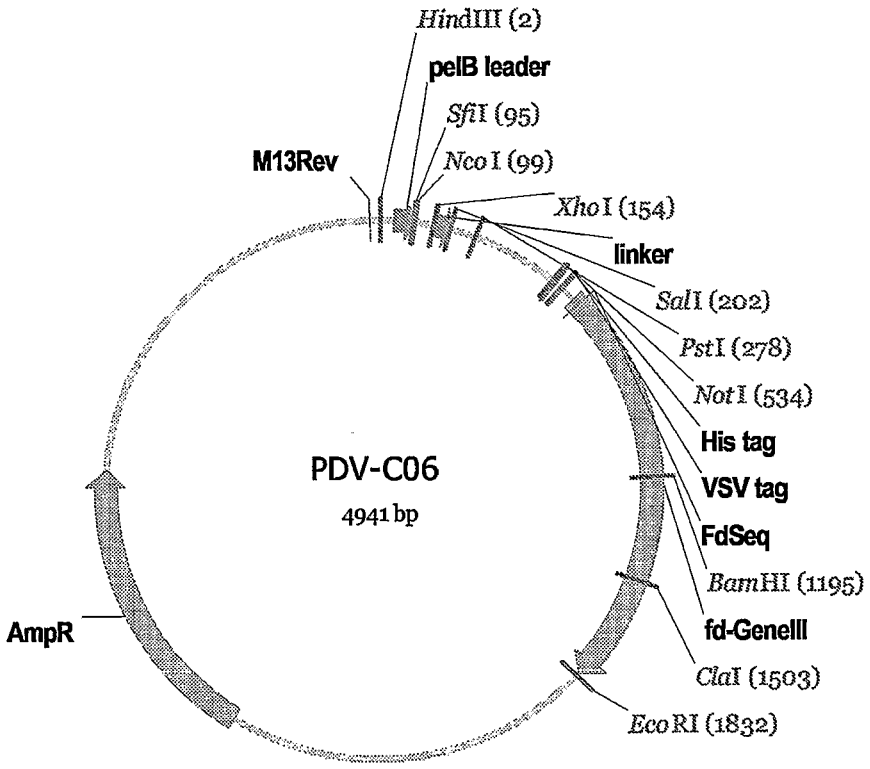

HindIII (2)
pelB leader
SfiI (95)
NcoI (99)
M13Rev
XhoI (154)
linker
SalI (202)
PstI (278)
NotI (534)
His tag
VSV tag
FdSeq
BamHI (1195)
fd-GeneIII
ClaI (1503)
EcoRI (1832)
AmpR
PDV-C06
4941 bp

FIGURE 3

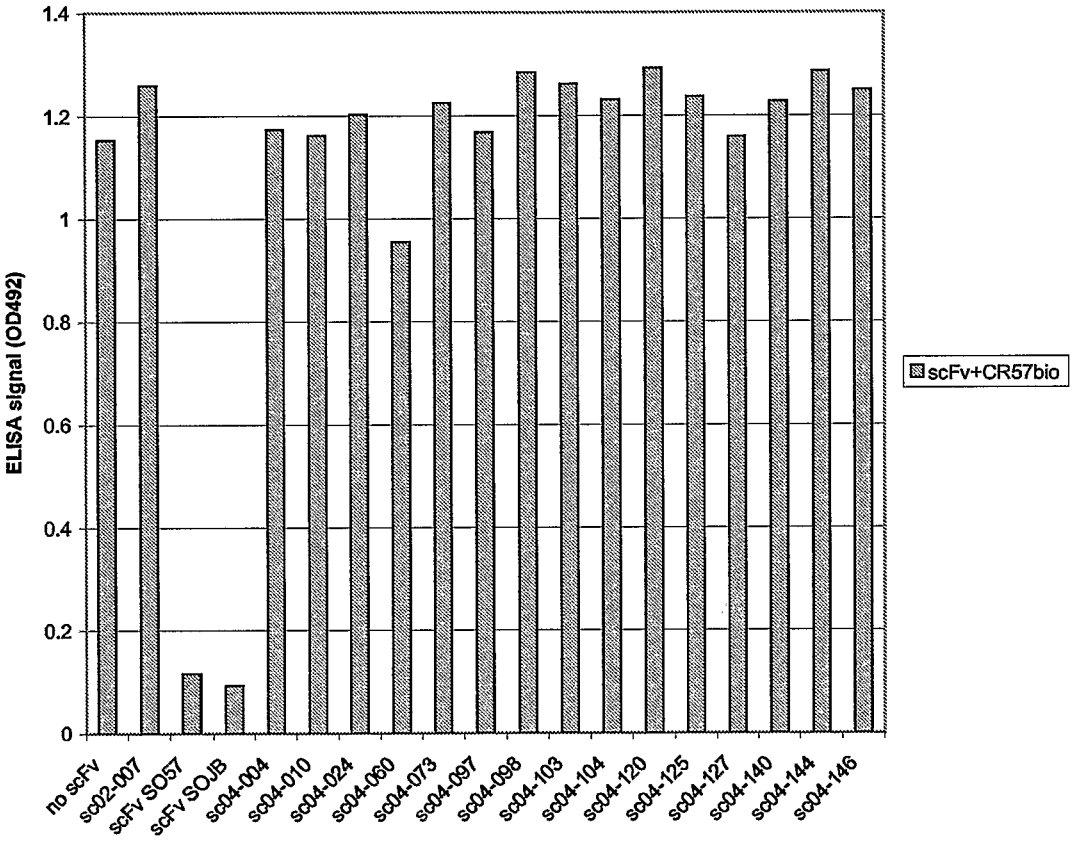

1.4
1.2
1
0.8
0.6
0.4
0.2
0
ELISA signal (OD492)
scFv+CR57bio
no scFv
sc02-007
scFv SO57
scFv SOJB
sc04-004
sc04-010
sc04-024
sc04-060
sc04-073
sc04-097
sc04-098
sc04-103
sc04-104
sc04-120
sc04-125
sc04-127
sc04-140
sc04-144
sc04-146

FIGURE 4

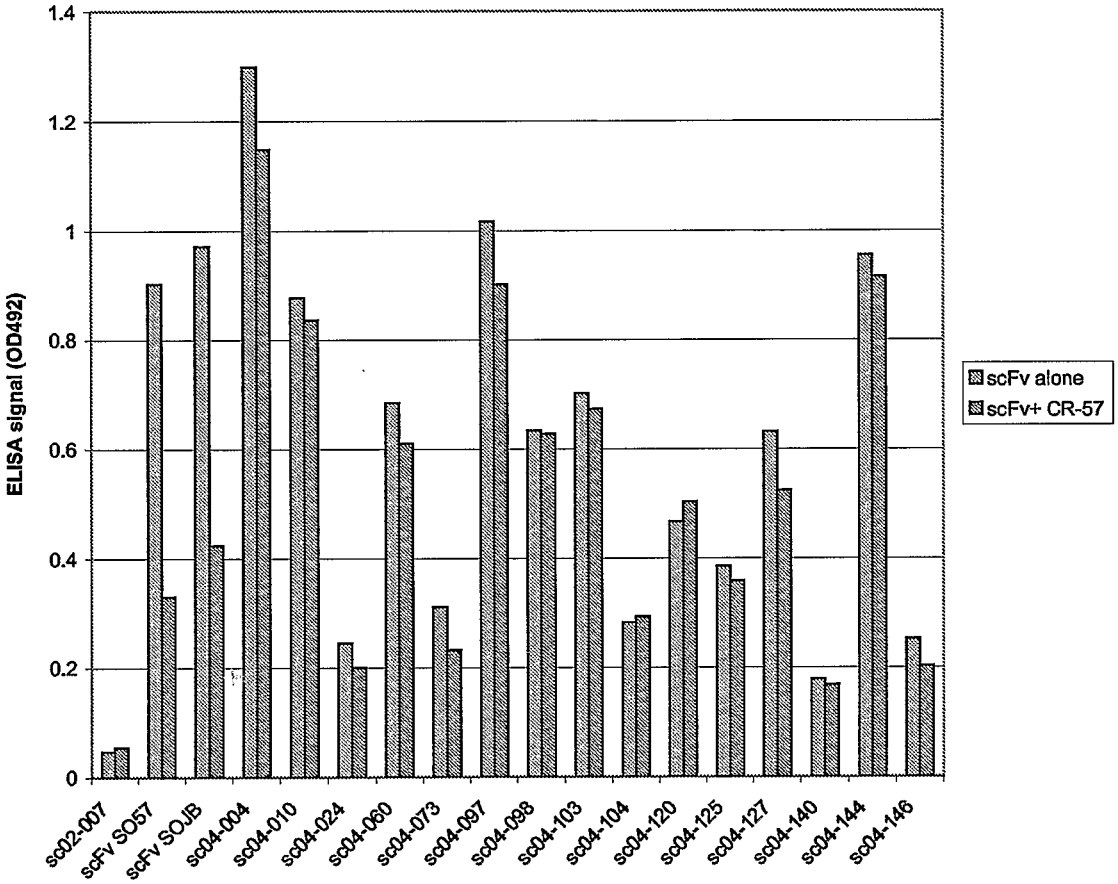

ELISA signal (OD492)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
scFv alone
scFv+ CR-57
sc02-007
scFv SO57
scFv SOJB
sc04-004
sc04-010
sc04-024
sc04-060
sc04-073
sc04-097
sc04-098
sc04-103
sc04-104
sc04-120
sc04-125
sc04-127
sc04-140
sc04-144
sc04-146

FIGURE 5

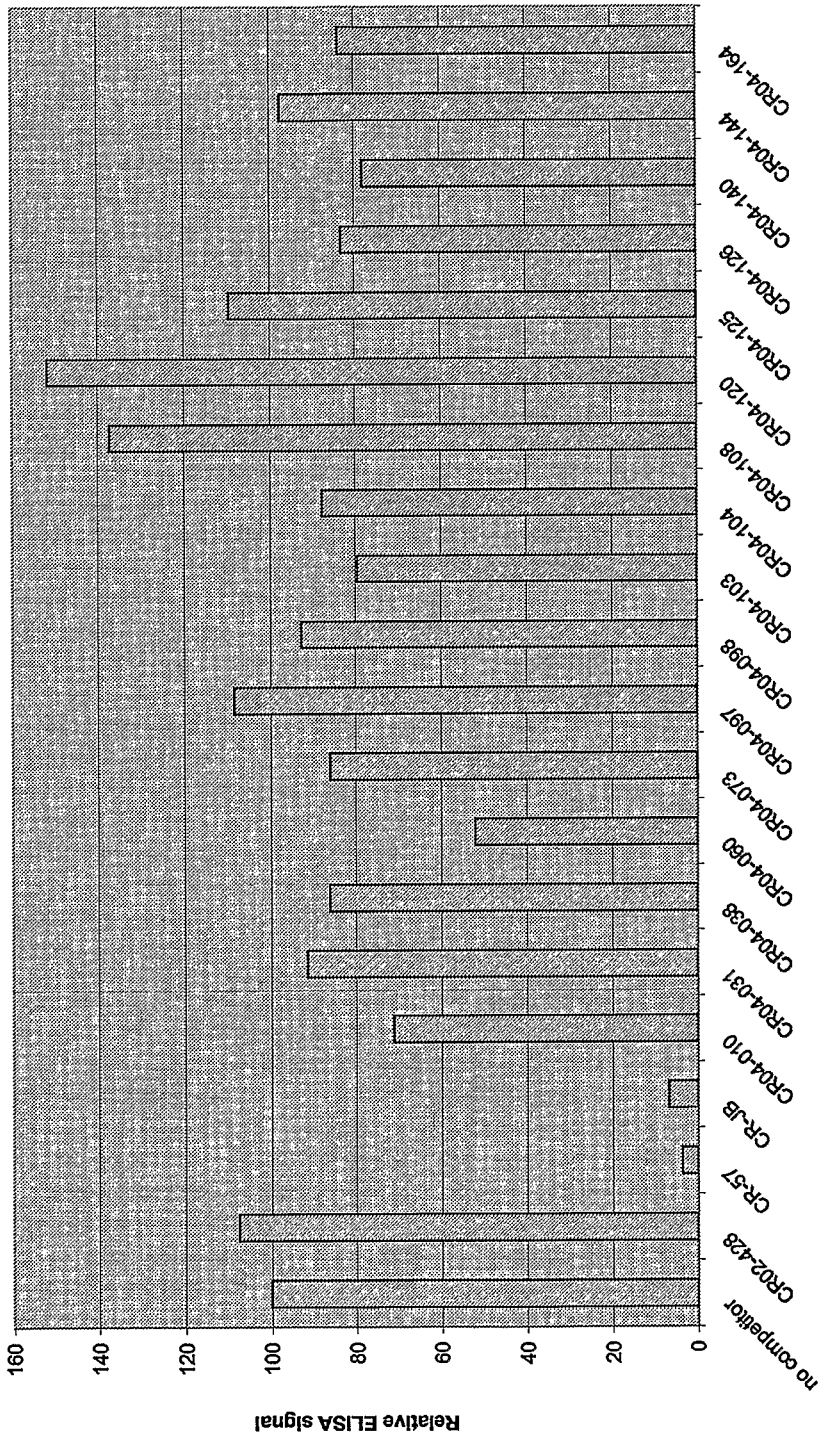

Relative ELISA signal
160
140
120
100
80
60
40
20
0
no competitor
CR02-428
CR-57
CR-JB
CR04-010
CR04-031
CR04-038
CR04-060
CR04-073
CR04-097
CR04-098
CR04-103
CR04-104
CR04-108
CR04-120
CR04-125
CR04-128
CR04-140
CR04-144
CR04-164

FIGURE 6

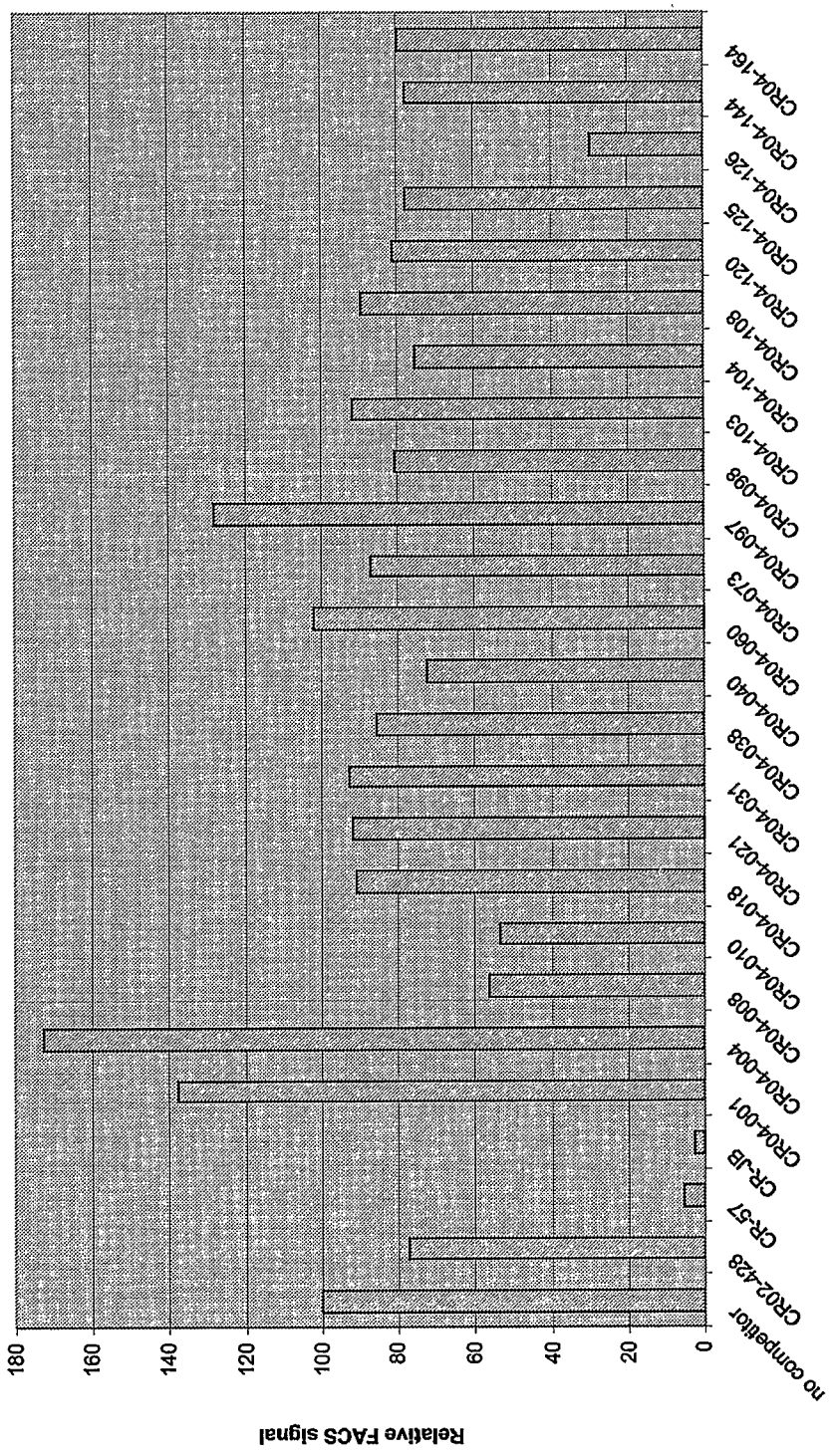

Relative FACS signal
180
160
140
120
100
80
60
40
20
0
no competitor
CR02-428
CR-57
CR-JB
CR04-001
CR04-004
CR04-008
CR04-010
CR04-018
CR04-021
CR04-031
CR04-038
CR04-040
CR04-060
CR04-073
CR04-097
CR04-098
CR04-103
CR04-104
CR04-108
CR04-120
CR04-125
CR04-126
CR04-144
CR04-164

FIGURE 7

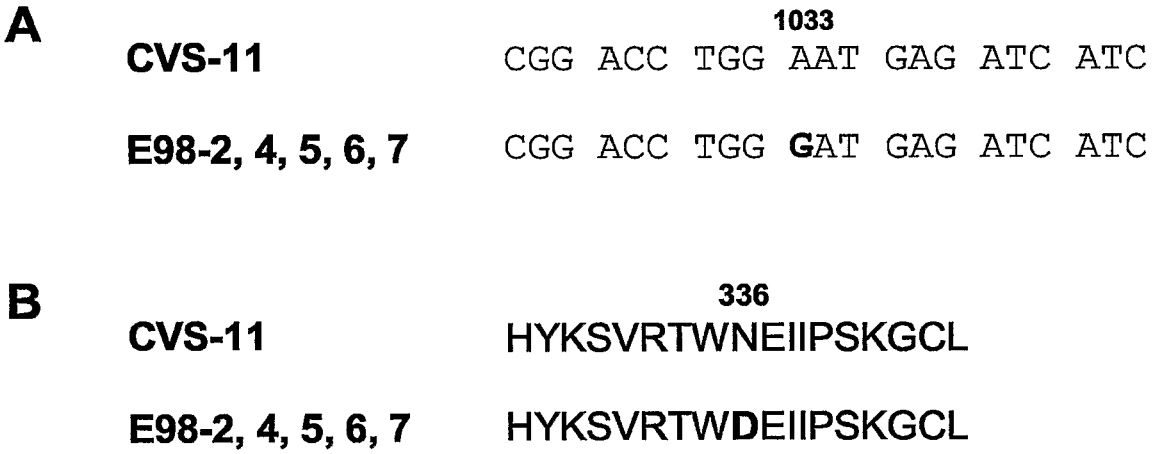

A
1033
CVS-11
CGG ACC TGG AAT GAG ATC ATC
E98-2, 4, 5, 6, 7
CGG ACC TGG GAT GAG ATC ATC
B
336
CVS-11
HYKSVRTWNEIIPSKGCL
E98-2, 4, 5, 6, 7
HYKSVRTWDEIIPSKGCL

FIGURE 8

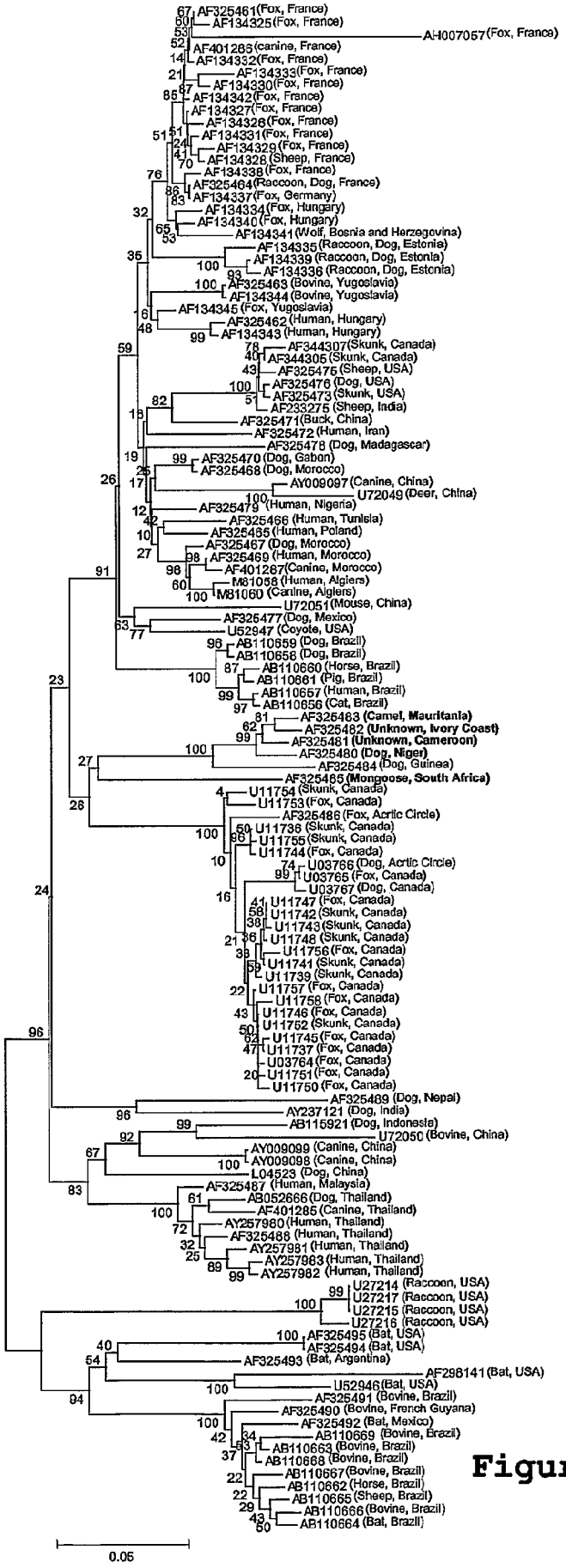

AF325461 (Fox, France)
AF134325 (Fox, France)
AH007057 (Fox, France)
AF401283 (canine, France)
AF134332 (Fox, France)
AF134333 (Fox, France)
AF134330 (Fox, France)
AF134342 (Fox, France)
AF134327 (Fox, France)
AF134326 (Fox, France)
AF134331 (Fox, France)
AF134329 (Fox, France)
AF134328 (Sheep, France)
AF134338 (Fox, France)
AF325464 (Raccoon, Dog, France)
AF134337 (Fox, Germany)
AF134334 (Fox, Hungary)
AF134340 (Fox, Hungary)
AF134341 (Wolf, Bosnia and Herzegovina)
AF134335 (Raccoon, Dog, Estonia)
AF134339 (Raccoon, Dog, Estonia)
AF134336 (Raccoon, Dog, Estonia)
AF325463 (Bovine, Yugoslavia)
AF134344 (Bovine, Yugoslavia)
AF134345 (Fox, Yugoslavia)
AF325462 (Human, Hungary)
AF134343 (Human, Hungary)
AF344307 (Skunk, Canada)
AF344305 (Skunk, Canada)
AF325476 (Sheep, USA)
AF325476 (Dog, USA)
AF325473 (Skunk, USA)
AF233275 (Sheep, India)
AF325471 (Buck, China)
AF325472 (Human, Iran)
AF325478 (Dog, Madagascar)
AF325470 (Dog, Gabon)
AF325468 (Dog, Morocco)
AY009097 (Canine, China)
U72049 (Deer, China)
AF325479 (Human, Nigeria)
AF325466 (Human, Tunisia)
AF325465 (Human, Poland)
AF325467 (Dog, Morocco)
AF325469 (Human, Morocco)
AF401287 (Canine, Morocco)
M81058 (Human, Algiers)
M81060 (Canine, Algiers)
U72051 (Mouse, China)
AF325477 (Dog, Mexico)
U52947 (Coyote, USA)
AB110659 (Dog, Brazil)
AB110658 (Dog, Brazil)
AB110660 (Horse, Brazil)
AB110661 (Pig, Brazil)
AB110657 (Human, Brazil)
AB110656 (Cat, Brazil)
AF325483 (Camel, Mauritania)
AF325482 (Unknown, Ivory Coast)
AF325481 (Unknown, Cameroon)
AF325480 (Dog, Niger)
AF325484 (Dog, Guinea)
AF325485 (Mongoose, South Africa)
U11754 (Skunk, Canada)
U11753 (Fox, Canada)
AF325486 (Fox, Arctic Circle)
U11736 (Skunk, Canada)
U11755 (Skunk, Canada)
U11744 (Fox, Canada)
U03766 (Dog, Arctic Circle)
U03765 (Fox, Canada)
U03767 (Dog, Canada)
U11747 (Fox, Canada)
U11742 (Skunk, Canada)
U11743 (Skunk, Canada)
U11748 (Skunk, Canada)
U11756 (Fox, Canada)
U11741 (Skunk, Canada)
U11739 (Skunk, Canada)
U11757 (Fox, Canada)
U11758 (Fox, Canada)
U11746 (Fox, Canada)
U11752 (Skunk, Canada)
U11745 (Fox, Canada)
U11737 (Fox, Canada)
U03764 (Fox, Canada)
U11751 (Fox, Canada)
U11750 (Fox, Canada)
AF325489 (Dog, Nepal)
AY237121 (Dog, India)
AB115921 (Dog, Indonesia)
U72050 (Bovine, China)
AY009099 (Canine, China)
AY009098 (Canine, China)
L04523 (Dog, China)
AF325487 (Human, Malaysia)
AB052666 (Dog, Thailand)
AF401285 (Canine, Thailand)
AY257980 (Human, Thailand)
AF325488 (Human, Thailand)
AY257981 (Human, Thailand)
AY257983 (Human, Thailand)
AY257982 (Human, Thailand)
U27214 (Raccoon, USA)
U27217 (Raccoon, USA)
U27215 (Raccoon, USA)
U27216 (Raccoon, USA)
AF325495 (Bat, USA)
AF325494 (Bat, USA)
AF325493 (Bat, Argentina)
AF298141 (Bat, USA)
U52946 (Bat, USA)
AF325491 (Bovine, Brazil)
AF325490 (Bovine, French Guyana)
AF325492 (Bat, Mexico)
AB110669 (Bovine, Brazil)
AB110663 (Bovine, Brazil)
AB110668 (Bovine, Brazil)
AB110667 (Bovine, Brazil)
AB110662 (Horse, Brazil)
AB110665 (Sheep, Brazil)
AB110666 (Bovine, Brazil)
AB110664 (Bat, Brazil)
0.05

Figure 9

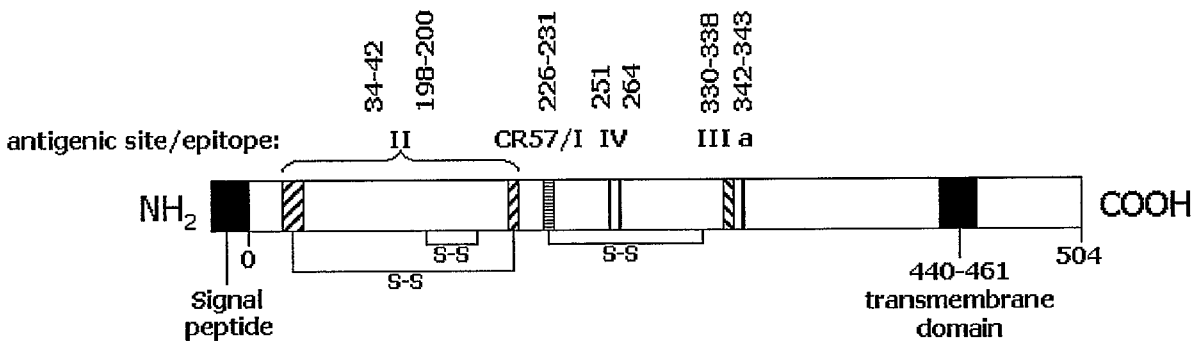

34-42
198-200
226-231
251
264
330-338
342-343
antigenic site/epitope:
II
CR57/I
IV
III a
NH2
COOH
0
S-S
S-S
S-S
504
440-461
transmembrane
domain
Signal
peptide

Figure 10