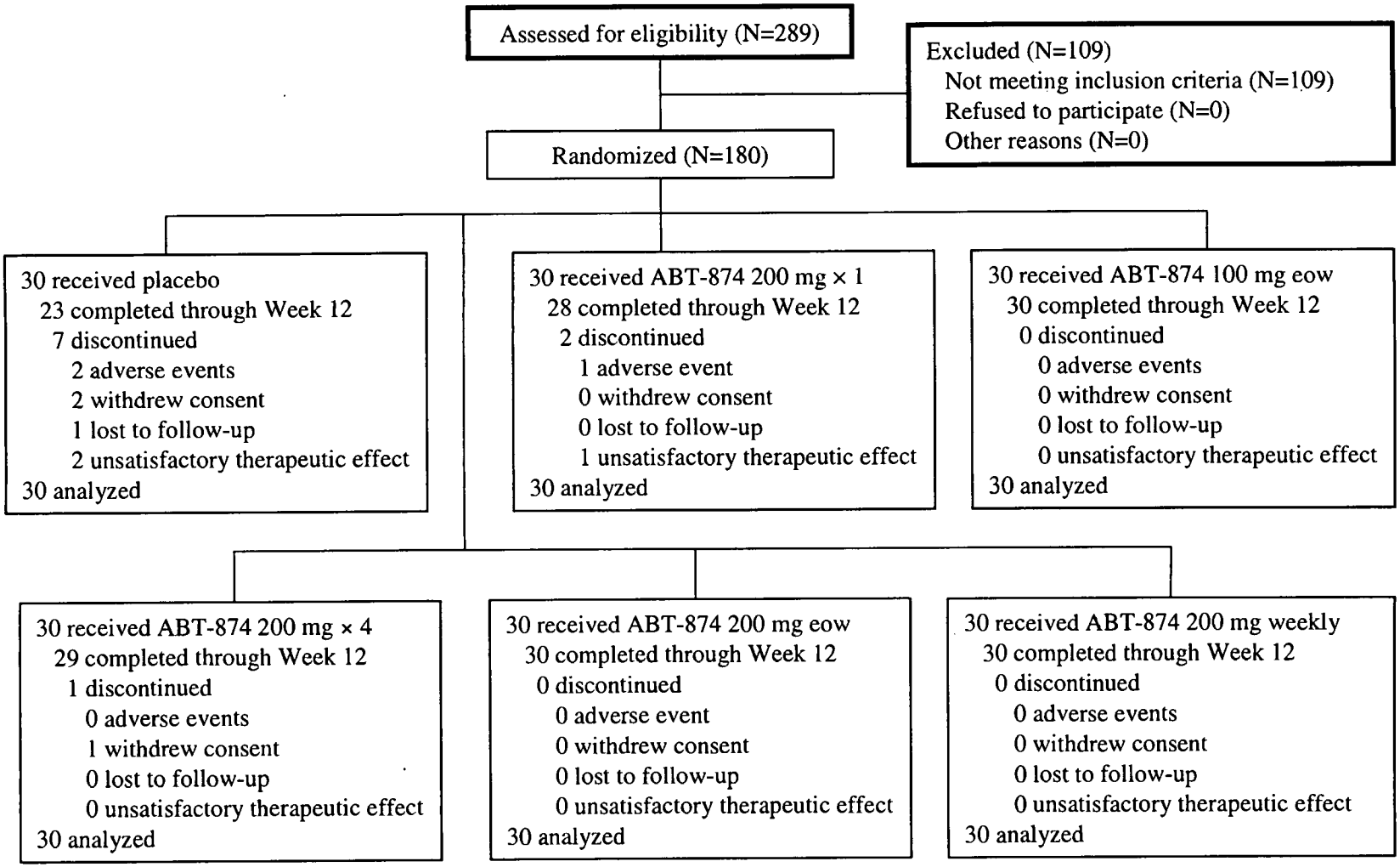

Assessed for eligibility (N=289)
Excluded (N=109)
Not meeting inclusion criteria (N=109)
Refused to participate (N=0)
Other reasons (N=0)
Randomized (N=180)
30 received placebo
23 completed through Week 12
7 discontinued
2 adverse events
2 withdrew consent
1 lost to follow-up
2 unsatisfactory therapeutic effect
30 analyzed
30 received ABT-874 200 mg × 1
28 completed through Week 12
2 discontinued
1 adverse event
0 withdrew consent
0 lost to follow-up
1 unsatisfactory therapeutic effect
30 analyzed
30 received ABT-874 100 mg eow
30 completed through Week 12
0 discontinued
0 adverse events
0 withdrew consent
0 lost to follow-up
0 unsatisfactory therapeutic effect
30 analyzed
30 received ABT-874 200 mg × 4
29 completed through Week 12
1 discontinued
0 adverse events
1 withdrew consent
0 lost to follow-up
0 unsatisfactory therapeutic effect
30 analyzed
30 received ABT-874 200 mg eow
30 completed through Week 12
0 discontinued
0 adverse event
0 withdrew consent
0 lost to follow-up
0 unsatisfactory therapeutic effect
30 analyzed
30 received ABT-874 200 mg weekly
30 completed through Week 12
0 discontinued
0 adverse events
0 withdrew consent
0 lost to follow-up
0 unsatisfactory therapeutic effect
30 analyzed

Fig. 1

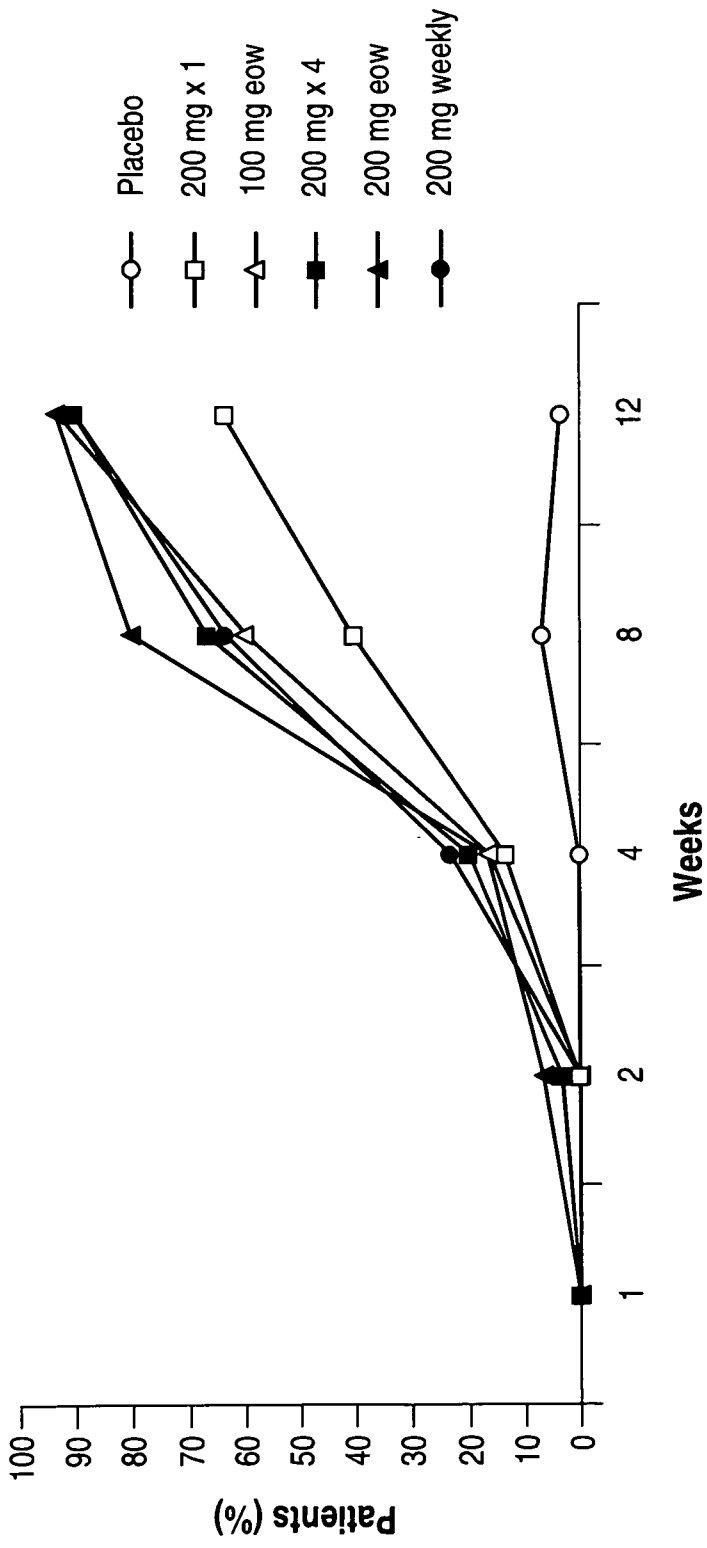

Placebo
200 mg x 1
100 mg eow
200 mg x 4
200 mg eow
200 mg weekly
Patients (%)
100
90
80
70
60
50
40
30
20
10
0
1
2
4
8
12
Weeks

Fig. 2

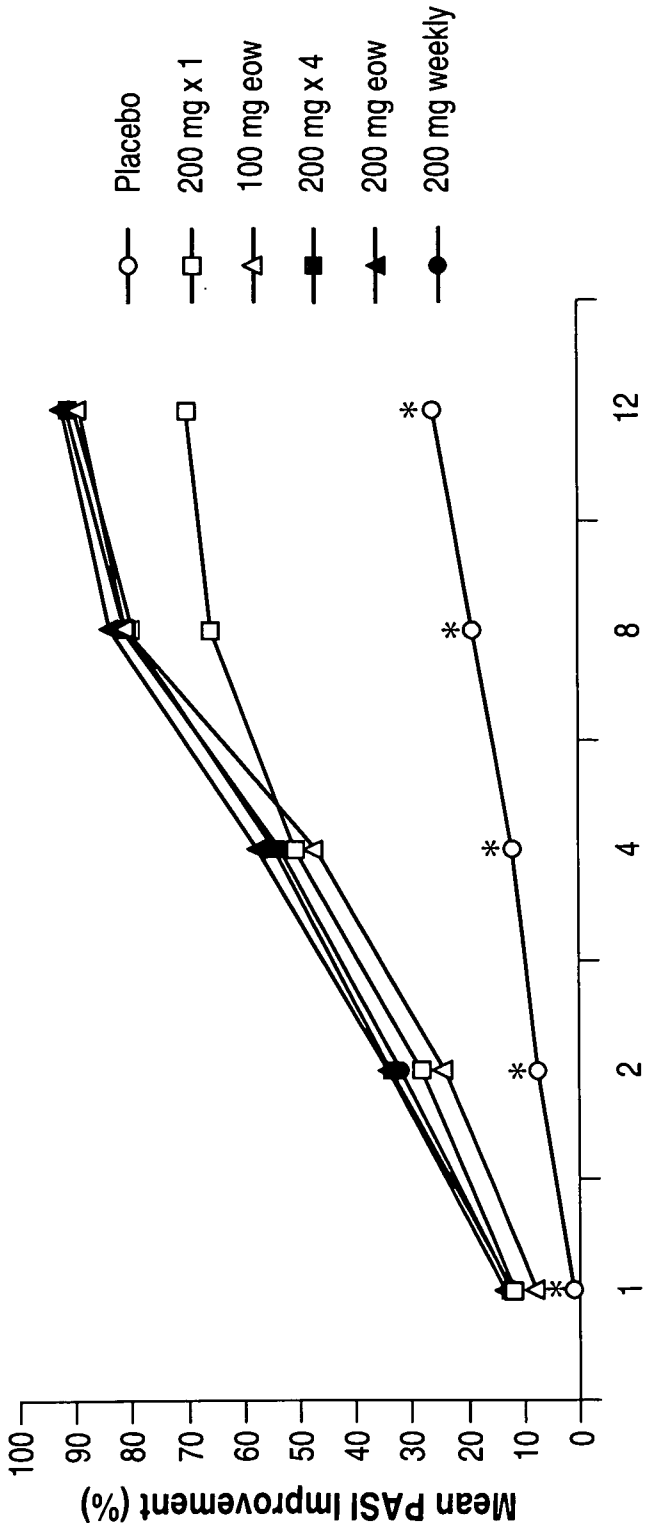
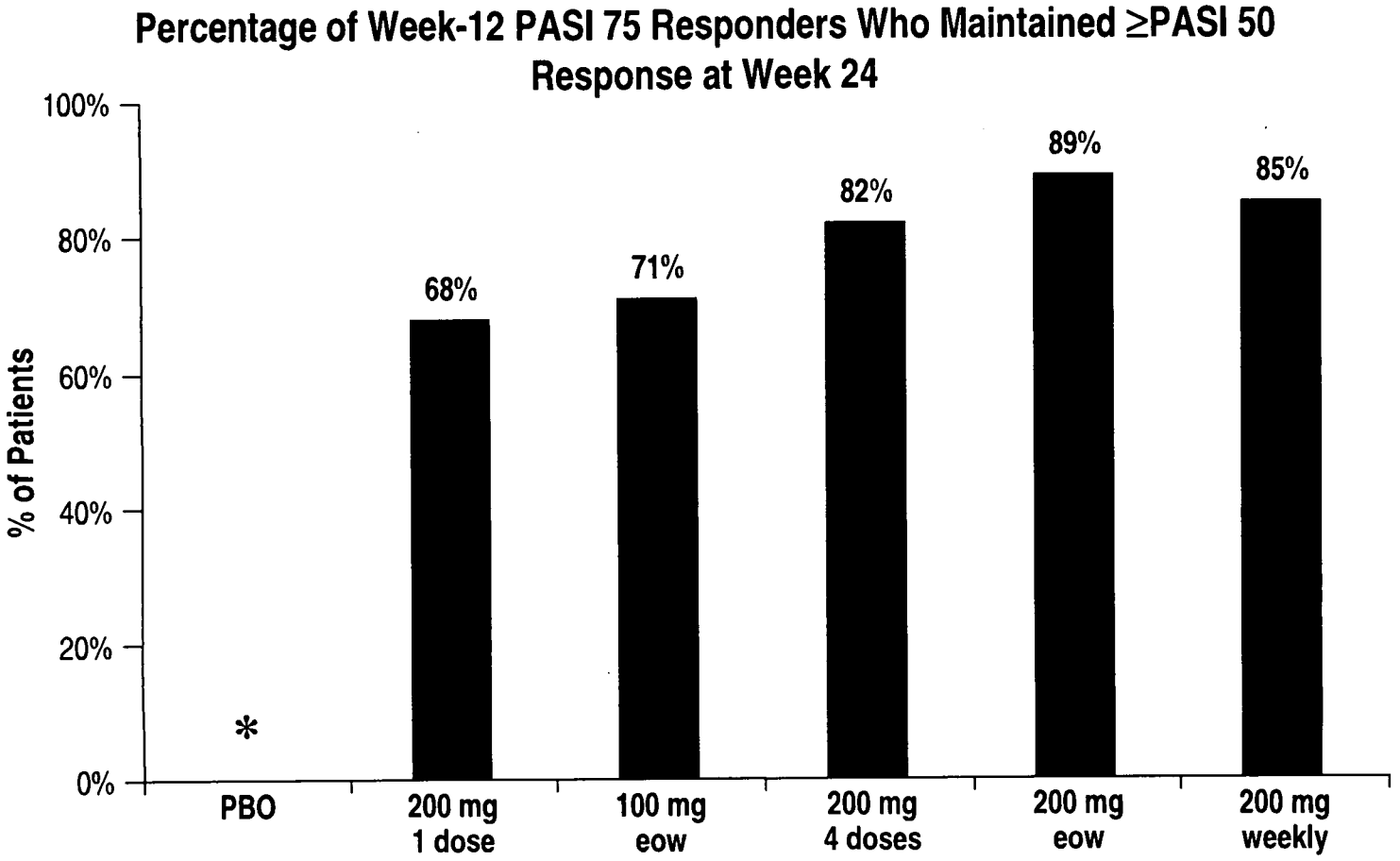

Placebo
200 mg x 1
100 mg eow
200 mg x 4
200 mg eow
200 mg weekly
Mean PASI Improvement (%)
0
10
20
30
40
50
60
70
80
90
100
1
2
4
8
12
Weeks
*

Fig. 3



* 1 of 1 patients in the placebo group who was a PASI 75 responder at Week 12 maintained a PASI 50 response at Week 24 following discontinuation of placebo at Week 12.

Fig. 4A

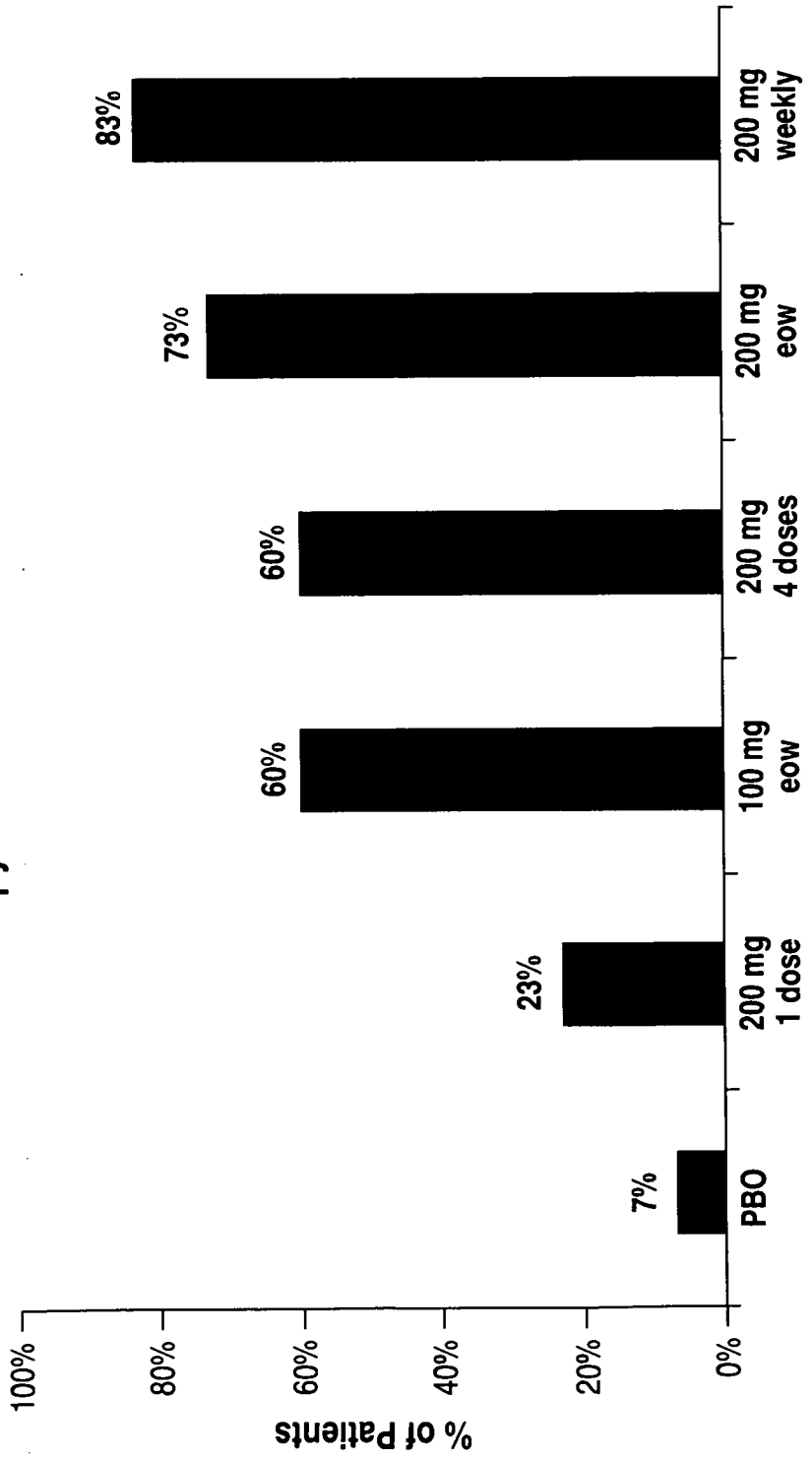

PASI 75 at Week 24 Following
Therapy Discontinuation at Week 12
% of Patients
100%
80%
60%
40%
20%
0%
7%
23%
60%
60%
73%
83%
PBO
200 mg 1 dose
100 mg eow
200 mg 4 doses
200 mg eow
200 mg weekly
ITT-NRI.

Fig. 4B

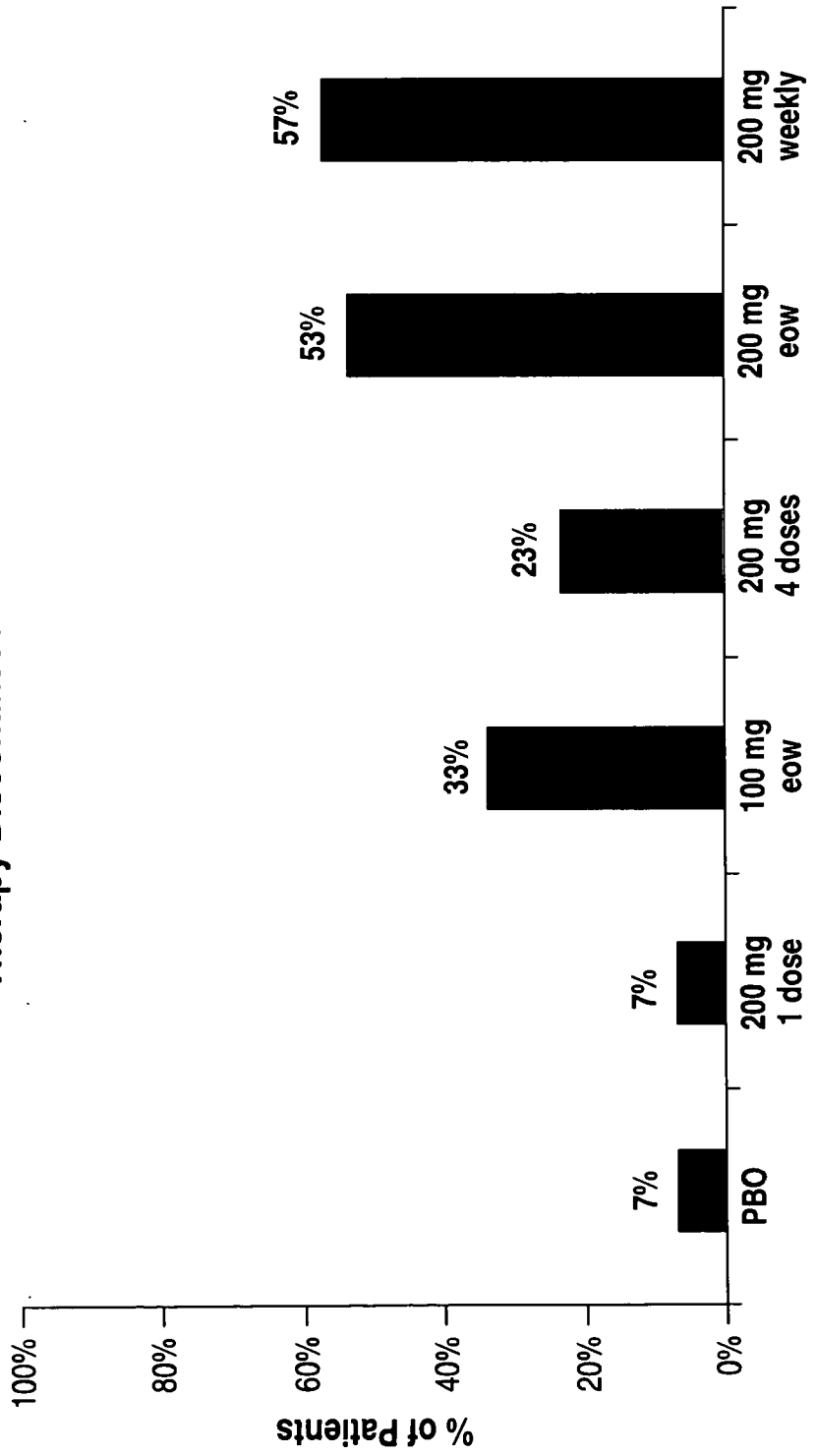
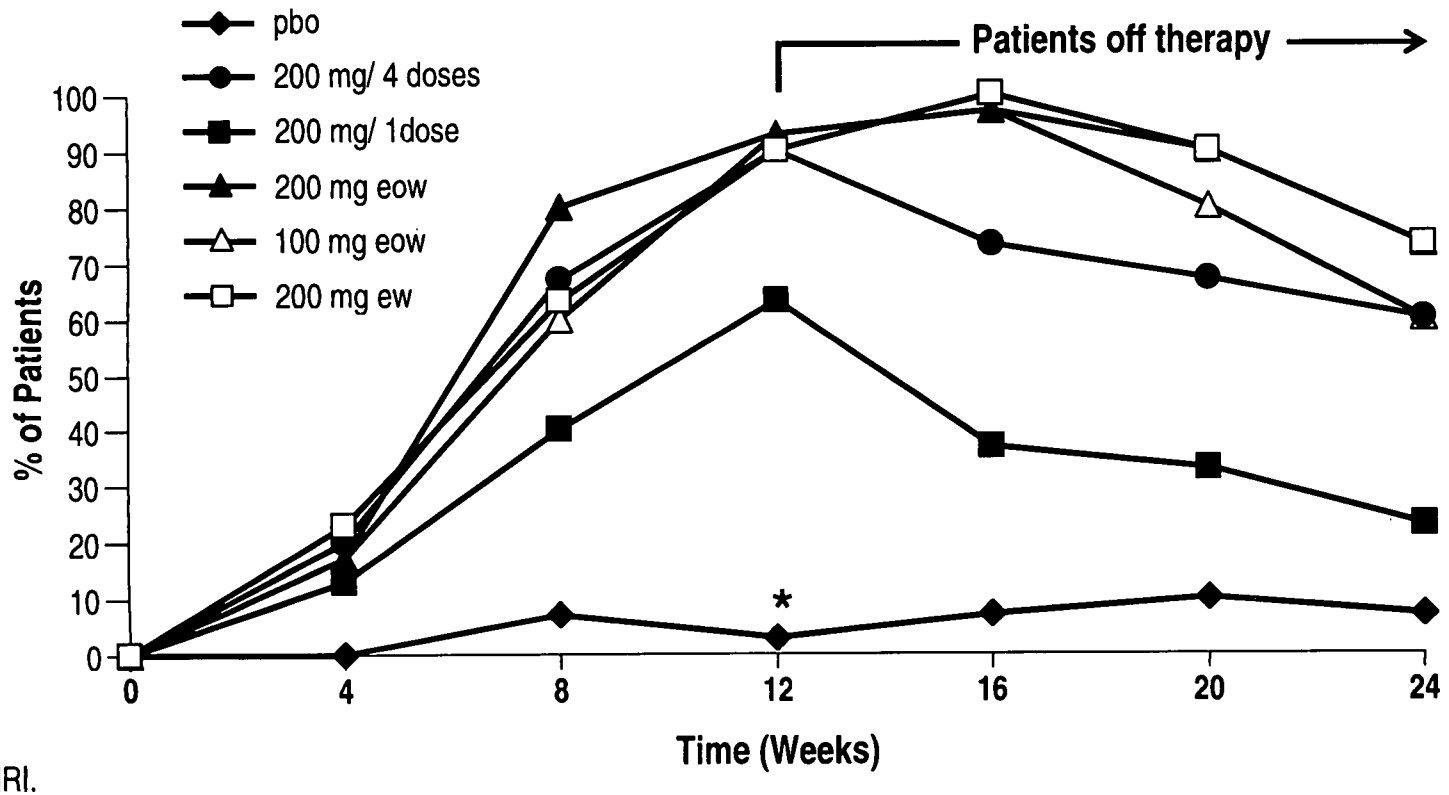

PASI 90 at Week 24 Following
Therapy Discontinuation at Week 12
% of Patients
100%
80%
60%
40%
20%
0%
7%
7%
33%
23%
53%
57%
PBO
200 mg 1 dose
100 mg eow
200 mg 4 doses
200 mg eow
200 mg weekly
ITT-NRI.

Fig. 4C

Time Course of PASI 75 Improvement



NRI.
*p<0.001 for all active treatment arms vs. placebo.

Fig. 4D

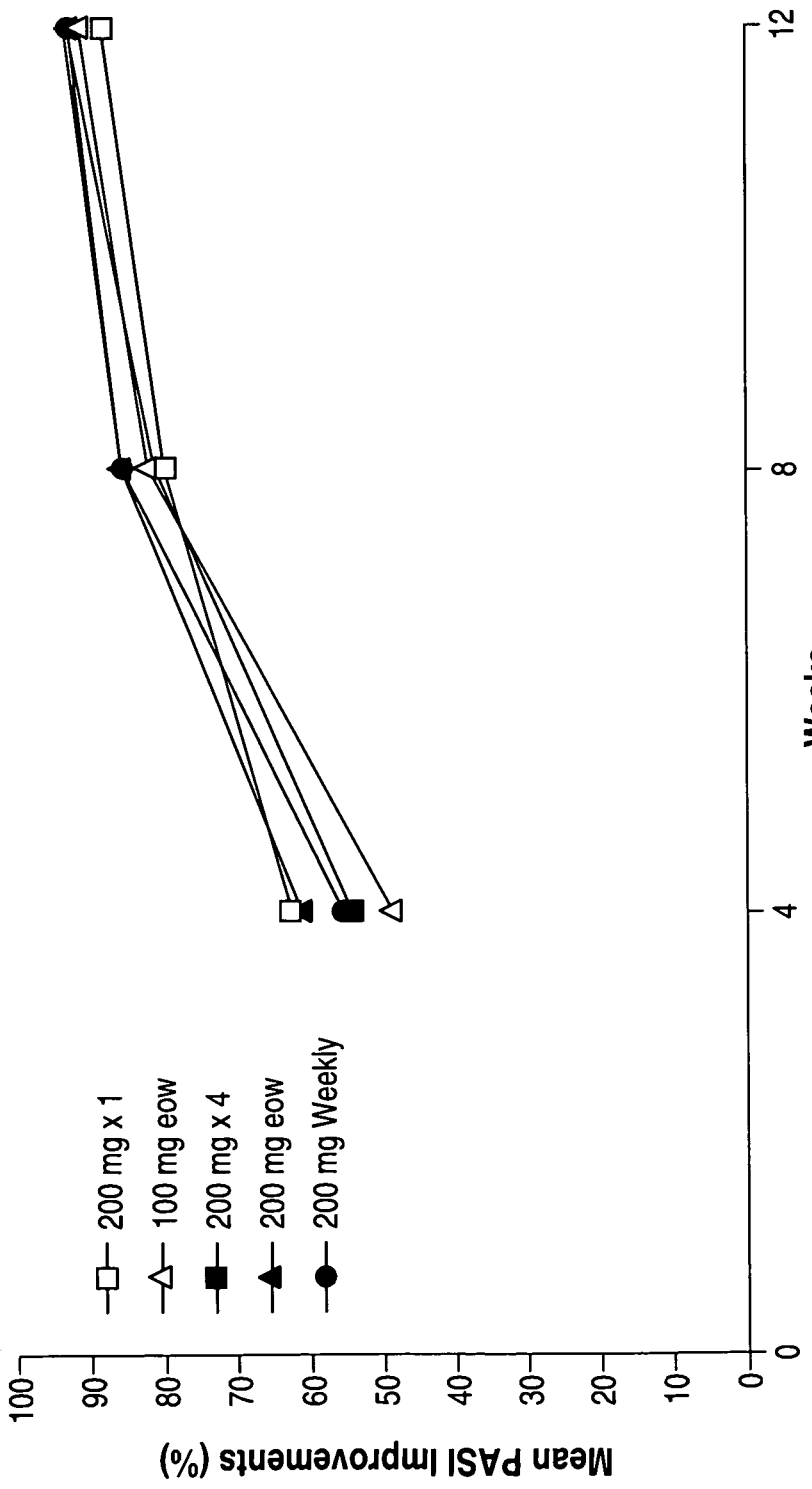

Mean Percentage Improvement from Baseline in
PASI Scores from Week 4 to Week 12 in PASI 75 Responders
200 mg x 1
100 mg eow
200 mg x 4
200 mg eow
200 mg Weekly
Mean PASI Improvements (%)
100
90
80
70
60
50
40
30
20
10
0
0
4
8
12
Weeks

Fig. 5A

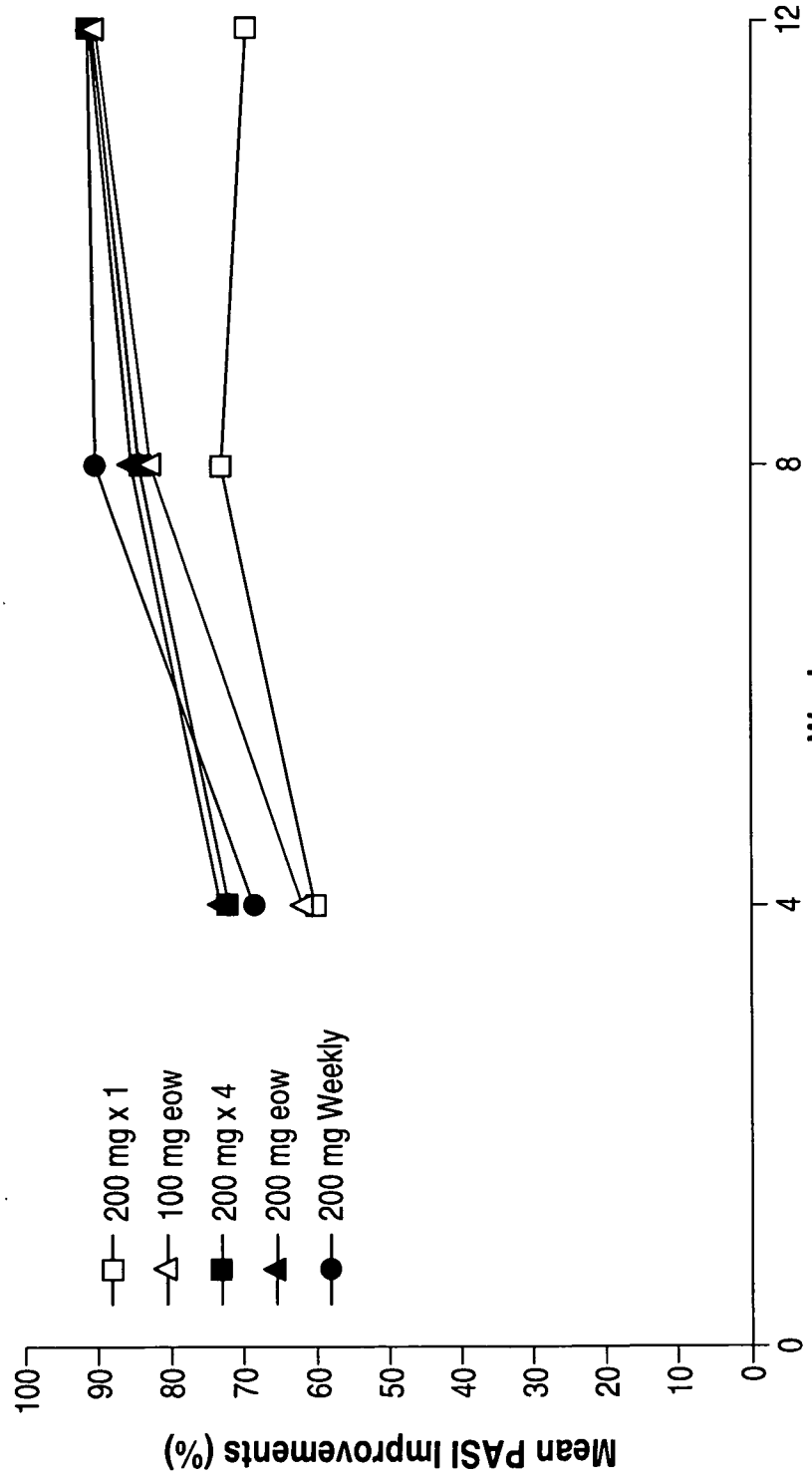

Mean Percentage Improvement from Baseline in
PASI Scores from Week 4 to Week 12 in PASI 75 Responders
Mean PASI Improvements (%)
100
90
80
70
60
50
40
30
20
10
0
0
4
8
12
Weeks
200 mg x 1
100 mg eow
200 mg x 4
200 mg eow
200 mg Weekly

Fig. 5B

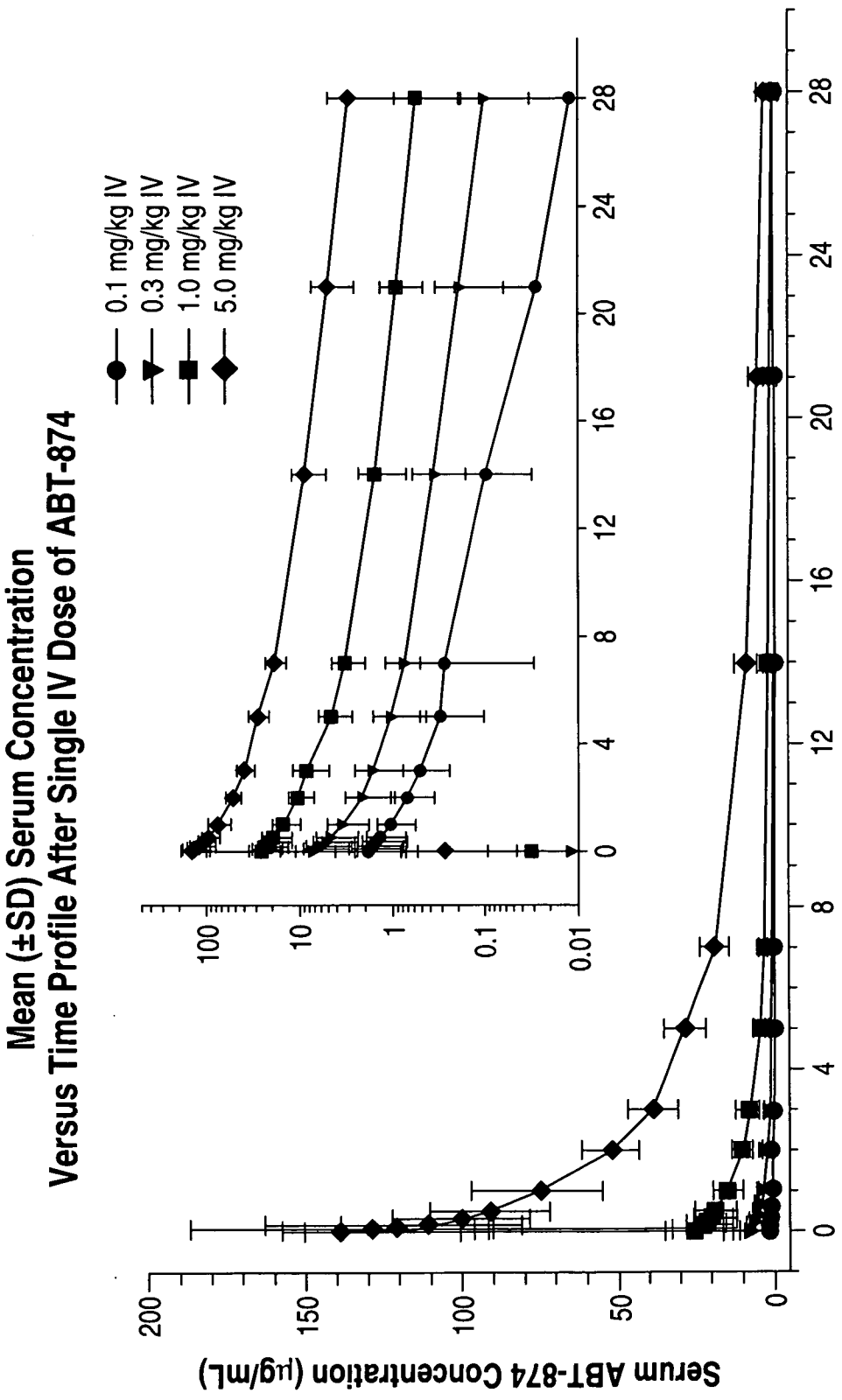

Mean (±SD) Serum Concentration
Versus Time Profile After Single IV Dose of ABT-874
0.1 mg/kg IV
0.3 mg/kg IV
1.0 mg/kg IV
5.0 mg/kg IV
Serum ABT-874 Concentration (μg/mL)
Time (day)
200
150
100
50
0
0
4
8
12
16
20
24
28
100
10
1
0.1
0.01

Fig. 6A

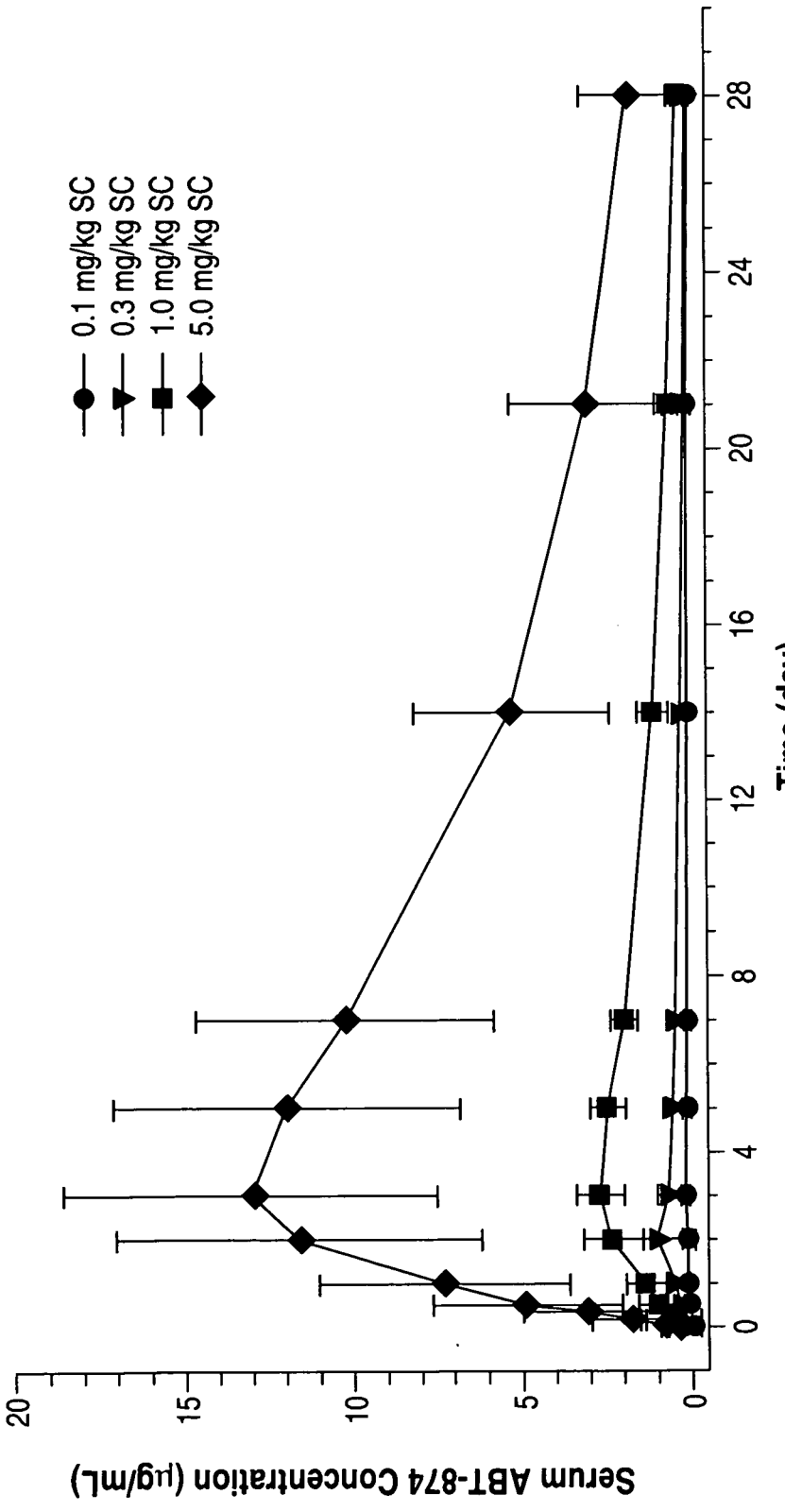
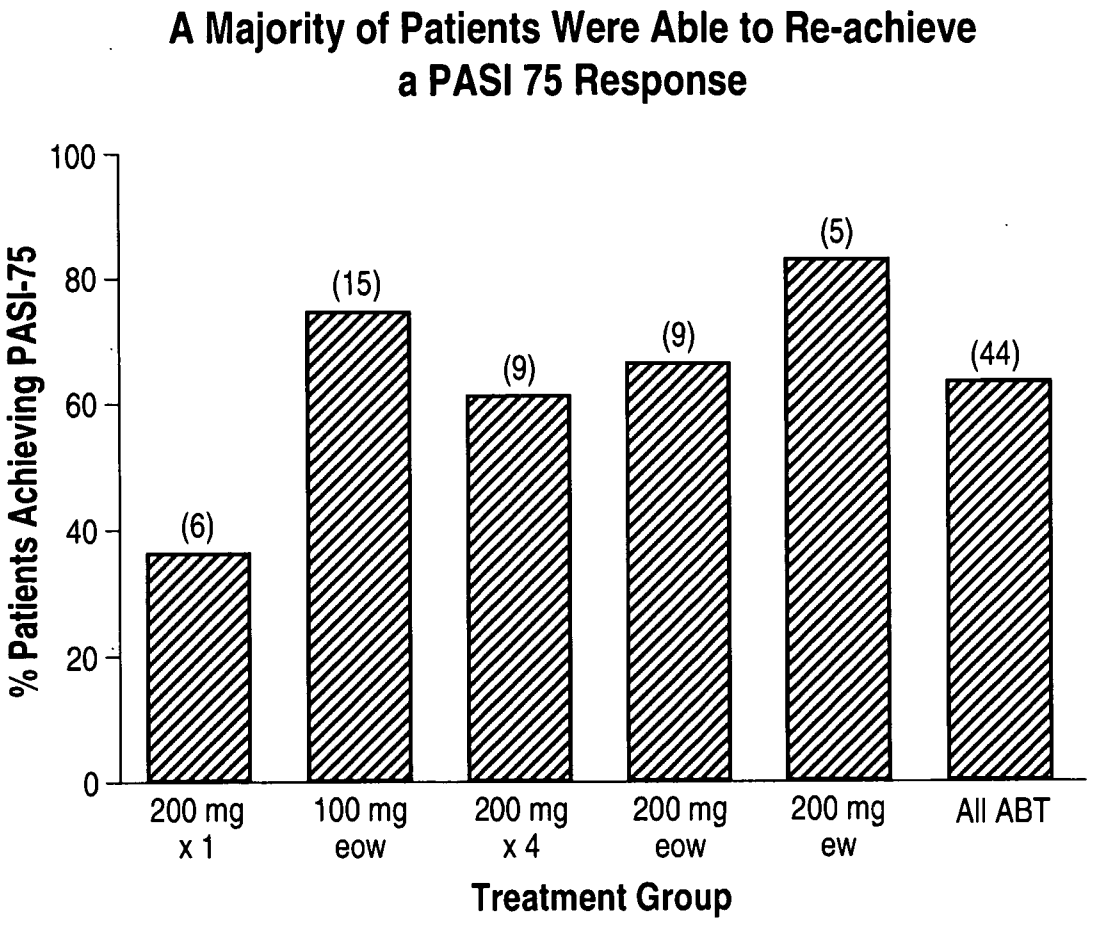
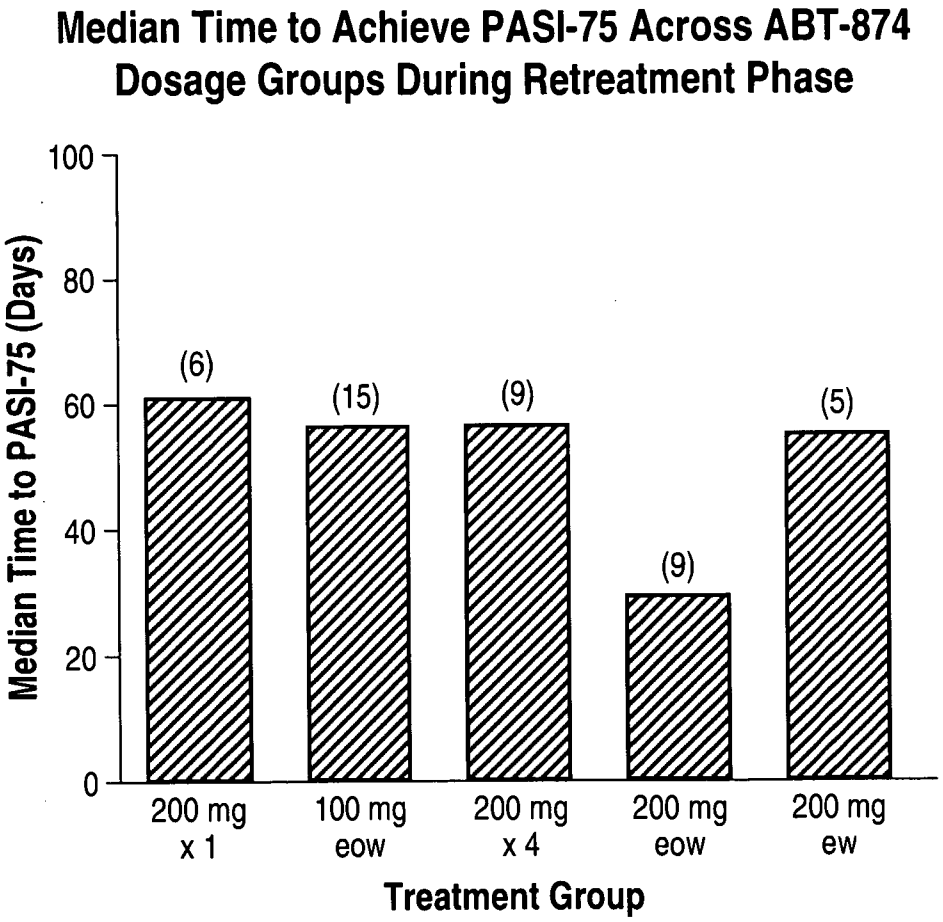

Mean (±SD) Serum Concentration
Versus Time Profile After Single IV Dose of ABT-874
0.1 mg/kg SC
0.3 mg/kg SC
1.0 mg/kg SC
5.0 mg/kg SC
Serum ABT-874 Concentration (µg/mL)
0
5
10
15
20
0
4
8
12
16
20
24
28
Time (day)

Fig. 6B



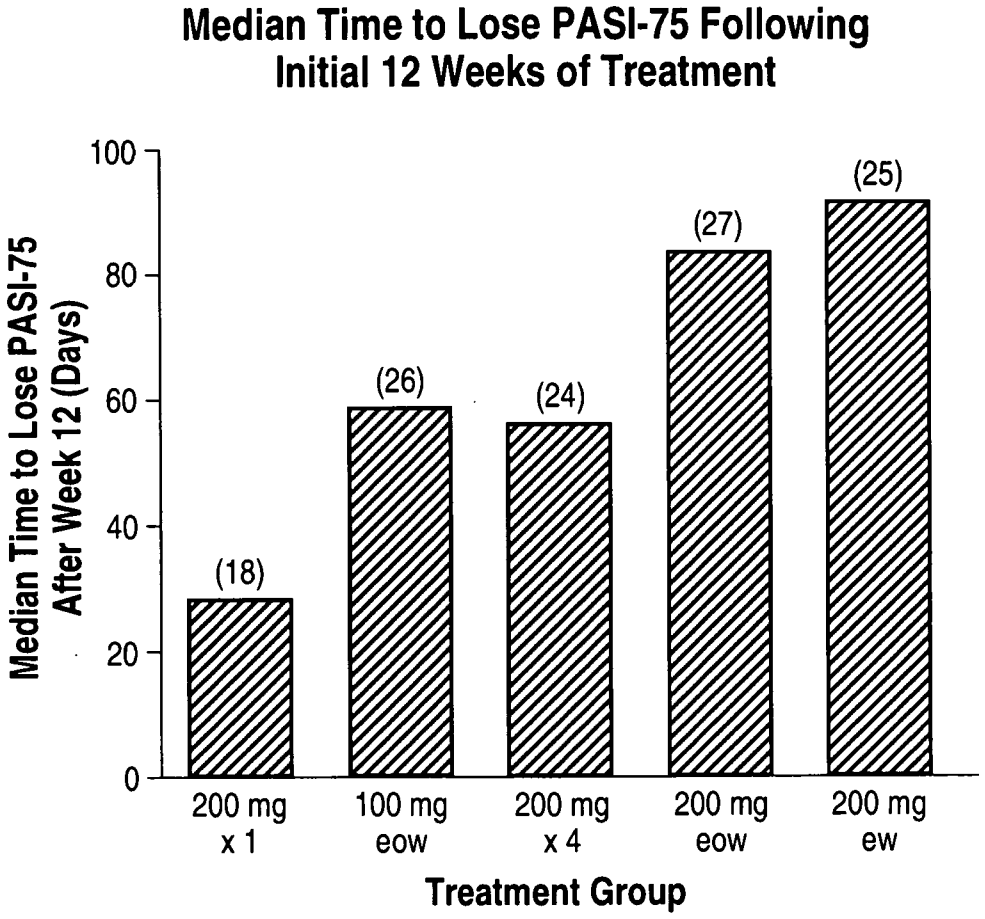
Patient numbers per group are denoted in parentheses above bars

Fig. 7A



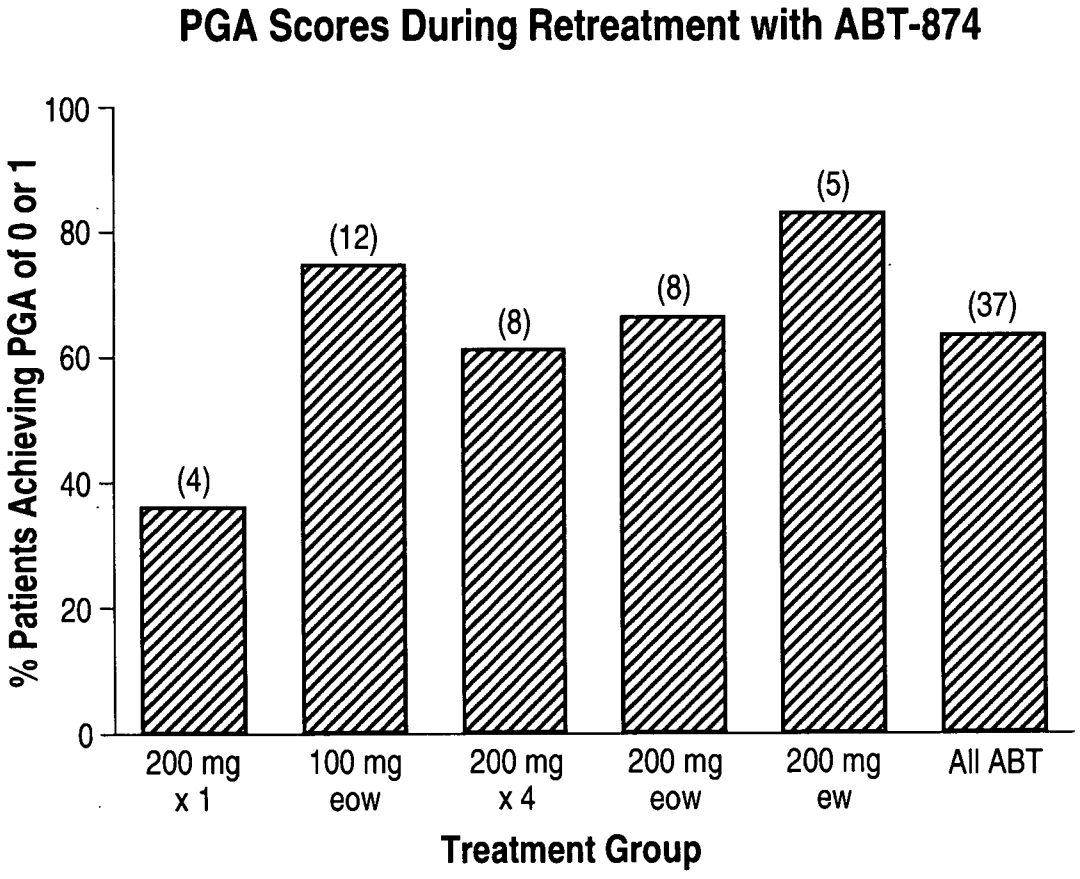
Patient numbers per group are denoted in parentheses above bars

Fig. 7B



Patient numbers per group are denoted in parentheses above bars

Fig. 7C



Patient numbers per group are denoted in parentheses above bars

Fig. 7D

FIG. 8A

Heavy Chain Variable Region Sequences

SEQ ID NO.:	Kabat number	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	CDR H1 31 32 33 34 35	36 37 38 39 40 41 42 43 44 45 46 47 48 49	CDR H2 50 51 52 52A 53 54 55 56
33	JOE9wt VH	QVQLVQSGGGVVQPGRSLRLSCAASGFTFS	SYGMH	WVRQAPGKGLEWVA	FIRYDGSN
35	Cos-3/JH3 VH	.....E.....G.....	.....	.....	.....
37	70-1 VH	.....	.....	.....	.....
39	78-34 VH	.....	.....	.....	.....
41	79-1 VH	.....	.....	.....	.....
43	101-11 VH	.....	.....	.....	.....
45	26-1 VH	.....	.....	.....	.....
47	136-15 VH	.....	.....	.....	.....
49	136-15 VH germline	.....E.....	.....	.....	.....
51	149-5 VH	.....	.....	.....	.....
53	149-6 VH	.....	.....	.....	.....
55	103-4 VH	.....	.....	.....	.....
57	103-8 VH	.....	.....	.....	.....
59	103-14 VH	.....	.....	.....	.....
61	G6 VH	.....	.....	.....	.....
63	Y139 VH	.....	.....	.....	.....
65	AO3 VH	.....	.....	.....	.....
67	AO3 VH germline	.....E.....	.....	.....	.....
23	Y61 VH	.....	.....	.....	.....
69	Y61 VH germline	.....E.....	.....	.....	.....
71	Y61-H31E VH	.....	E....	.....	.....
73	Y61 L50Y VH	.....	.....	.....	.....
75	Y61-L94Y VH	.....	.....	.....	.....
31	J695	.....E.....	.....	.....	.....

FIG. 8B

Heavy Chain Variable Region Sequences

SEQ ID NO.:	Kabat number	CDR H2	CDR H3
		55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 82A 82B 82C 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113	
33	JOE9wt VH	KYYADSVKG	RFTISRDNSKNTLYLQMKSLRAEDTAVYYCTT	SGSYDY	WGQGTMVTVSS
35	Cos-3/JH3 VH	.....	.....N.....AK		.....
37	70-1 VH	.....	.....	H..H.N	.....
39	78-34 VH	.....	.....	.....	.....
41	79-1 VH	.....	.....	.....	.....
43	101-11 VH	.....	.....	H..H.N	.....
45	26-1 VH	.....	.....	H..H.N	.....
47	136-15 VH	.....	.....K.	H..H.N	.....
49	136-15 VH germline	.....	.....N.....K.	H..H.N	.....
51	149-5 VH	.....	.....	H..H.N	.....
53	149-6 VH	.....	.....	H..H.N	.....
55	103-4 VH	.....	.....	H..H.N	.....
57	103-8 VH	.....	.....K.	H..H.N	.....
59	103-14 VH	.....	.....K.	H..H.N	.....
61	G6 VH	.....	.....K.	H..H.N	.....
63	Y139 VH	.....	.....K.	H..H.N	.....
65	AO3 VH	.....	.....K.	H..H.N	.....
67	AO3 VH germline	.....	.....N.....K.	H..H.N	.....
23	Y61 VH	.....	.....K.	H..H.N	.....
69	Y61 VH germline	.....	.....N.....K.	H..H.N	.....
71	Y61-H31E VH	.....	.....K.	H..H.N	.....
73	Y61 L50Y VH	.....	.....K.	H..H.N	.....
75	Y61-L94Y VH	.....	.....K.	H..H.N	.....
31	J695	.....	.....N.....K.	H..H.N	.....

FIG. 8C

Light Chain Variable Region Sequences

SEQ ID NO.:	Kabat number	CDR L1	CDR L2
		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	25 26 27 27A 27B 27C 27D 27E 27F 28 29 30 31 32 33 34	35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56	57 58 59 60 61 62 63 64 65 66
34	JOE9 VL wt	SYVLTQPPSVSGTPGQRVTISC	SGGRSNIGSNTVK	WYQQLPGTAPKLLIY	GNDQRPS
36	Dp18 Lv1042/Jλ1	QS.....A.....	T.SS....AGYD.H	.....	..SN...
38	70-1 VL	.....	.....	.....	.....
40	78-34 VL	.....	.....	.....	.....
42	79-1 VL	.....	.....	.....	.....
44	101-11 VL	.....	.....	.....	.....
46	26-1 VL	.....	.....	.....	.....
48	136-15 VL	.....	..S.....	.....	.....
50	136-15 VL germline	QS.....A.....	..S.....	.....	.....
52	149-5 VL	.....	.....	.....	.....
54	149-6 VL	.....	.....V.....	.....	.....
56	103-4 VL	.....	.....V.....	.....	.....
58	103-8 VL	.....	.....	.....	.....
60	103-14 VL	.....	.....	.....	.....
62	G6 VL	.....	.....	.....	.....
64	Y139 VL	.....	.....	.....	.....
66	AO3 VL	.....	.....	.....	.....
68	AO3 VL germline	QS.....A.....	..S.....	.....	.....
24	Y61 VL	.....	.....	.....	.....
70	Y61 VL germline	QS.....A.....	..S.....	.....	.....
72	Y61-H31E VL	QS.....A.....	..S.....	.....	.....
74	Y61 L50Y VL	QS.....A.....	..S.....	.....	Y.....
76	Y61-L94Y VL	QS.....A.....	..S.....	.....	.....
32	J695 VL	QS.....A.....	..S.....	.....	Y.....

FIG. 8D

Light Chain Variable Region Sequences

SEQ ID NO.:	Kabat number	57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88	CDR L3 86 87 88 89 90 91 92 93 94 95 95A 95B 95C 96 97	98 99 100 101 102 103 104 105 106 106A 107
34	JOE9 VL wt	GVPDRFSGSKSGTSASLAITGVQAEDEADYYC	QSYDSSLRGSRV	FGTGTKVTVLG
36	Dp18 Lv1042/Jλ1	.....L.....	.....S.	.....
38	70-1 VL	.....	.....	.....
40	78-34 VL	.....	....RGFT....	.....
42	79-1 VL	.....	.....W....	.....
44	101-11 VL	.....	....RGFT....	.....
46	26-1 VL	.....	.....W....	.....
48	136-15 VL	.....	.T..KGFT..S.	.....
50	136-15 VL germline	.....L.....	.T..KGFT..S.	.....
52	149-5 VL	.....	.....W.T..	.....
54	149-6 VL	.....	....RGFT....	.....
56	103-4 VL	.....	....RGFT.A..	.....
58	103-8 VL	.....	.T..KGFT..S.	.....
60	103-14 VL	.....	...EKGFT..M.	.....
62	G6 VL	.....	....RGTHPLTI	.....
64	Y139 VL	.....	....RGSHPALT	.....
66	AO3 VL	.....	....RGTHPLTM	.....
68	AO3 VL germline	.....L.....	....RGTHPLTM	.....
24	Y61 VL	.....	....RGTHPALL	.....
70	Y61 VL germline	.....L.....	....RGTHPALL	.....
72	Y61-H31E VL	.....L.....	....RGTHPALL	.....
74	Y61 L50Y VL	.....L.....	....RGTHPALL	.....
76	Y61-L94Y VL	.....L.....	....RYTHPALL	.....
32	J695 VL	.....L.....	....RYTHPALL	.....

Fig. 9A

Y61 Heavy Chain CDR H1 Mutagenesis

		CDR H1									
SEQ ID NO:		27	28	29	30	31	32	33	34	35	k_{off} ($\times 10^5$)
21	Y61	F	T	F	S	S	Y	G	M	H	
288		.	.	.	E	.	.	.	.	.	22.8
289		.	.	.	S	.	.	.	.	.	16.8
290		.	.	.	Y	.	.	.	.	.	31.9
291		.	.	.	H	.	.	.	.	.	29.6
292		.	.	.	K	.	.	.	.	.	22.5
293		.	.	.	R	.	.	.	.	.	24.5
294		.	.	.	N	.	.	.	.	.	30.1
295		.	.	.	T	.	.	.	.	.	32.0
296		.	.	.	G	.	.	.	.	.	23.3
297		.	.	.	V	.	.	.	.	.	39.9
298		.	.	.	I	.	.	.	.	.	20.7
299		.	.	.	W	.	.	.	.	.	21.6
300		.	.	.	.	E	.	.	.	.	21.9
301		.	.	.	.	C	.	.	.	.	12.0
302		.	.	.	.	S	.	.	.	.	24.9
303		.	.	.	.	Y	.	.	.	.	39.8
304		.	.	.	.	H	.	.	.	.	30.9
305		.	.	.	.	R	.	.	.	.	66.4
306		.	.	.	.	N	.	.	.	.	19.1
307		.	.	.	.	Q	.	.	.	.	15.2
308		.	.	.	.	T	.	.	.	.	71.6
309		.	.	.	.	A	.	.	.	.	20.5
310		.	.	.	.	I	.	.	.	.	33.4
311		.	.	.	.	.	E	.	.	.	229.0
312		.	.	.	.	.	C	.	.	.	383.0
313		.	.	.	.	.	S	.	.	.	157.5
314		.	.	.	.	.	Y	.	.	.	33.7
315		.	.	.	.	.	H	.	.	.	46.1
316		.	.	.	.	.	R	.	.	.	448.5
317		.	.	.	.	.	N	.	.	.	297.0
318		.	.	.	.	.	T	.	.	.	148.0
319		.	.	.	.	.	A	.	.	.	165.5
320		.	.	.	.	.	V	.	.	.	133.5
321		.	.	.	.	.	L	.	.	.	226.0
322		.	.	.	.	.	I	.	.	.	160.5
323		.	.	.	.	.	.	D	.	.	152.0
324		.	.	.	.	.	.	E	.	.	189.0
325		.	.	.	.	.	.	C	.	.	286.5
326		.	.	.	.	.	.	S	.	.	39.9
327		.	.	.	.	.	.	Y	.	.	250.5
328		.	.	.	.	.	.	N	.	.	30.8
329		.	.	.	.	.	.	G	.	.	17.8
330		.	.	.	.	.	.	A	.	.	27.3
331		.	.	.	.	.	.	V	.	.	191.0
332		.	.	.	.	.	.	M	.	.	21.5
333		.	.	.	.	.	.	I	.	.	250.0
334		.	.	.	.	.	.	P	.	.	159.5

Fig. 9A-1

Y61 Mutagenesis: H30

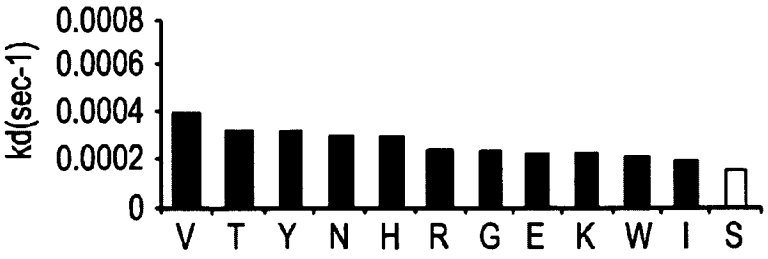


Fig. 9A-2

Y61 Mutagenesis: H31

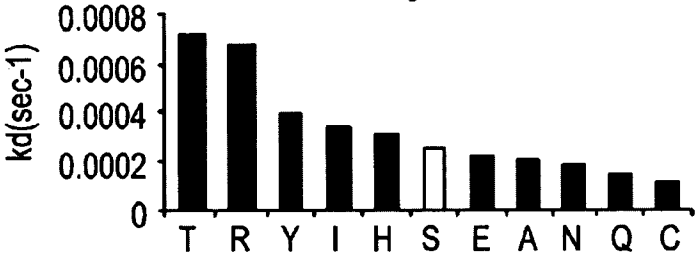


Fig. 9A-3

Y61 Mutagenesis: H32

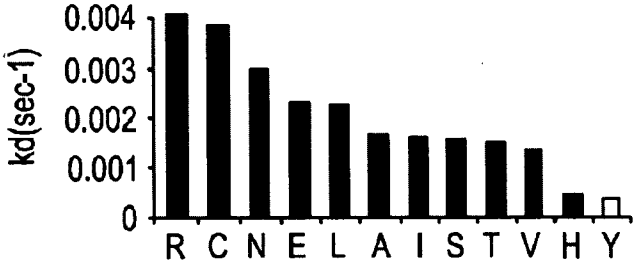


Fig. 9A-4

Y61 Mutagenesis: H33

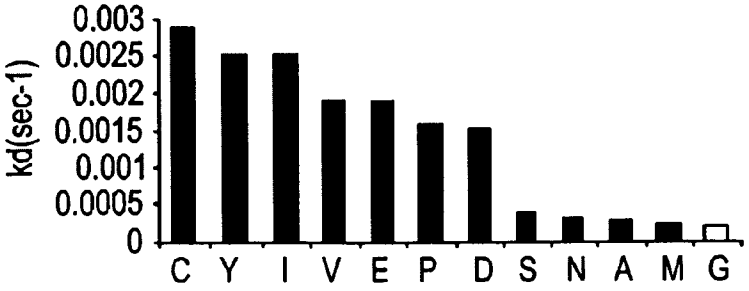


Fig. 9B

Y61 Heavy Chain CDR H2 Mutagenesis

		CDR H2																	
SEQ ID NO:		50	51	52	52A	53	54	55	56	57	58	59	60	61	62	63	64	65	k_{off} ($\times 10^5$)
19	Y61	F	I	R	Y	D	G	S	N	K	Y	Y	A	D	S	V	K	G	
335		E	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	34.7
336		C	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	28.5
337		Y	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	23.0
338		H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30.9
339		K	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	61.2
340		N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	34.4
341		Q	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	42.0
342		T	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	20.5
343		L	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	44.0
344		F	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	20.4
345		.	.	E	.	.	.	.	.	.	.	.	.	.	.	.	.	.	31.8
346		.	.	S	.	.	.	.	.	.	.	.	.	.	.	.	.	.	29.2
347		.	.	Y	.	.	.	.	.	.	.	.	.	.	.	.	.	.	29.8
348		.	.	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	40.7
349		.	.	K	.	.	.	.	.	.	.	.	.	.	.	.	.	.	26.2
350		.	.	R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	20.6
351		.	.	Q	.	.	.	.	.	.	.	.	.	.	.	.	.	.	28.5
352		.	.	T	.	.	.	.	.	.	.	.	.	.	.	.	.	.	37.4
353		.	.	G	.	.	.	.	.	.	.	.	.	.	.	.	.	.	32.1
354		.	.	A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	17.1
355		.	.	V	.	.	.	.	.	.	.	.	.	.	.	.	.	.	31.7
356		.	.	L	.	.	.	.	.	.	.	.	.	.	.	.	.	.	34.7
357		.	.	W	.	.	.	.	.	.	.	.	.	.	.	.	.	.	35.1
358		.	.	.	.	D	.	.	.	.	.	.	.	.	.	.	.	.	15.1
359		.	.	.	.	E	.	.	.	.	.	.	.	.	.	.	.	.	39.9
360		.	.	.	.	S	.	.	.	.	.	.	.	.	.	.	.	.	36.8
361		.	.	.	.	Y	.	.	.	.	.	.	.	.	.	.	.	.	61.1
362		.	.	.	.	K	.	.	.	.	.	.	.	.	.	.	.	.	158.0
363		.	.	.	.	R	.	.	.	.	.	.	.	.	.	.	.	.	166.5
364		.	.	.	.	N	.	.	.	.	.	.	.	.	.	.	.	.	72.7
365		.	.	.	.	Q	.	.	.	.	.	.	.	.	.	.	.	.	79.2
366		.	.	.	.	T	.	.	.	.	.	.	.	.	.	.	.	.	50.0
367		.	.	.	.	A	.	.	.	.	.	.	.	.	.	.	.	.	40.4
368		.	.	.	.	V	.	.	.	.	.	.	.	.	.	.	.	.	44.0
369		.	.	.	.	L	.	.	.	.	.	.	.	.	.	.	.	.	109.5
370		.	.	.	.	I	.	.	.	.	.	.	.	.	.	.	.	.	94.4
371		.	.	.	.	F	.	.	.	.	.	.	.	.	.	.	.	.	168.5
372		.	.	.	.	.	D	.	.	.	.	.	.	.	.	.	.	.	45.5
373		.	.	.	.	.	E	.	.	.	.	.	.	.	.	.	.	.	35.1
374		.	.	.	.	.	S	.	.	.	.	.	.	.	.	.	.	.	37.3
375		.	.	.	.	.	Y	.	.	.	.	.	.	.	.	.	.	.	64.6
376		.	.	.	.	.	K	.	.	.	.	.	.	.	.	.	.	.	40.7
377		.	.	.	.	.	R	.	.	.	.	.	.	.	.	.	.	.	2.5
378		.	.	.	.	.	N	.	.	.	.	.	.	.	.	.	.	.	44.7
379		.	.	.	.	.	Q	.	.	.	.	.	.	.	.	.	.	.	31.6
380		.	.	.	.	.	T	.	.	.	.	.	.	.	.	.	.	.	64.4
381		.	.	.	.	.	G	.	.	.	.	.	.	.	.	.	.	.	17.8
382		.	.	.	.	.	V	.	.	.	.	.	.	.	.	.	.	.	43.5

Fig. 9B-1

Y61 Mutagenesis: H50

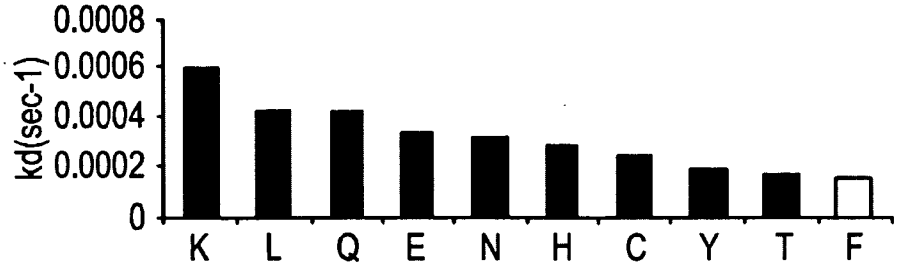


Fig. 9B-2

Y61 Mutagenesis: H52

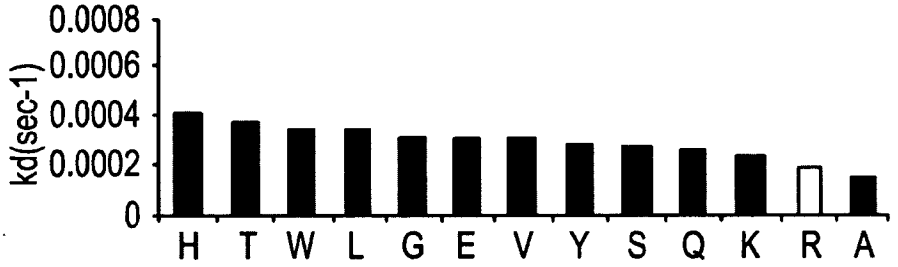


Fig. 9B-3

Y61 Mutagenesis: H53

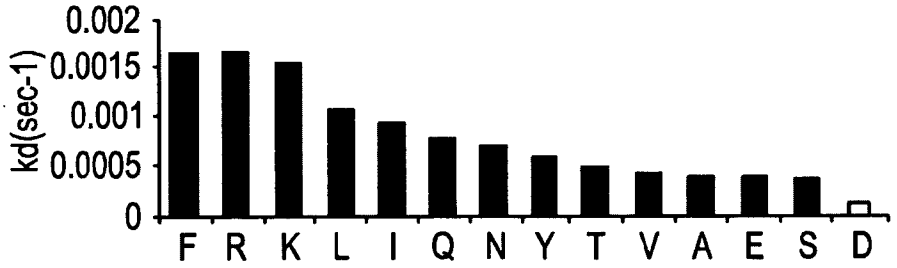


Fig. 9B-4

Y61 Mutagenesis: H54

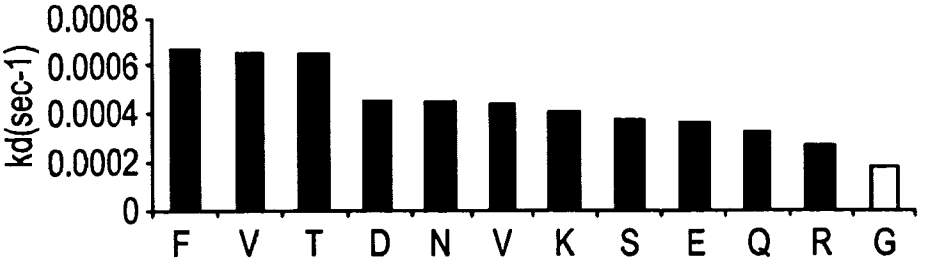


Fig. 9C

Y61 Heavy Chain CDR H2 Mutagenesis

		CDR H2																	
SEQ ID NO:		50	51	52	52A	53	54	55	56	57	58	59	60	61	62	63	64	65	k_{off} ($\times 10^5$)
19	Y61	F	I	R	Y	D	G	S	N	K	Y	Y	A	D	S	V	K	G	
383		.	.	.	.	.	F	.	.	.	.	.	.	.	.	.	.	.	66.3
384			.	.	.	.	.	.	S	.	.	.	.	.	.	.	.	.	62.4
385			.	.	.	.	.	.	Y	.	.	.	.	.	.	.	.	.	39.0
386			.	.	.	.	.	.	H	.	.	.	.	.	.	.	.	.	42.0
387			.	.	.	.	.	.	N	.	.	.	.	.	.	.	.	.	38.5
388			.	.	.	.	.	.	T	.	.	.	.	.	.	.	.	.	23.5
389			.	.	.	.	.	.	G	.	.	.	.	.	.	.	.	.	27.2
390			.	.	.	.	.	.	M	.	.	.	.	.	.	.	.	.	38.3
391			.	.	.	.	.	.	L	.	.	.	.	.	.	.	.	.	26.4
392			.	.	.	.	.	.	I	.	.	.	.	.	.	.	.	.	16.9
393		.	.	.	.	.	.	.	P	.	.	.	.	.	.	.	.	.	29.9
394		.	.	.	.	.	.	.	F	.	.	.	.	.	.	.	.	.	34.5
395		.	.	.	.	.	.	.	.	.	E	.	.	.	.	.	.	.	41.5
396		.	.	.	.	.	.	.	.	.	S	.	.	.	.	.	.	.	94.1
397		.	.	.	.	.	.	.	.	.	Y	.	.	.	.	.	.	.	31.0
398		.	.	.	.	.	.	.	.	.	N	.	.	.	.	.	.	.	83.1
399		.	.	.	.	.	.	.	.	.	V	.	.	.	.	.	.	.	52.4
400		.	.	.	.	.	.	.	.	.	L	.	.	.	.	.	.	.	73.0
401		.	.	.	.	.	.	.	.	.	I	.	.	.	.	.	.	.	65.7
402		.	.	.	.	.	.	.	.	.	P	.	.	.	.	.	.	.	62.8
403		.	.	.	.	.	.	.	.	.	F	.	.	.	.	.	.	.	79.4

Fig. 9C-1

Y61 Mutagenesis: H56

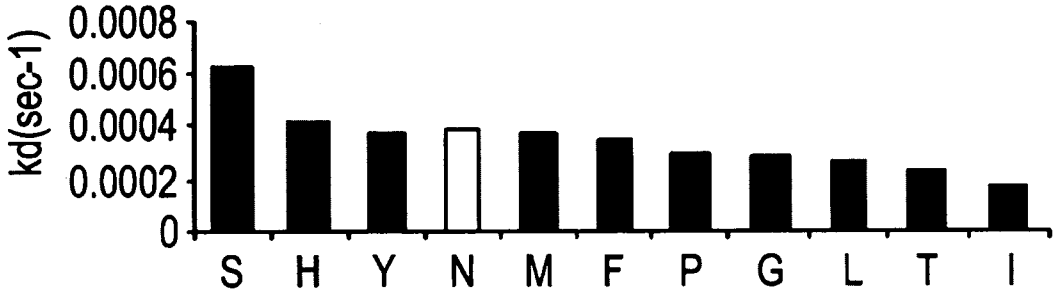


Fig. 9C-1

Y61 Mutagenesis: H58

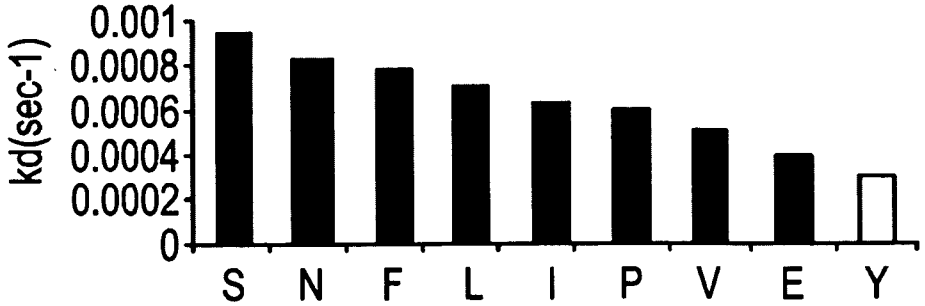


Fig. 9D

Y61 Heavy Chain CDR H3 Mutagenesis

		CDR H3						
SEQ ID NO:		95	96	97	98	101	102	k_{off} ($\times 10^5$)
17	Y61	H	G	S	H	D	N	
404		E	.	.	.	.	.	231.5
405		S	.	.	.	.	.	193.0
406		H	.	.	.	.	.	28.7
407		K	.	.	.	.	.	227.5
408		Q	.	.	.	.	.	85.9
409		T	.	.	.	.	.	202.0
410		A	.	.	.	.	.	150.0
411		L	.	.	.	.	.	147.5
412		P	.	.	.	.	.	471.0
413		F	.	.	.	.	.	514.0
414		.	D	.	.	.	.	223.5
415		.	C	.	.	.	.	24.2
416		.	H	.	.	.	.	23.7
417		.	R	.	.	.	.	96.2
418		.	T	.	.	.	.	186.0
419		.	G	.	.	.	.	39.7
420		.	V	.	.	.	.	38.2
421		.	M	.	.	.	.	204.5
422		.	L	.	.	.	.	261.0
423		.	I	.	.	.	.	207.5
424		.	P	.	.	.	.	129.0
425		.	W	.	.	.	.	197.0
426		.	.	D	.	.	.	202.0
427		.	.	S	.	.	.	37.5
428		.	.	Y	.	.	.	273.0
429		.	.	H	.	.	.	190.5
430		.	.	R	.	.	.	224.0
431		.	.	N	.	.	.	221.5
432		.	.	T	.	.	.	58.8
433		.	.	G	.	.	.	229.0
434		.	.	A	.	.	.	143.0
435		.	.	I	.	.	.	208.0
436		.	.	P	.	.	.	300.0
437		.	.	W	.	.	.	239.0
438		.	.	F	.	.	.	180.5
439		.	.	.	H	.	.	25.5
440		.	.	.	R	.	.	34.0
441		.	.	.	T	.	.	22.7
442		.	.	.	A	.	.	67.3
443		.	.	.	V	.	.	29.3
444		.	.	.	L	.	.	59.8
445		.	.	.	I	.	.	34.3
446		.	.	.	F	.	.	68.8
447		.	.	.	.	D	.	14.4
448		.	.	.	.	S	.	44.9
449		.	.	.	.	Y	.	465.0
450		.	.	.	.	H	.	327.0
451		.	.	.	.	R	.	110.0

Fig. 9D-1

Y61 Mutagenesis: H95

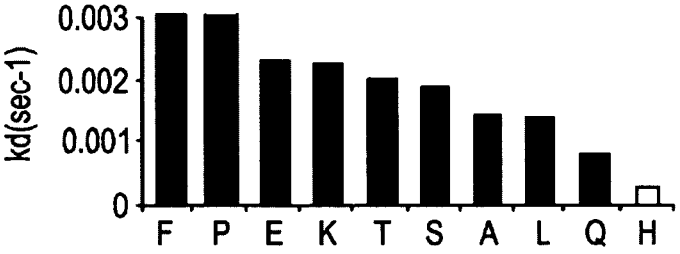


Fig. 9D-2

Y61 Mutagenesis: H96

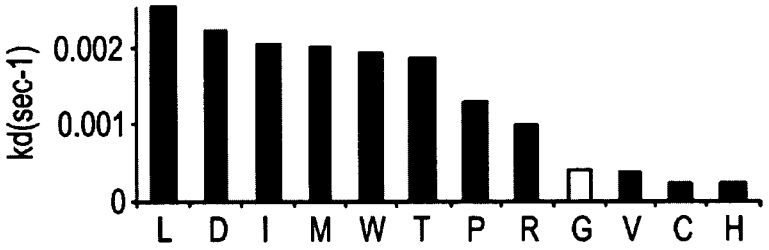


Fig. 9D-3

Y61 Mutagenesis: H97



Fig. 9D-4

Y61 Mutagenesis: H98

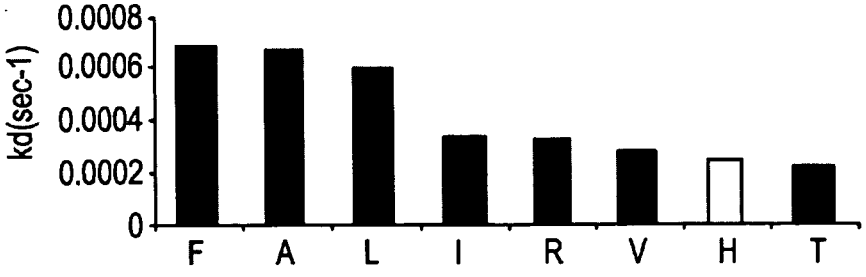


Fig. 9E

Y61 Heavy Chain CDR H3 Mutagenesis

		CDR H3						
SEQ ID NO:		95	96	97	98	101	102	K_{off} ($\times 10^5$)
17	Y61	H	G	S	H	D	N	
452			.	.	.	N	.	223.0
453			.	.	.	G	.	375.0
454			.	.	.	A	.	106.5
455			.	.	.	V	.	163.0
456			.	.	.	I	.	162.5
457			.	.	.	.	S	32.5
458			.	.	.	.	H	18.0
459			.	.	.	.	K	40.5
460			.	.	.	.	R	57.5
461			.	.	.	.	N	40.3
462			.	.	.	.	T	33.3
463			.	.	.	.	G	69.2
464			.	.	.	.	A	38.2
465			.	.	.	.	L	95.6
466			.	.	.	.	I	99.6
467			.	.	.	.	P	181.5
468			.	.	.	.	W	23.5
469			.	.	.	.	F	31.8

Fig. 9E-1

Y61 Mutagenesis: H101



Fig. 9E-2

Y61 Mutagenesis: H102

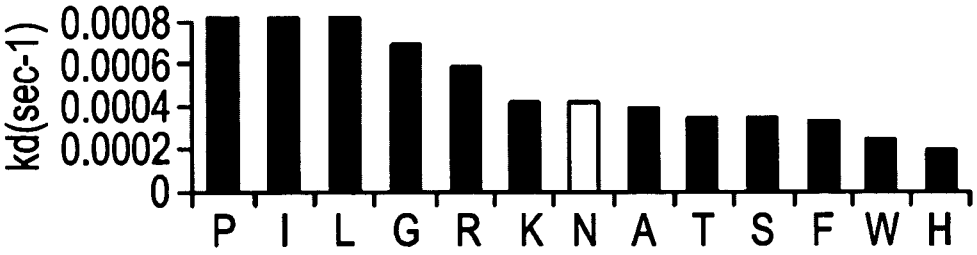


Fig. 9F

Y61 Light Chain CDR L1 Mutagenesis

		CDR L1													
SEQ ID NO:		24	25	26	27	27A	27B	28	29	30	31	32	33	34	$-k_{off}$ ($\times 10^5$)
22	Y61	S	G	G	R	S	N	I	G	S	N	T	V	K	
470		.	.	.	.	.	.	.	.	D	.	.	.	.	22.0
471		.	.	.	.	.	.	.	.	C	.	.	.	.	18.6
472		.	.	.	.	.	.	.	.	S	.	.	.	.	21.1
473		.	.	.	.	.	.	.	.	Y	.	.	.	.	48.3
474		.	.	.	.	.	.	.	.	K	.	.	.	.	34.6
475		.	.	.	.	.	.	.	.	R	.	.	.	.	18.2
476		.	.	.	.	.	.	.	.	N	.	.	.	.	16.6
477		.	.	.	.	.	.	.	.	T	.	.	.	.	22.6
478		.	.	.	.	.	.	.	.	P	.	.	.	.	25.0
479		.	.	.	.	.	.	.	.	.	D	.	.	.	58.0
480		.	.	.	.	.	.	.	.	.	E	.	.	.	38.4
481		.	.	.	.	.	.	.	.	.	S	.	.	.	39.2
482		.	.	.	.	.	.	.	.	.	Y	.	.	.	35.7
483		.	.	.	.	.	.	.	.	.	H	.	.	.	31.5
484		.	.	.	.	.	.	.	.	.	K	.	.	.	33.1
485		.	.	.	.	.	.	.	.	.	N	.	.	.	22.9
486		.	.	.	.	.	.	.	.	.	Q	.	.	.	29.2
487		.	.	.	.	.	.	.	.	.	T	.	.	.	30.9
488		.	.	.	.	.	.	.	.	.	G	.	.	.	36.6
489		.	.	.	.	.	.	.	.	.	M	.	.	.	17.4
490		.	.	.	.	.	.	.	.	.	I		.	.	9.7
491		.	.	.	.	.	.	.	.	.	.	D	.	.	25.2
492		.	.	.	.	.	.	.	.	.	.	C	.	.	381.5
493		.	.	.	.	.	.	.	.	.	.	S	.	.	191.0
494		.	.	.	.	.	.	.	.	.	.	Y	.	.	21.3
495		.	.	.	.	.	.	.	.	.	.	H	.	.	26.0
496		.	.	.	.	.	.	.	.	.	.	K	.	.	31.8
497		.	.	.	.	.	.	.	.	.	.	R	.	.	690.0
498		.	.	.	.	.	.	.	.	.	.	N	.	.	196.5
499		.	.	.	.	.	.	.	.	.	.	Q	.	.	247.0
500		.	.	.	.	.	.	.	.	.	.	T	.	.	24.1
501		.	.	.	.	.	.	.	.	.	.	A	.	.	190.5
502		.	.	.	.	.	.	.	.	.	.	V	.	.	164.5
503		.	.	.	.	.	.	.	.	.	.	L	.	.	215.5
504		.	.	.	.	.	.	.	.	.	.	I	.	.	154.0
505		.	.	.	.	.	.	.	.	.	.	P	.	.	42.4

Fig. 9F-1

Y61 Mutagenesis: L30

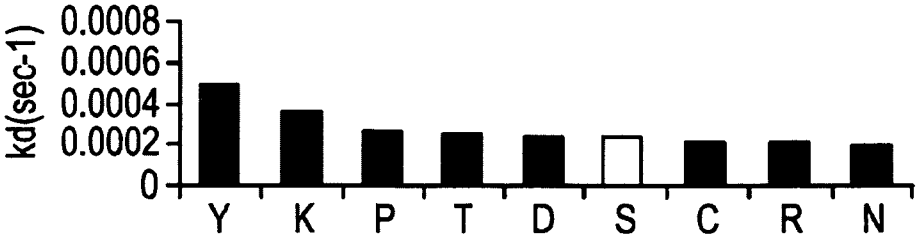


Fig. 9F-2

Y61 Mutagenesis: L31



Fig. 9F-3

Y61 Mutagenesis: L32



FIG. 9G

Y 61 Light Chain CDR L2 Mutagenesis

		CDR L2							
SEQ ID NO:		50	51	52	53	54	55	56	k off ($\times 10^5$)
20	Y61	G	N	D	Q	R	P	S	
506		D	.	.	.	.	.	.	34.8
507		E	.	.	.	.	.	.	61.7
508		C	.	.	.	.	.	.	46.7
509		S	.	.	.	.	.	.	28.6
510		Y	.	.	.	.	.	.	17.4
511		H	.	.	.	.	.	.	76.1
512		K	.	.	.	.	.	.	242.5
513		R	.	.	.	.	.	.	44.4
514		N	.	.	.	.	.	.	30.5
515		Q	.	.	.	.	.	.	34.8
516		T	.	.	.	.	.	.	27.2
517		G	.	.	.	.	.	.	21.5
518		A	.	.	.	.	.	.	37.2
519		V	.	.	.	.	.	.	38.5
520		M	.	.	.	.	.	.	95.3
521		L	.	.	.	.	.	.	61.6
522		I	.	.	.	.	.	.	120.5
523		P	.	.	.	.	.	.	41.0
524		W	.	.	.	.	.	.	38.2
525		F	.	.	.	.	.	.	3, 476.7
526		.	.	.	S	.	.	.	86.6
527		.	.	.	Y	.	.	.	73.3
528		.	.	.	R	.	.	.	61.4
529		.	.	.	Q	.	.	.	29.7
530		.	.	.	T	.	.	.	83.4
531		.	.	.	A	.	.	.	55.4
532		.	.	.	I	.	.	.	85.5
533		.	.	.	P	.	.	.	97.4

Fig. 9G-1

Y61 Mutagenesis: L50

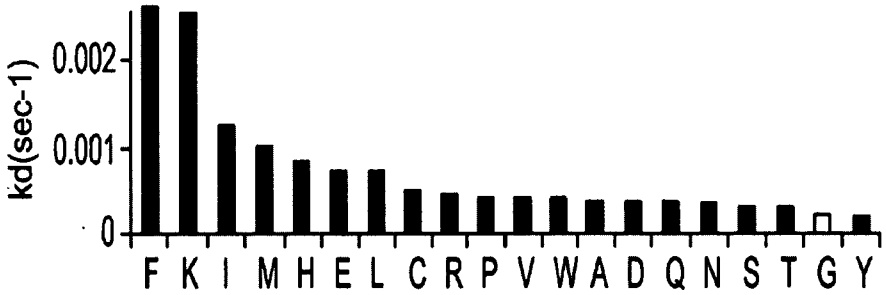


Fig. 9G-2

Y61 Mutagenesis: L53



Fig. 9H

Y61 Light Chain CDR L3 Mutagenesis

		CDR L3												
SEQ ID NO:		89	90	91	92	93	94	95	95A	95B	95C	96	97	k_{off} ($\times 10^5$)
18	Y61	Q	S	Y	D	R	G	T	H	P	A	L	L	
534		.	.	.	D	.	.	.	.	.	.	.	.	25.9
535		.	.	.	C	.	.	.	.	.	.	.	.	45.3
536		.	.	.	S	.	.	.	.	.	.	.	.	30.7
537		.	.	.	Y	.	.	.	.	.	.	.	.	51.1
538		.	.	.	N	.	.	.	.	.	.	.	.	34.7
539		.	.	.	Q	.	.	.	.	.	.	.	.	42.7
540		.	.	.	T	.	.	.	.	.	.	.	.	40.8
541		.	.	.	G	.	.	.	.	.	.	.	.	34.9
542		.	.	.	A	.	.	.	.	.	.	.	.	35.7
543		.	.	.	L	.	.	.	.	.	.	.	.	72.8
544		.	.	.	I	.	.	.	.	.	.	.	.	61.8
545		.	.	.	W	.	.	.	.	.	.	.	.	72.0
546		.	.	.	F	.	.	.	.	.	.	.	.	44.9
547		.	.	.	.	D	.	.	.	.	.	.	.	34.3
548		.	.	.	.	C	.	.	.	.	.	.	.	32.0
549		.	.	.	.	S	.	.	.	.	.	.	.	34.1
550		.	.	.	.	Y	.	.	.	.	.	.	.	33.5
551		.	.	.	.	R	.	.	.	.	.	.	.	19.9
552		.	.	.	.	N	.	.	.	.	.	.	.	31.6
553		.	.	.	.	Q	.	.	.	.	.	.	.	30.0
554		.	.	.	.	T	.	.	.	.	.	.	.	31.6
555		.	.	.	.	G	.	.	.	.	.	.	.	39.2
556		.	.	.	.	A	.	.	.	.	.	.	.	31.0
557		.	.	.	.	V	.	.	.	.	.	.	.	26.9
558		.	.	.	.	M	.	.	.	.	.	.	.	27.5
559		.	.	.	.	L	.	.	.	.	.	.	.	30.0
560		.	.	.	.	I	.	.	.	.	.	.	.	29.5
561		.	.	.	.	P	.	.	.	.	.	.	.	34.9
562		.	.	.	.	W		.	.	.	.	.	.	34.9
563		.	.	.	.	.	D	.	.	.	.	.	.	25.3
564		.	.	.	.	.	C	.	.	.	.	.	.	52.0
565		.	.	.	.	.	S	.	.	.	.	.	.	28.7
566		.	.	.	.	.	Y	.	.	.	.	.	.	13.1
567		.	.	.	.	.	H	.	.	.	.	.	.	18.7
568		.	.	.	.	.	R	.	.	.	.	.	.	23.1
569		.	.	.	.	.	N	.	.	.	.	.	.	13.7
570		.	.	.	.	.	Q	.	.	.	.	.	.	25.0
571		.	.	.	.	.	T	.	.	.	.	.	.	30.5
572		.	.	.	.	.	G	.	.	.	.	.	.	25.6
573		.	.	.	.	.	A	.	.	.	.	.	.	52.6
574		.	.	.	.	.	V	.	.	.	.	.	.	35.1
575		.	.	.	.	.	L	.	.	.	.	.	.	24.4
576		.	.	.	.	.	I	.	.	.	.	.	.	27.6
577		.	.	.	.	.	P	.	.	.	.	.	.	33.2
578		.	.	.	.	.	W	.	.	.	.	.	.	29.3
579		.	.	.	.	.	F	.	.	.	.	.	.	23.6

Fig. 9H-1

Y61 Mutagenesis: L92

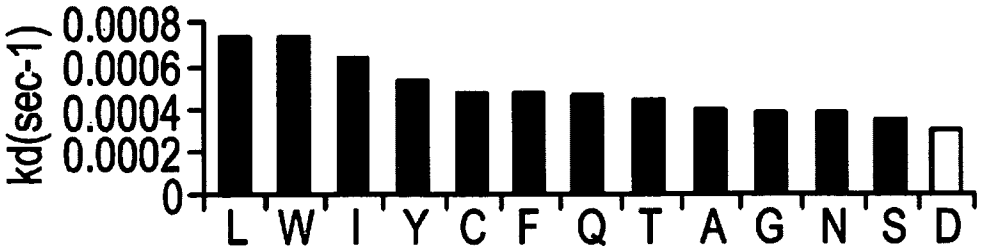


Fig. 9H-2

Y61 Mutagenesis: L93

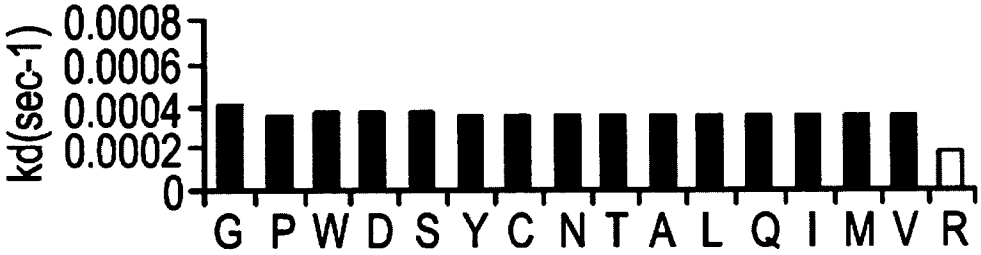


Fig. 9H-3

Y61 Mutagenesis: L94

