

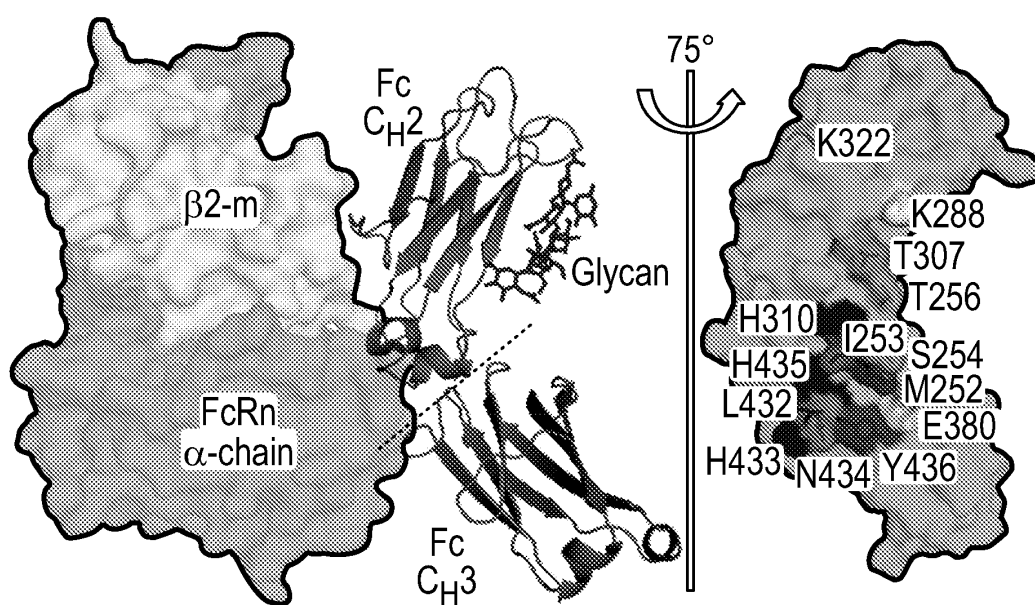


FIG. 1A

FIG. 1B

FIG. 2A

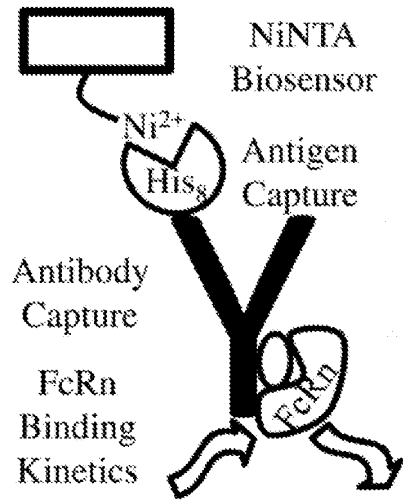


FIG. 2B

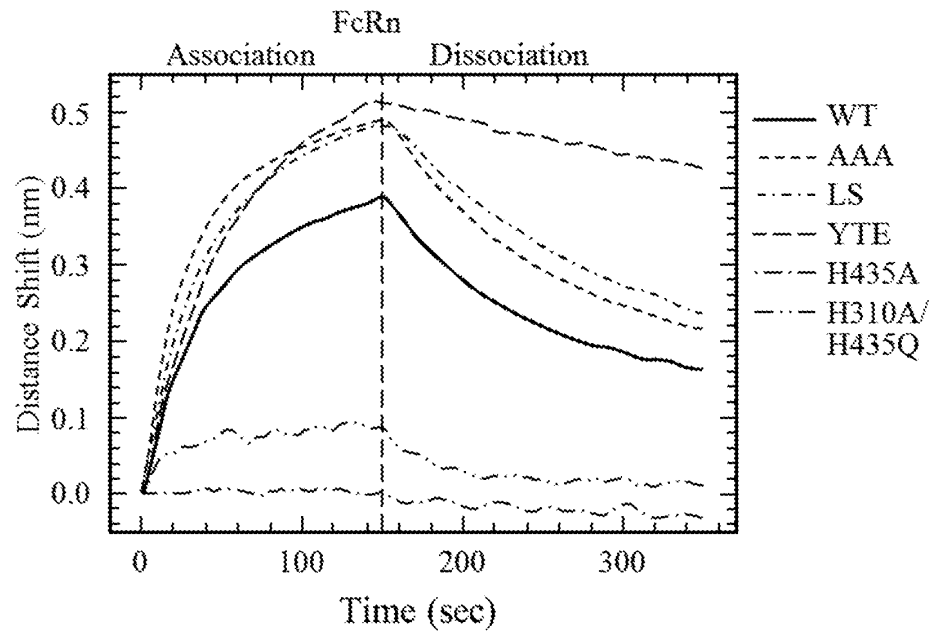


FIG. 2C

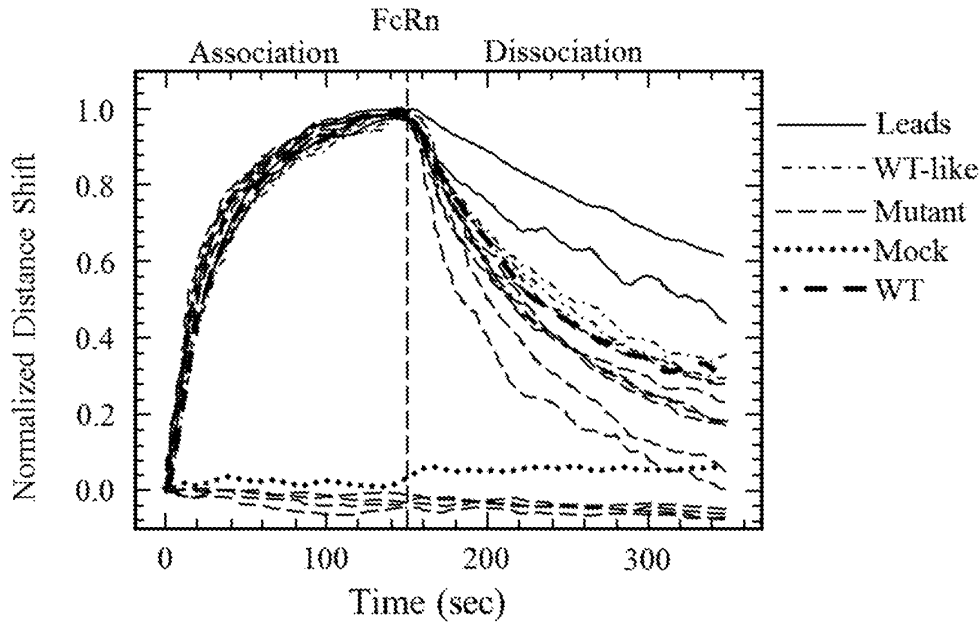
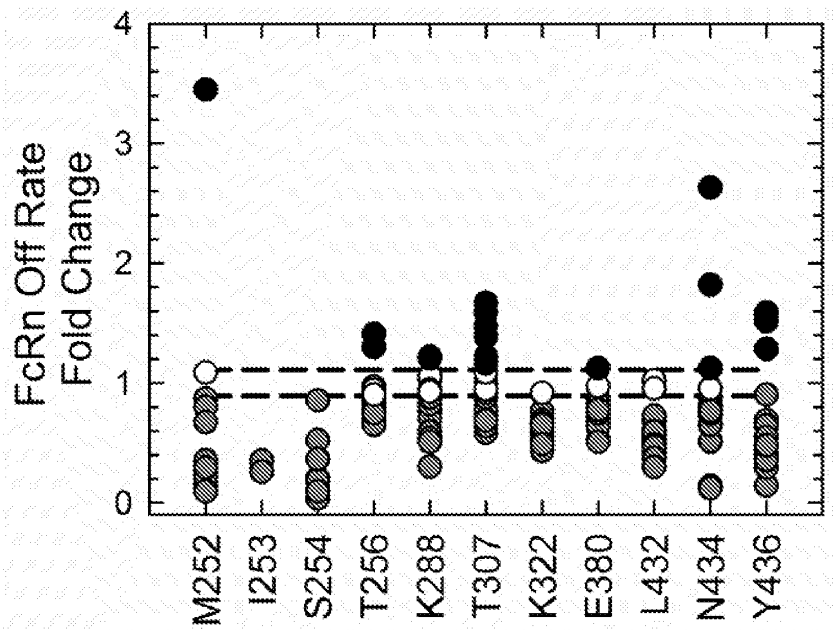


FIG. 2D



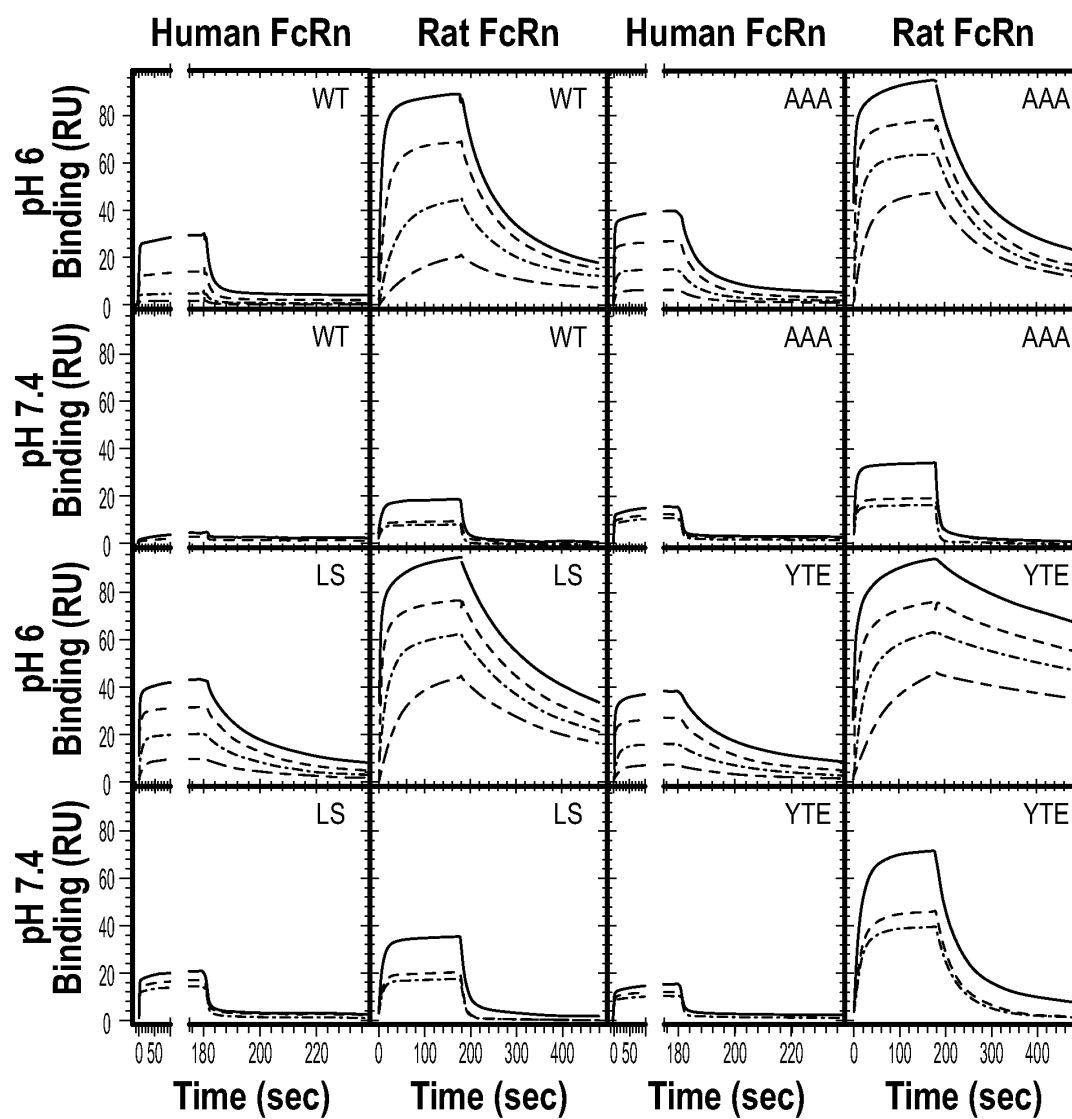


FIG. 3

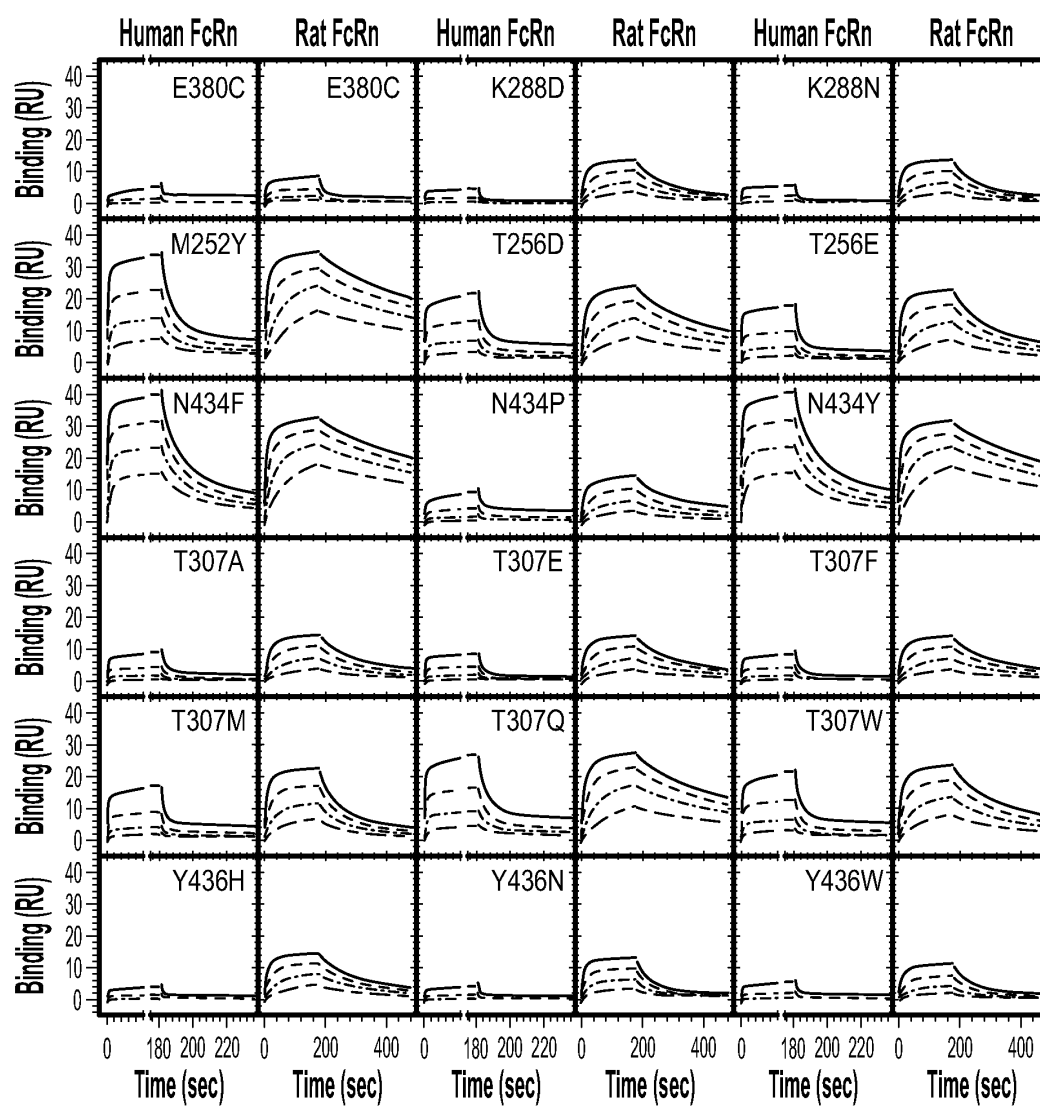


FIG. 4A

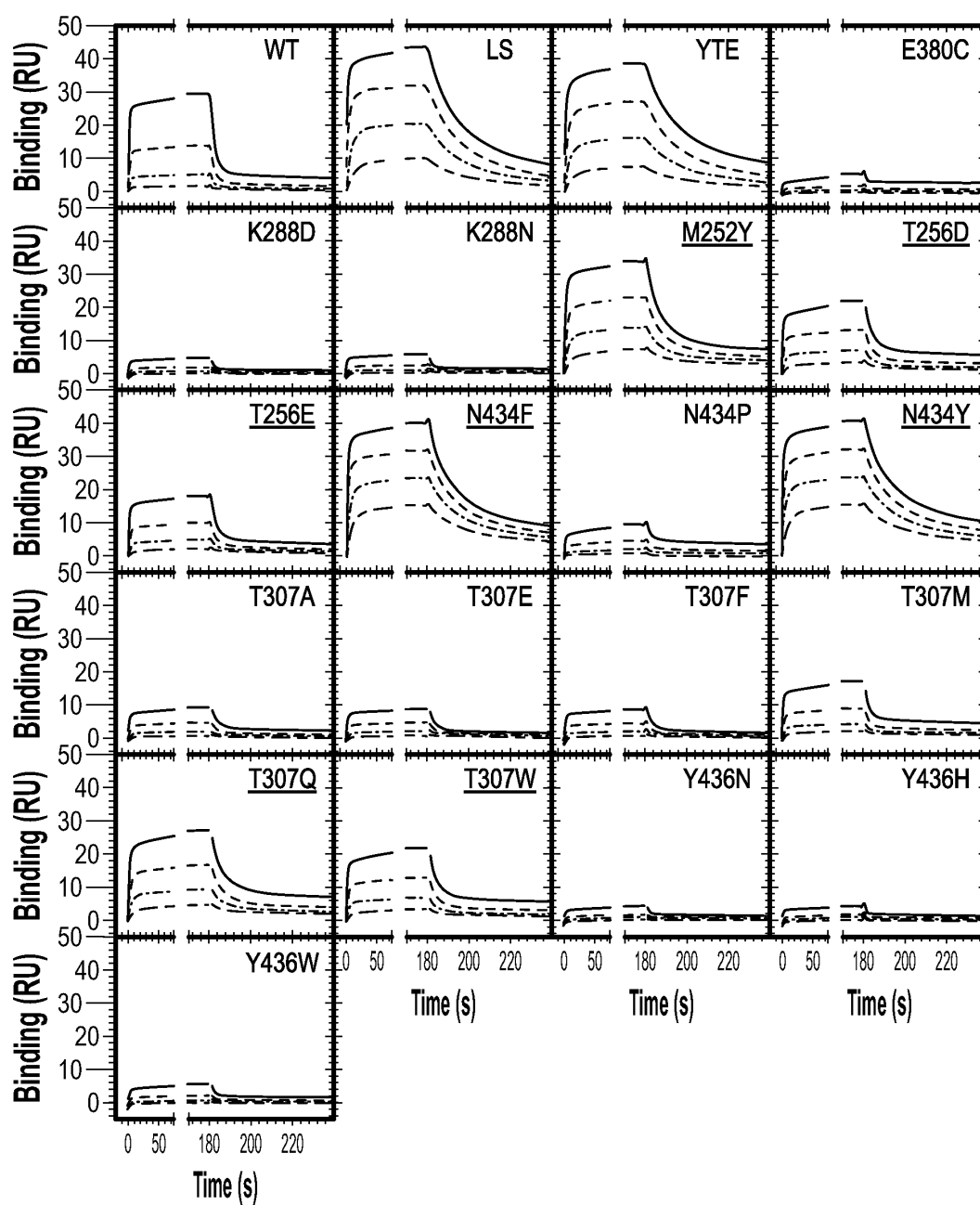


FIG. 4B

FIG. 5A

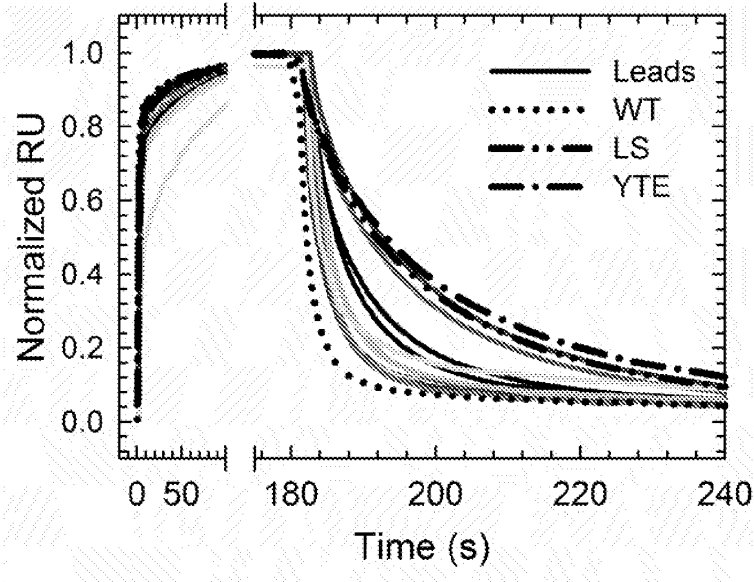


FIG. 5B

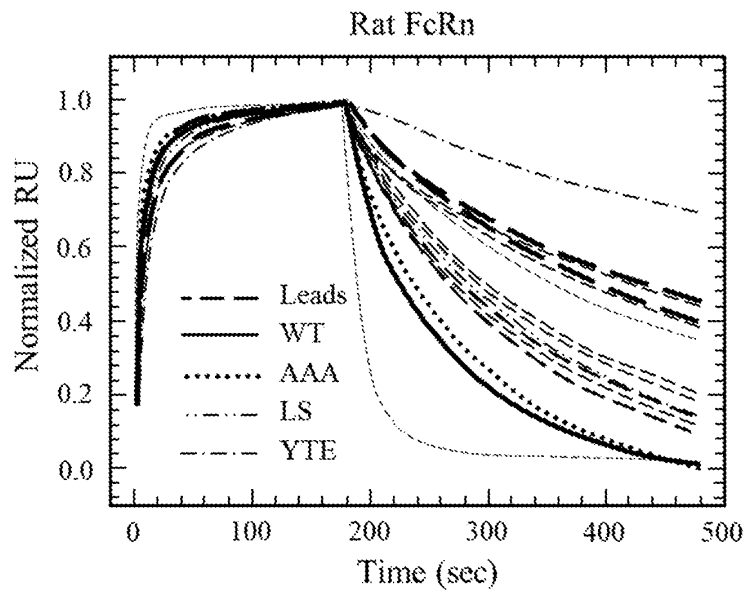


FIG. 5C

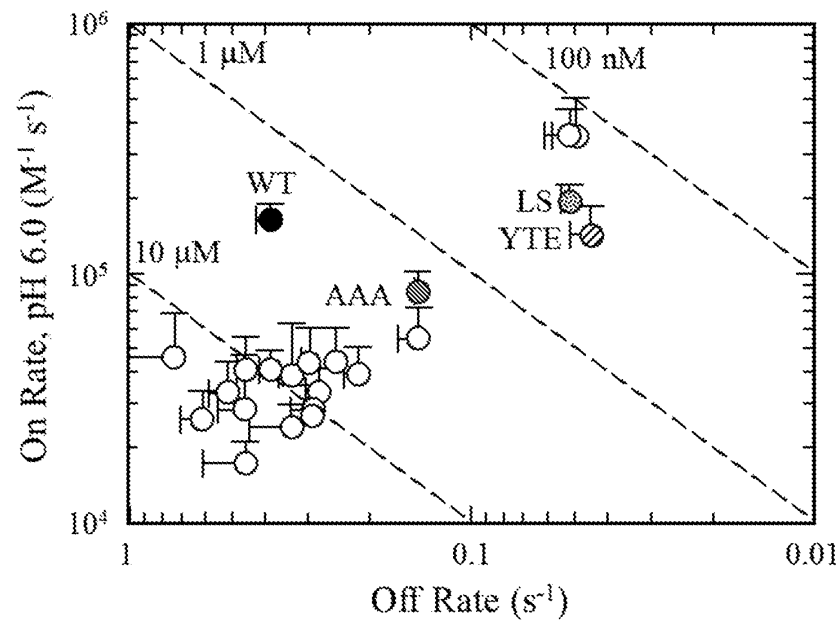


FIG. 5D

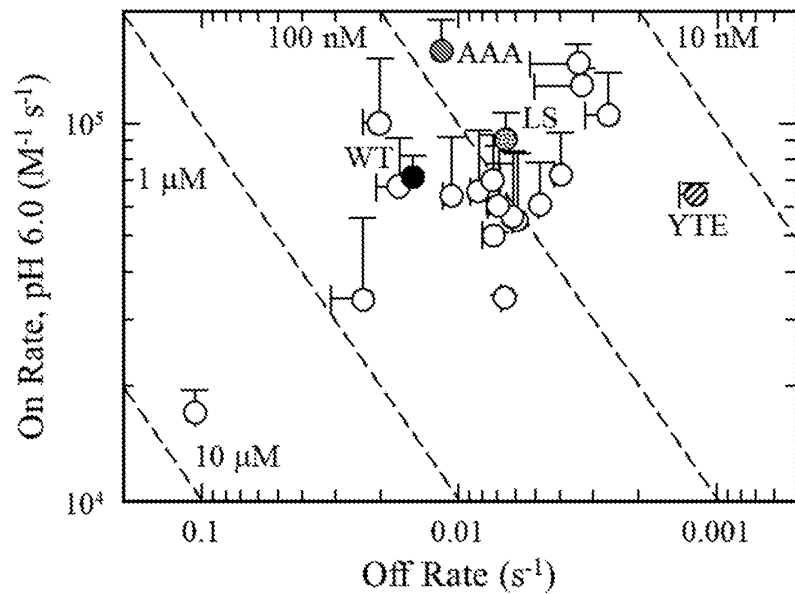


FIG. 6A

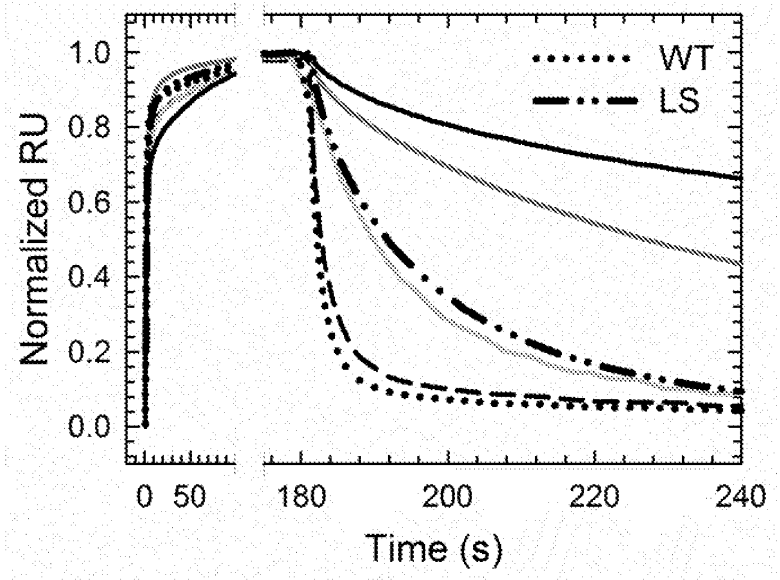


FIG. 6B

Rat FcRn

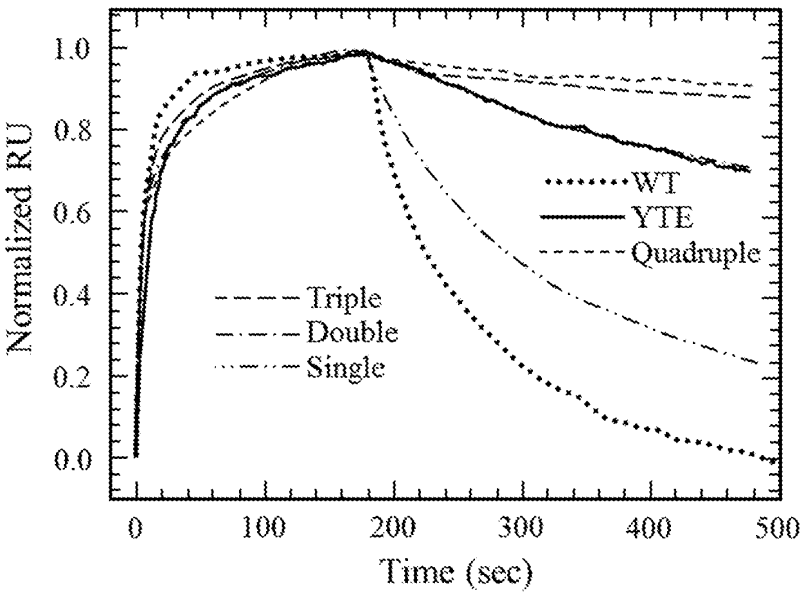


FIG. 6C

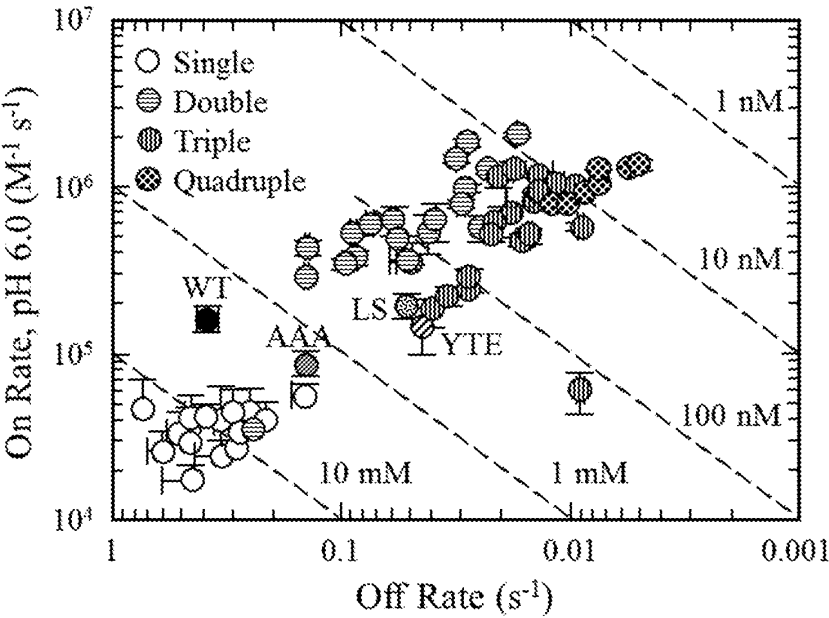


FIG. 6D

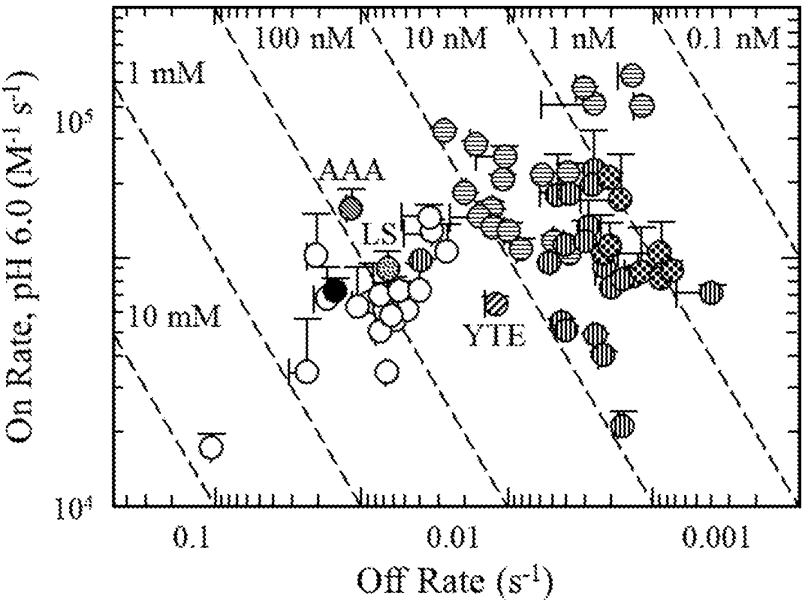


FIG. 7A

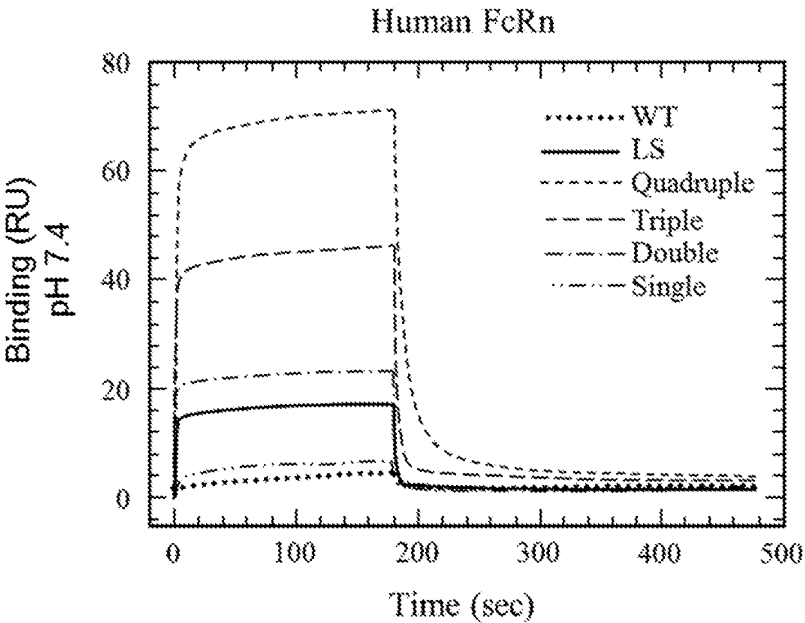


FIG. 7B

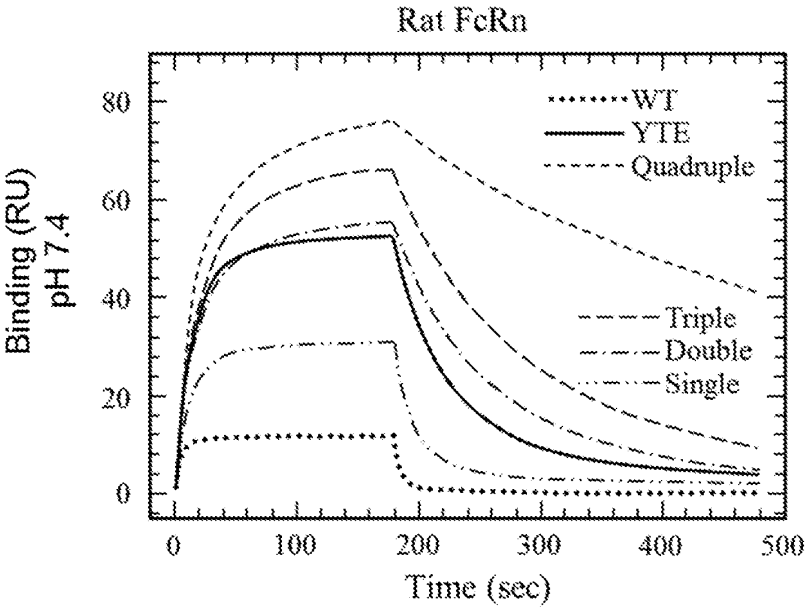


FIG. 7C

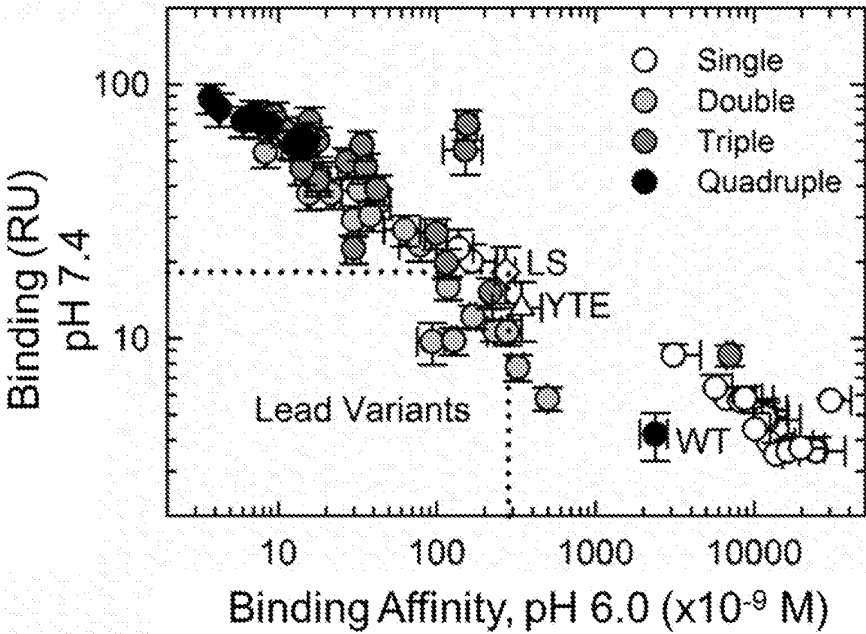


FIG. 7D

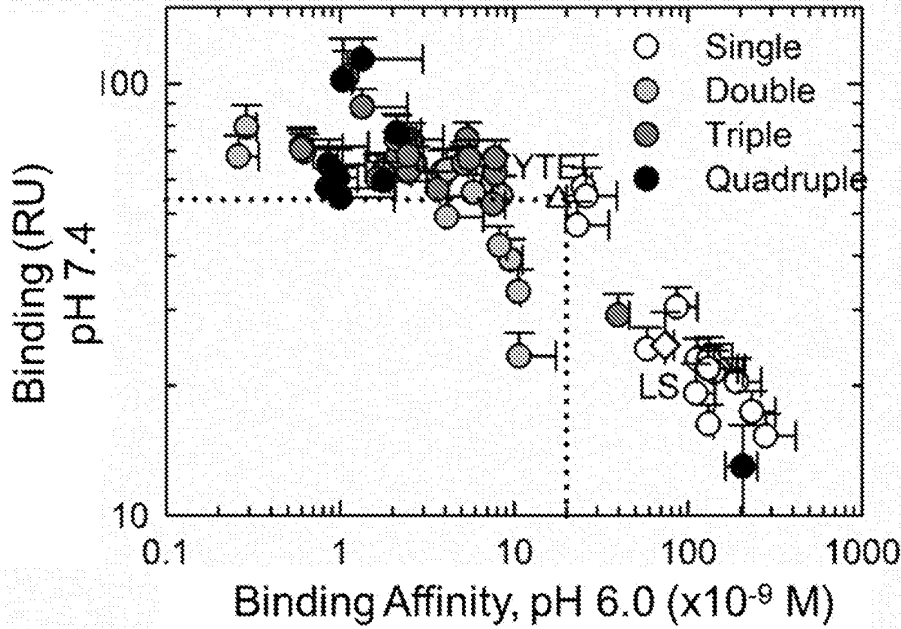


FIG. 8A

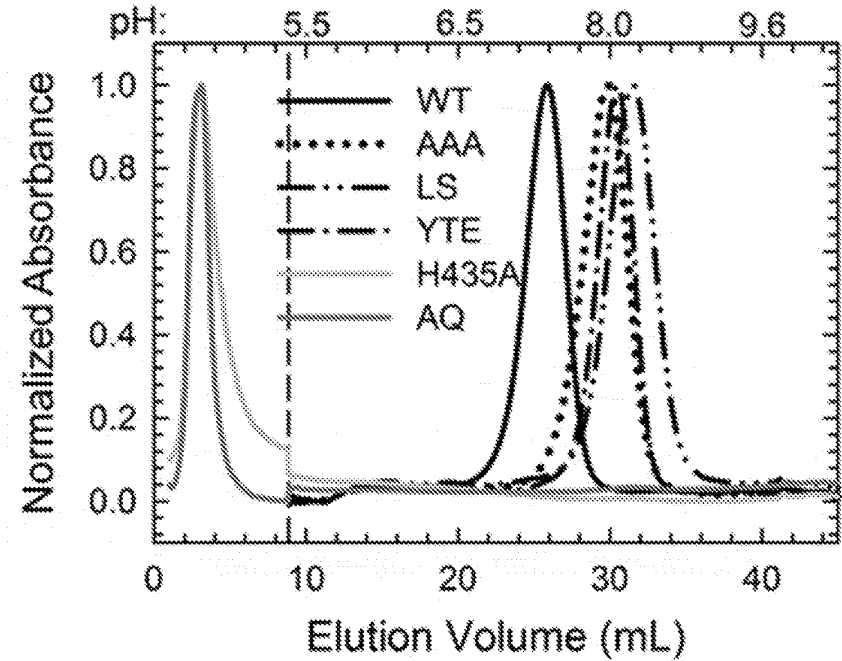


FIG. 8B

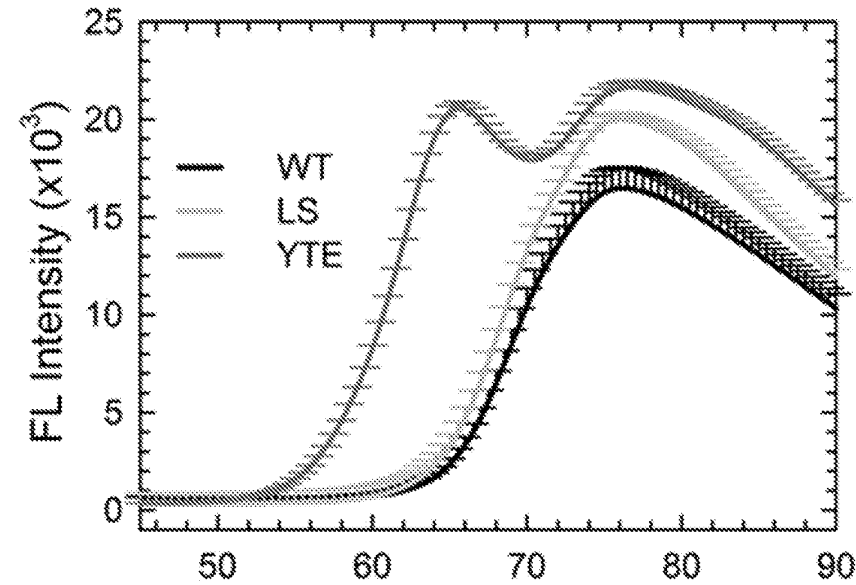


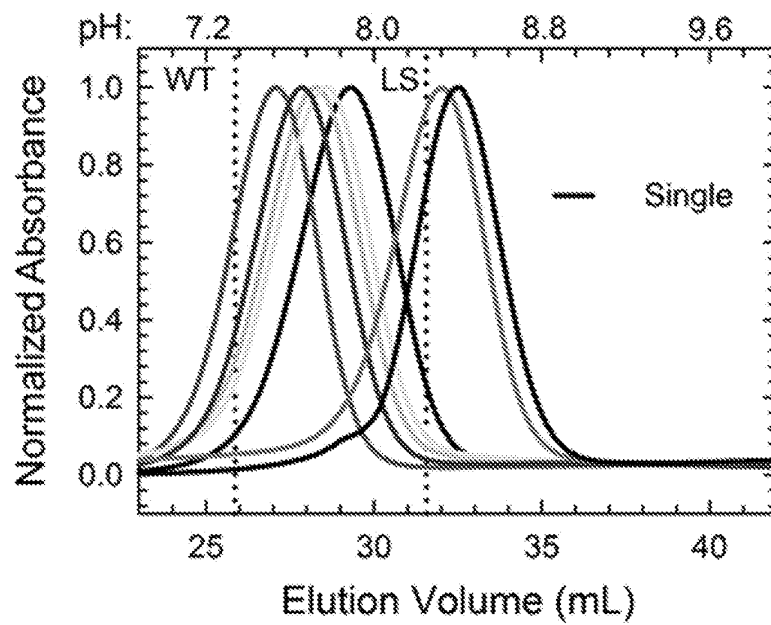
FIG. 8C

FIG. 9A

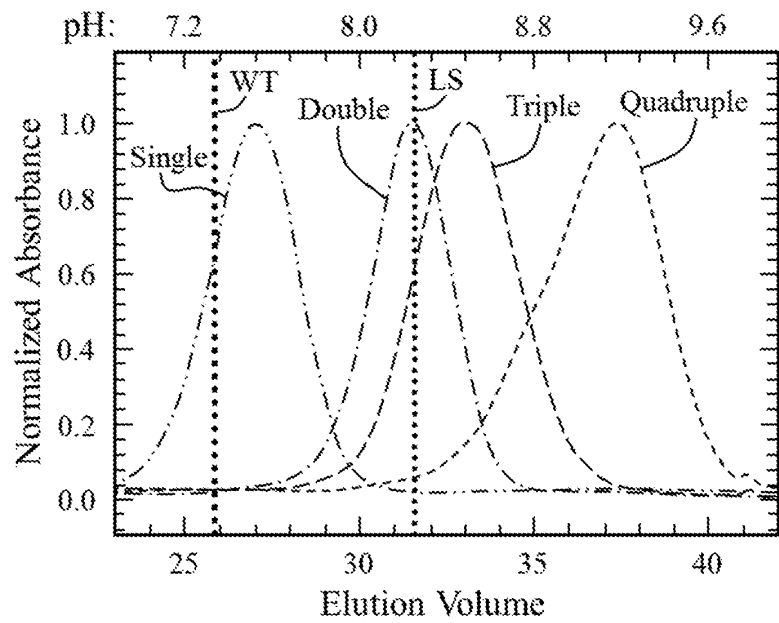


FIG. 9B

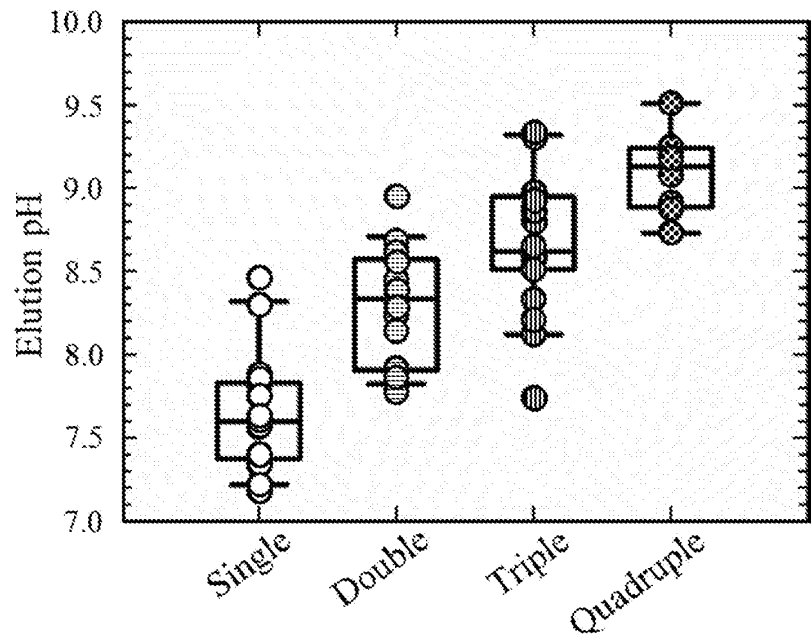


FIG. 9C

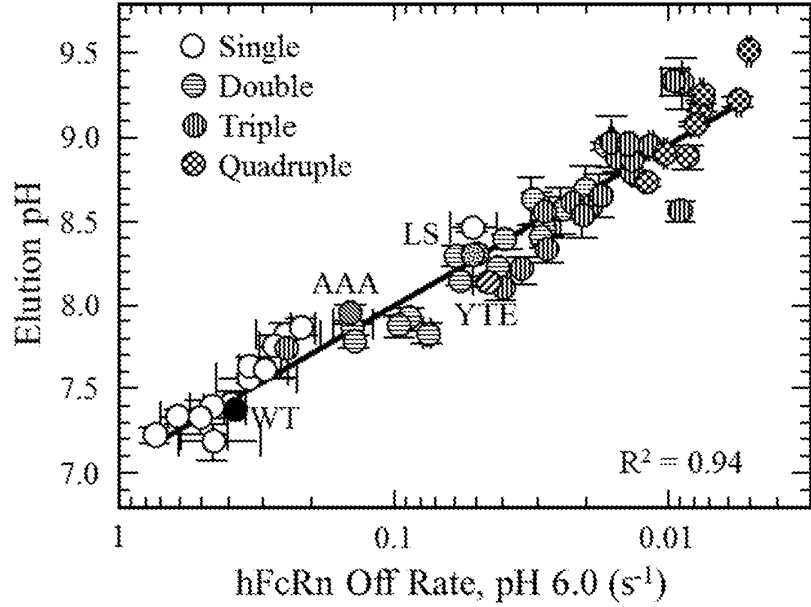


FIG. 9D

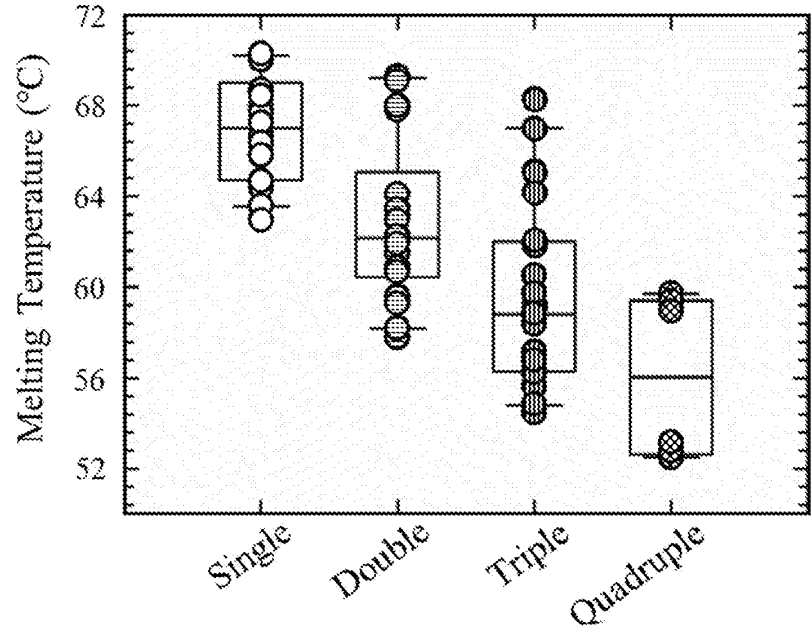


FIG. 10A

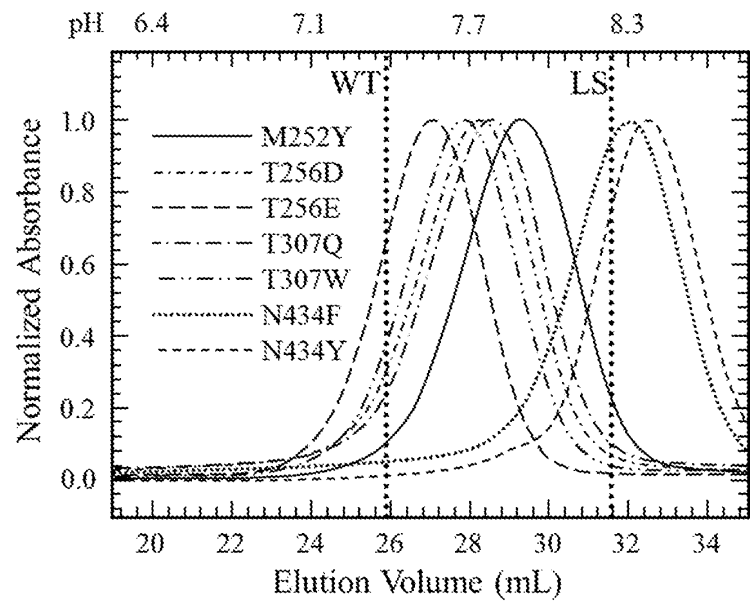


FIG. 10B

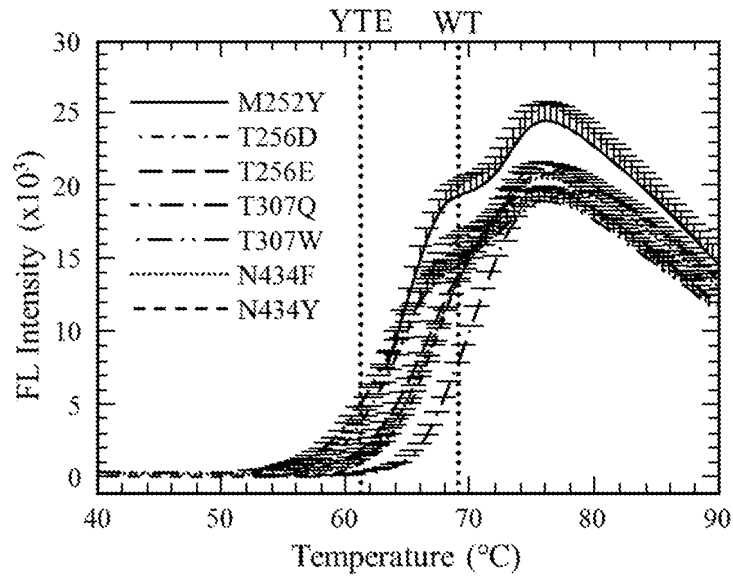


FIG. 11A

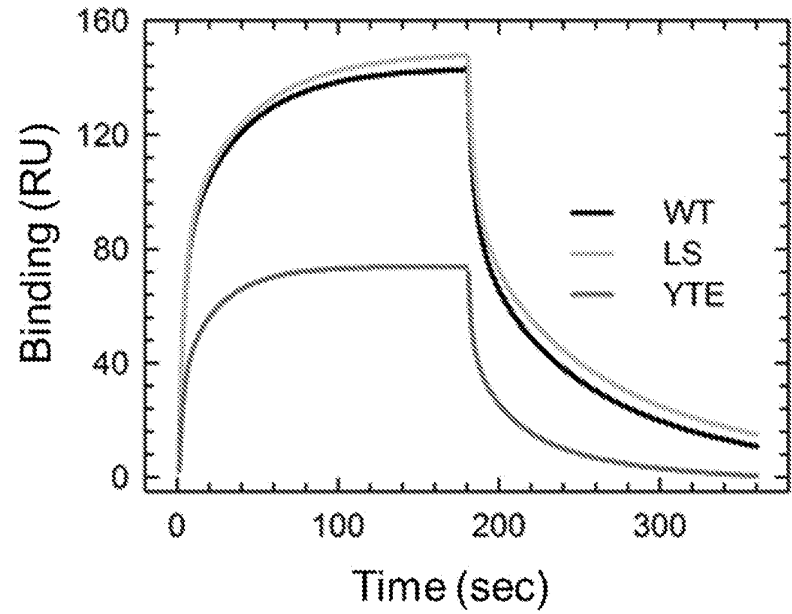


FIG. 11B

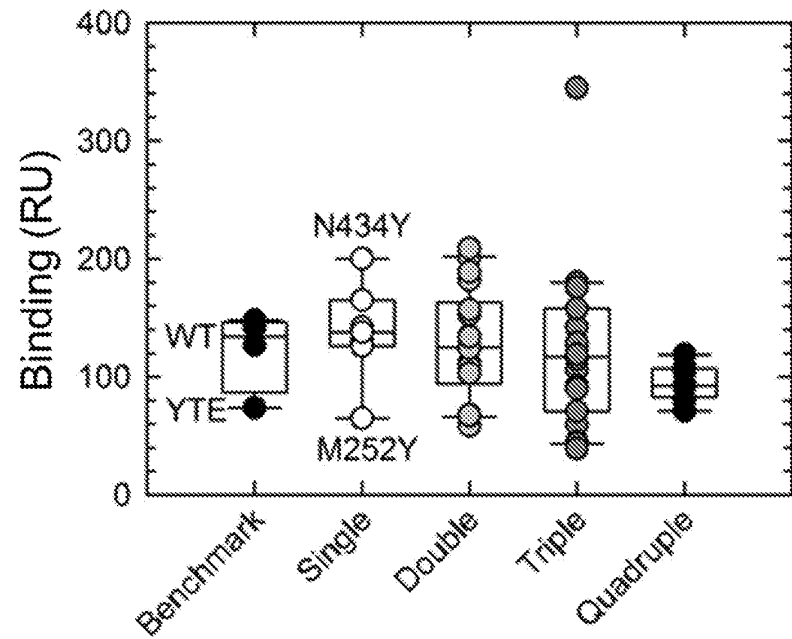


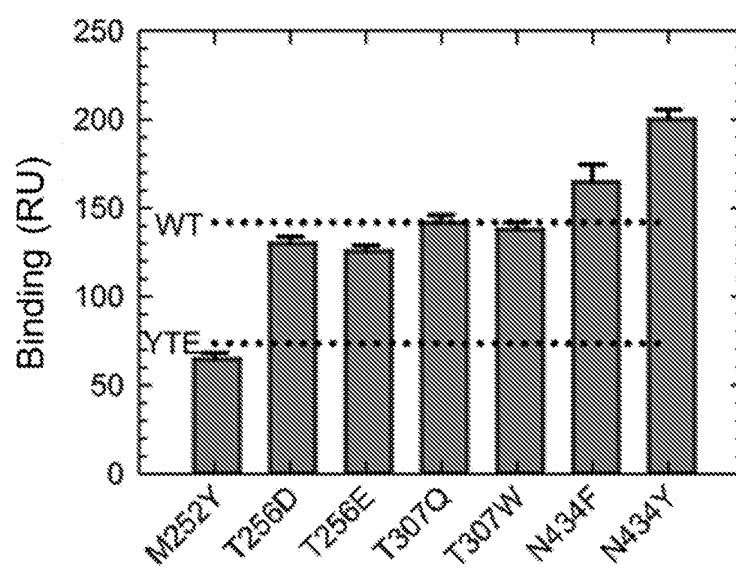
FIG. 11C

FIG. 12A

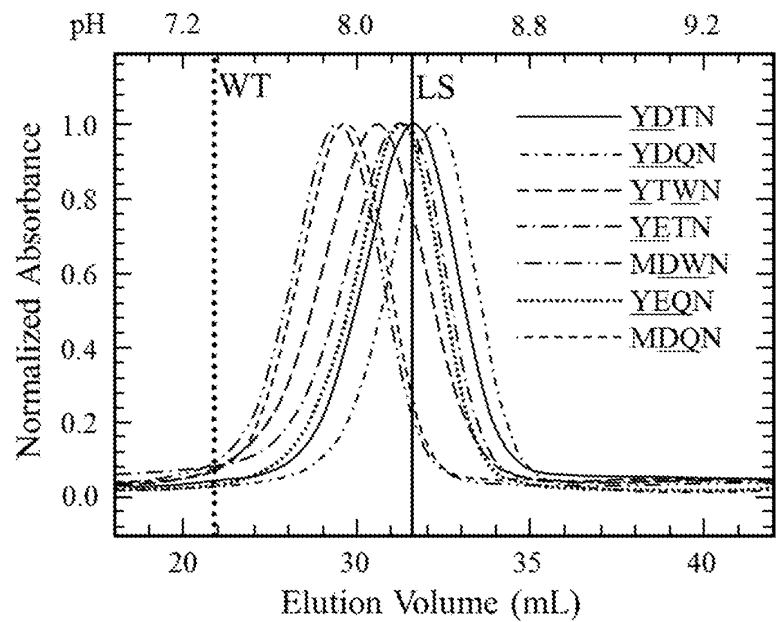


FIG. 12B

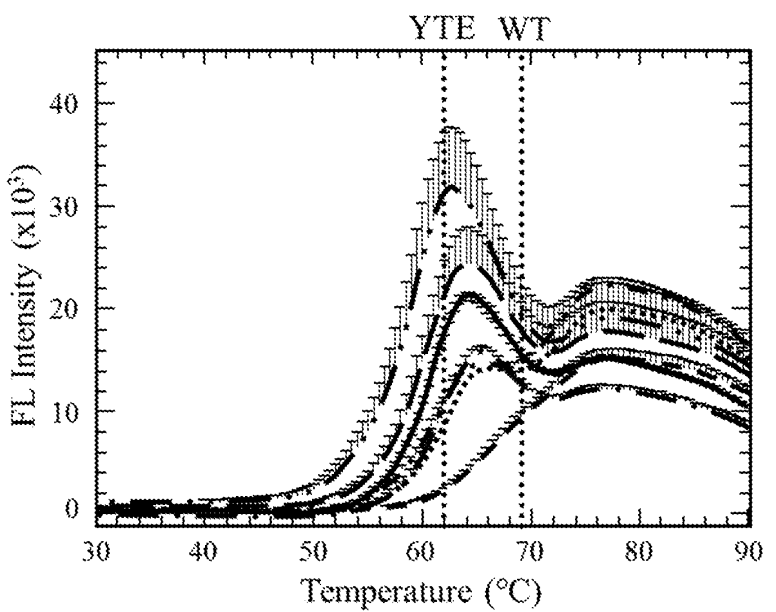


FIG. 12C

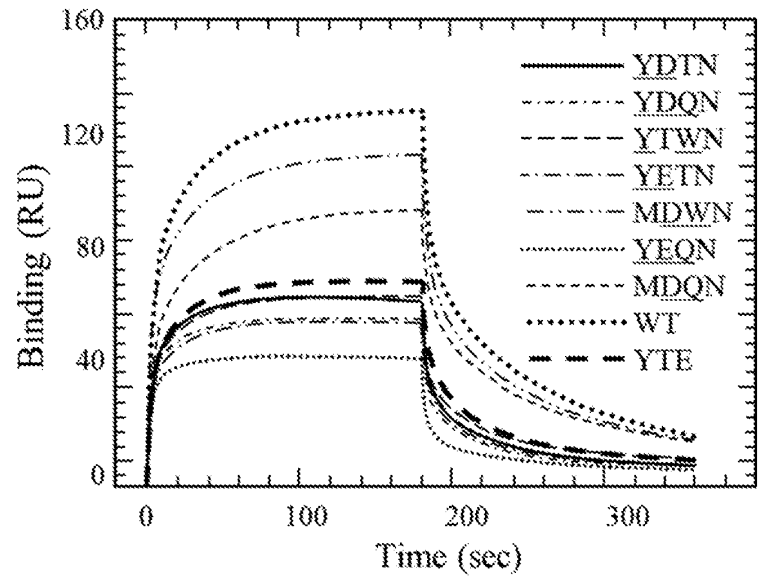


FIG. 12D

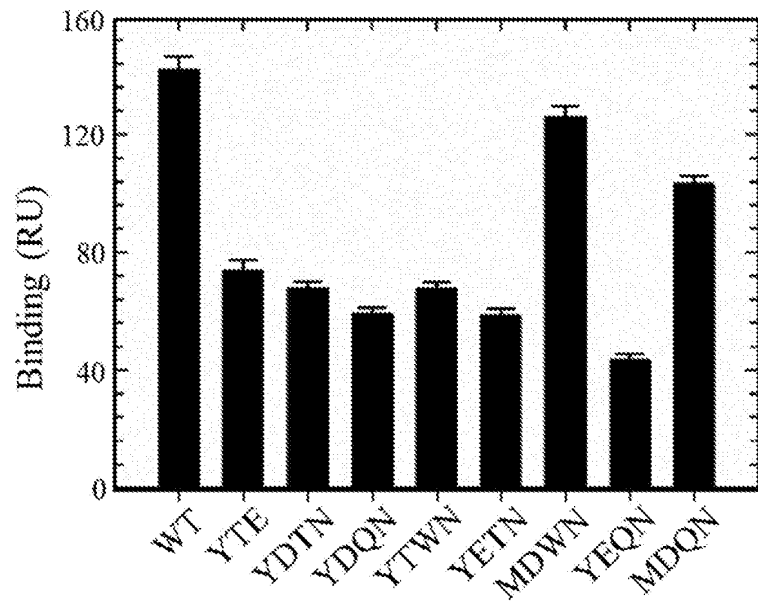


FIG. 12E

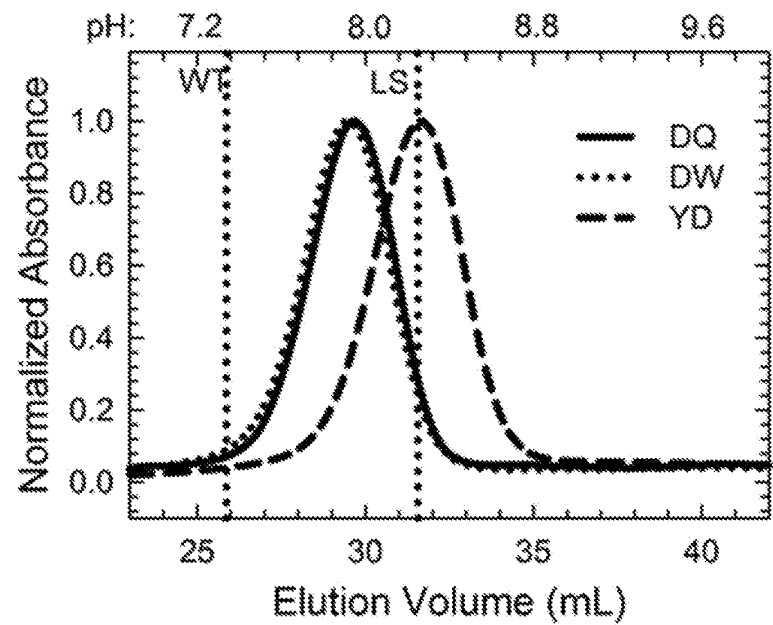


FIG. 12F

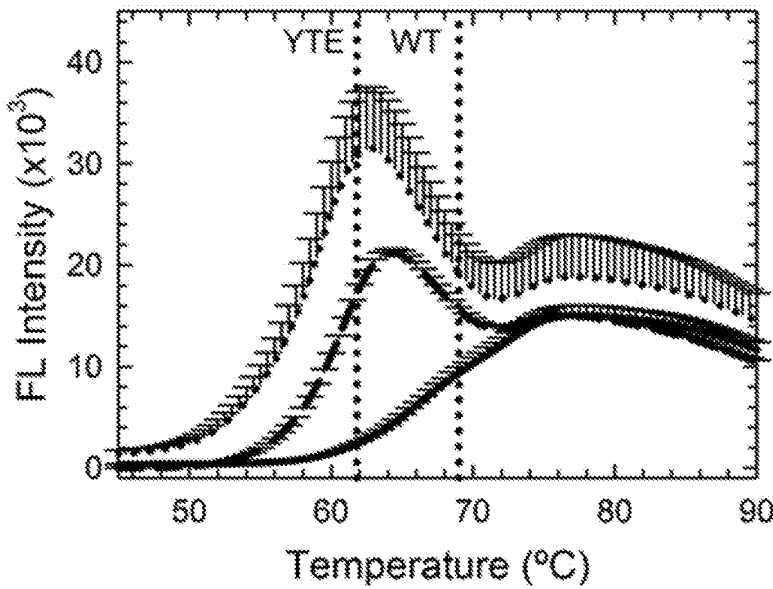


FIG. 12G

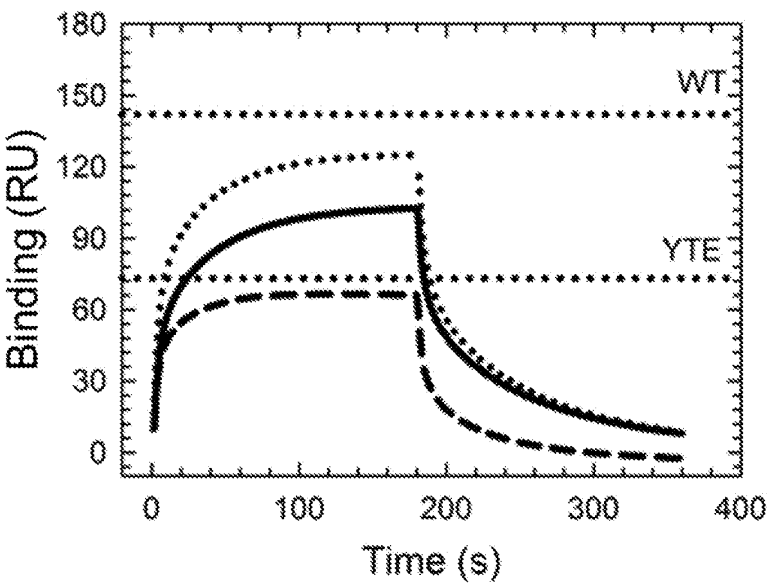


FIG. 12H

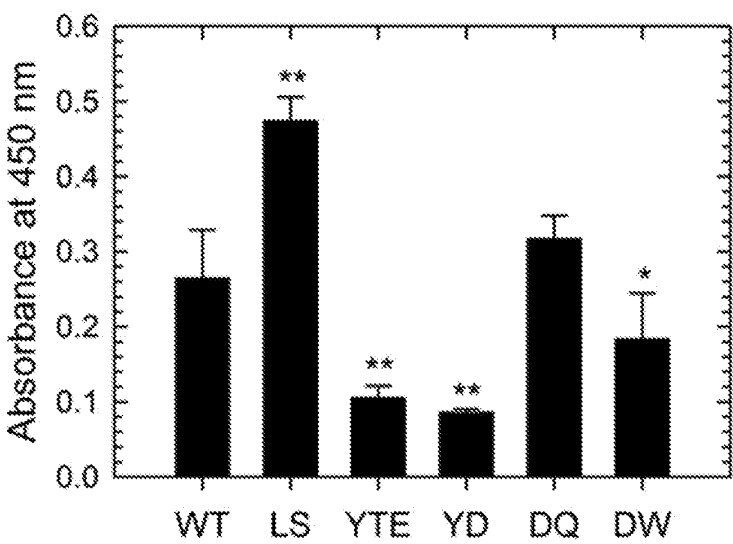


FIG. 13A

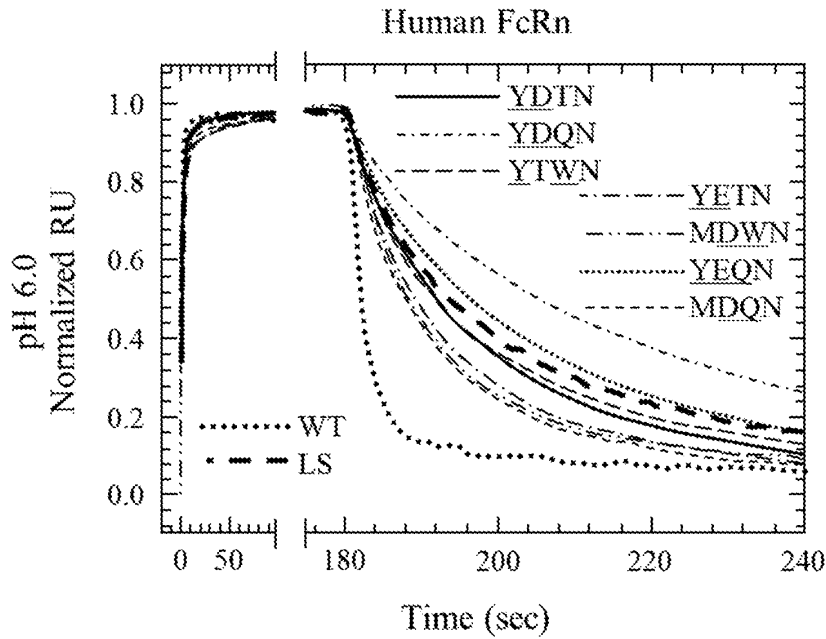


FIG. 13B

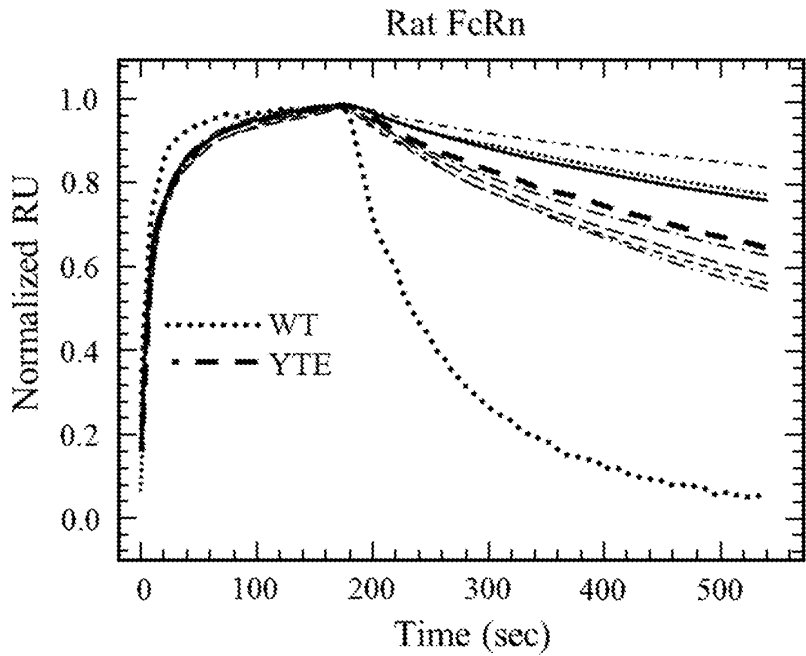


FIG. 13C

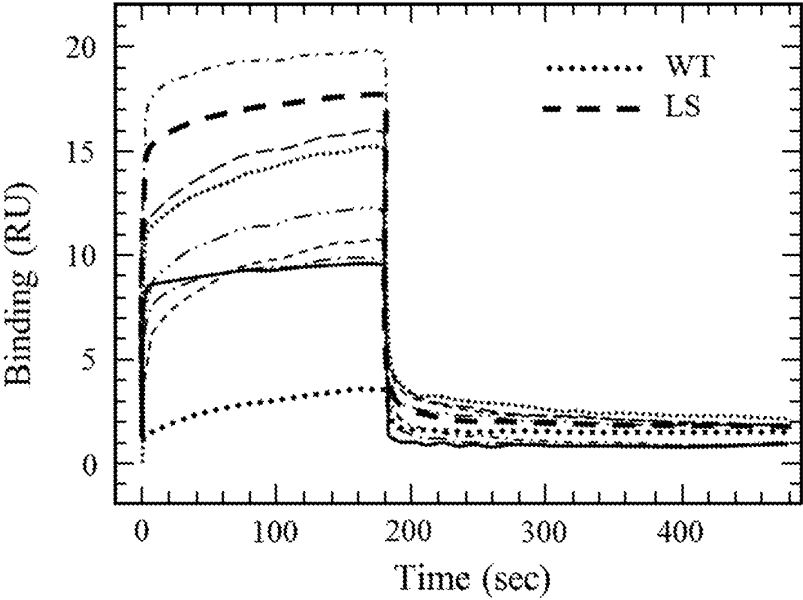
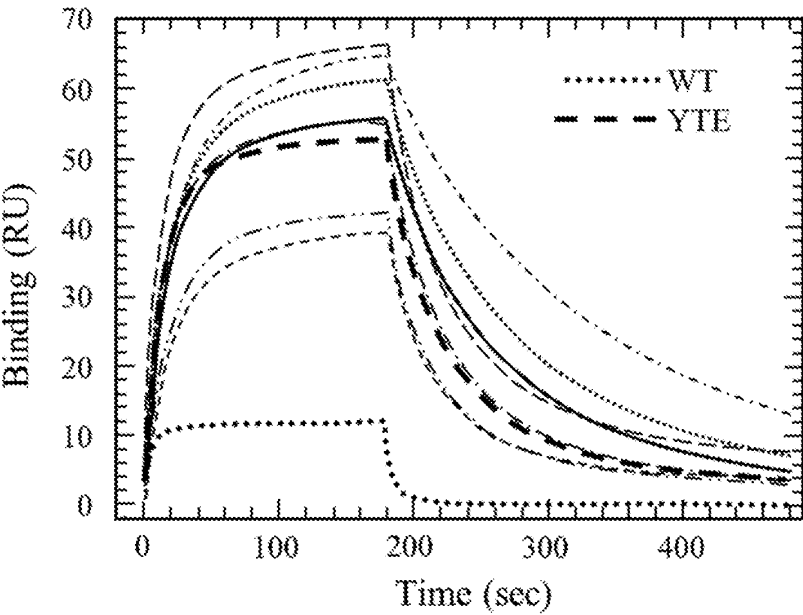


FIG. 13D



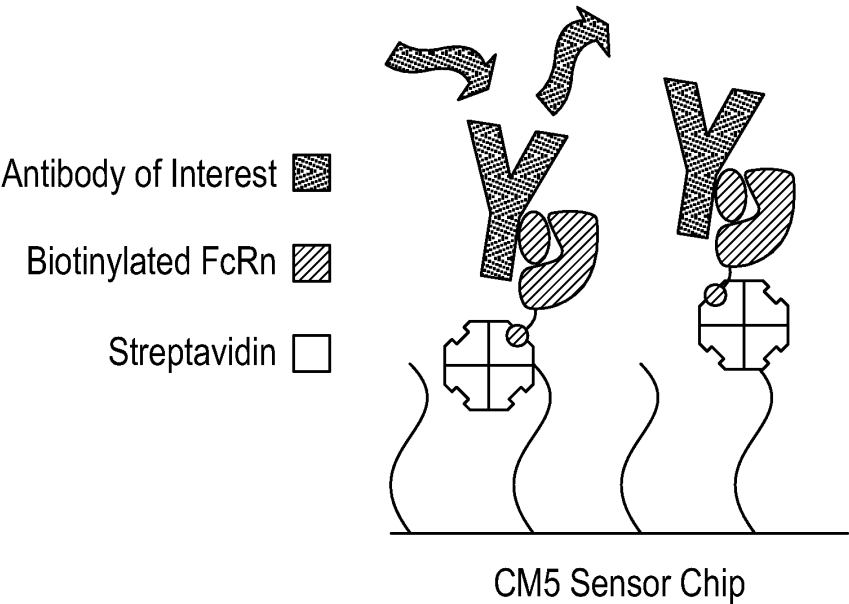


FIG. 15A

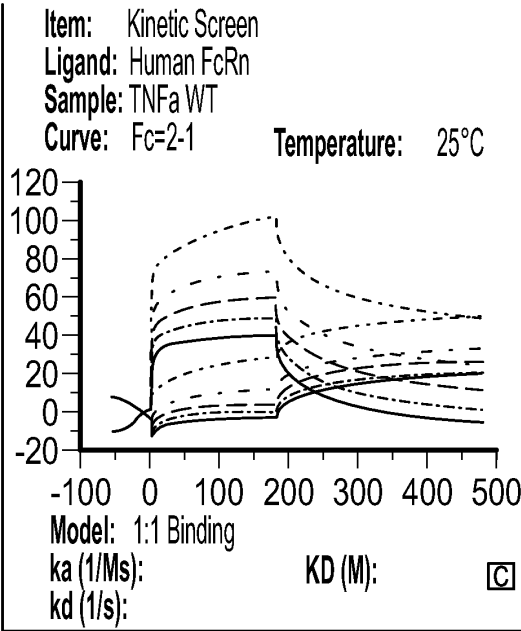


FIG. 15B

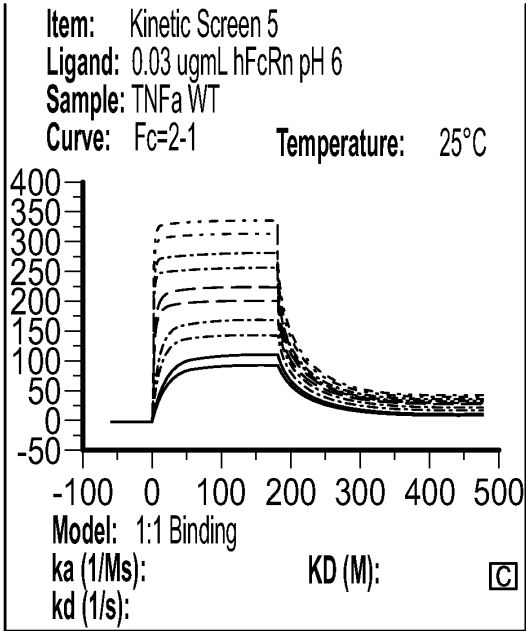


FIG. 15C

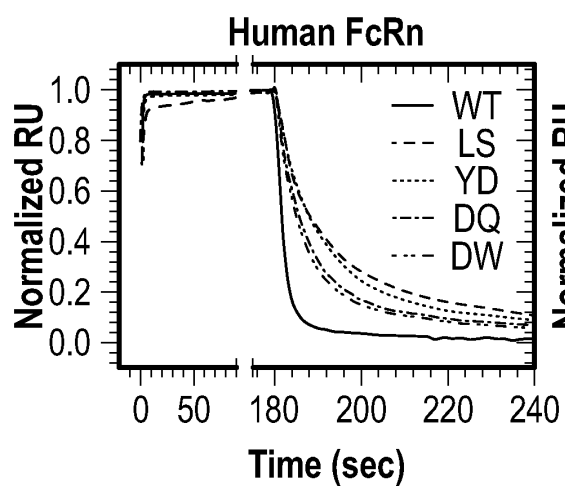


FIG. 16A

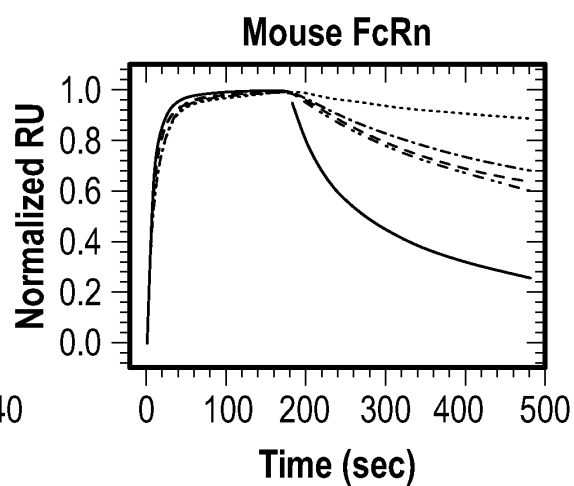


FIG. 16B

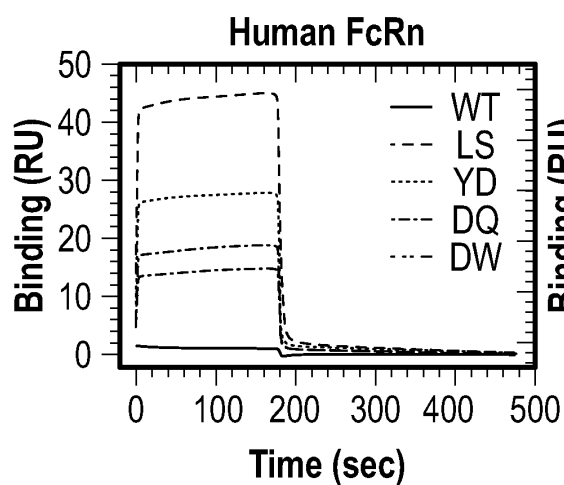


FIG. 17A

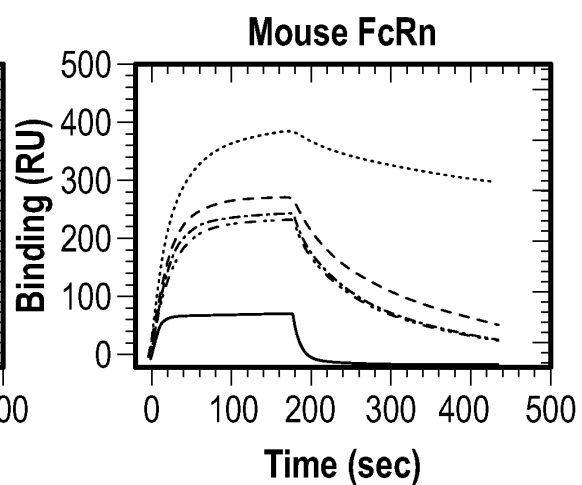


FIG. 17B

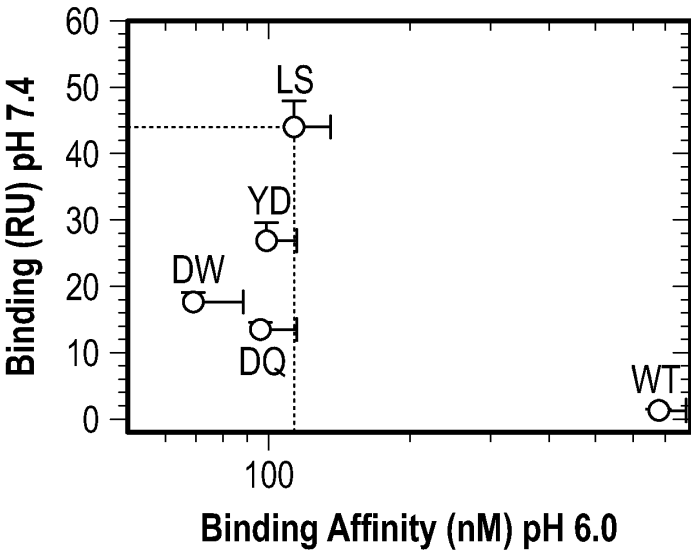


FIG. 18

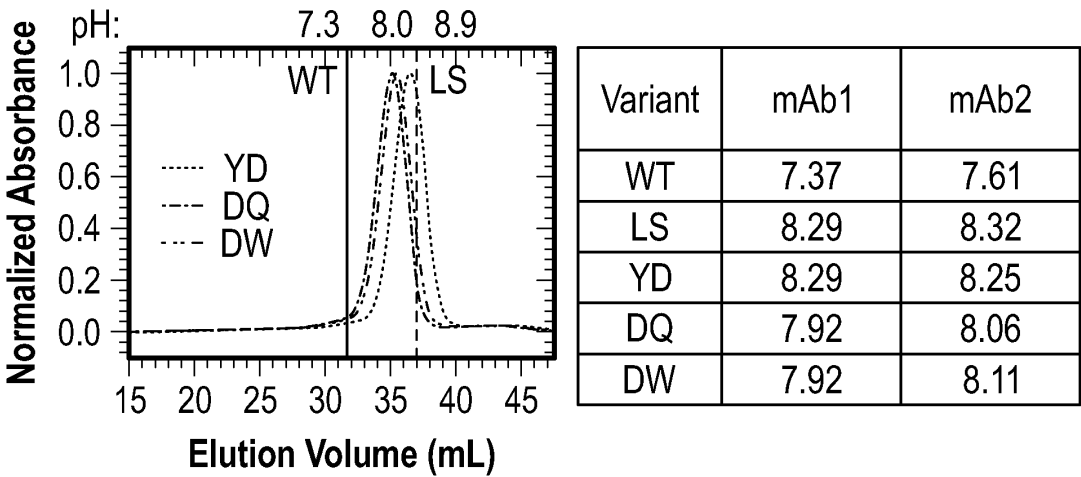


FIG. 19

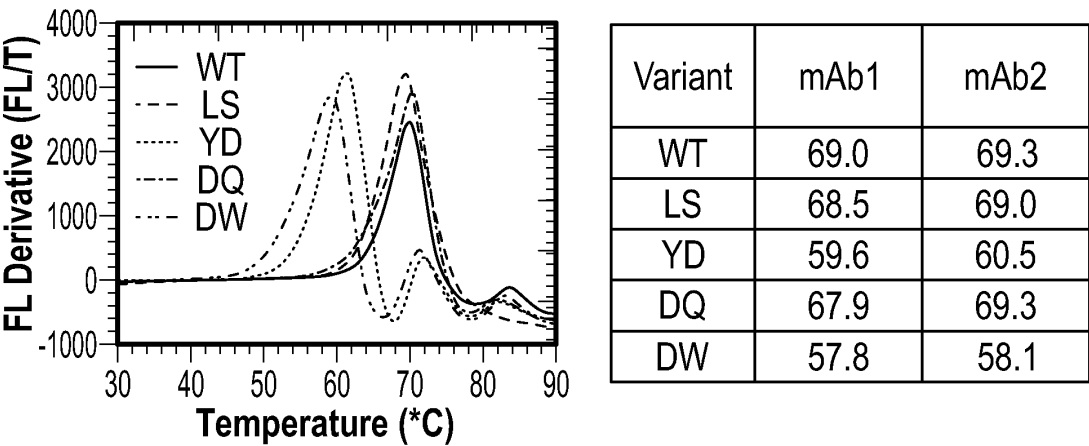


FIG. 20

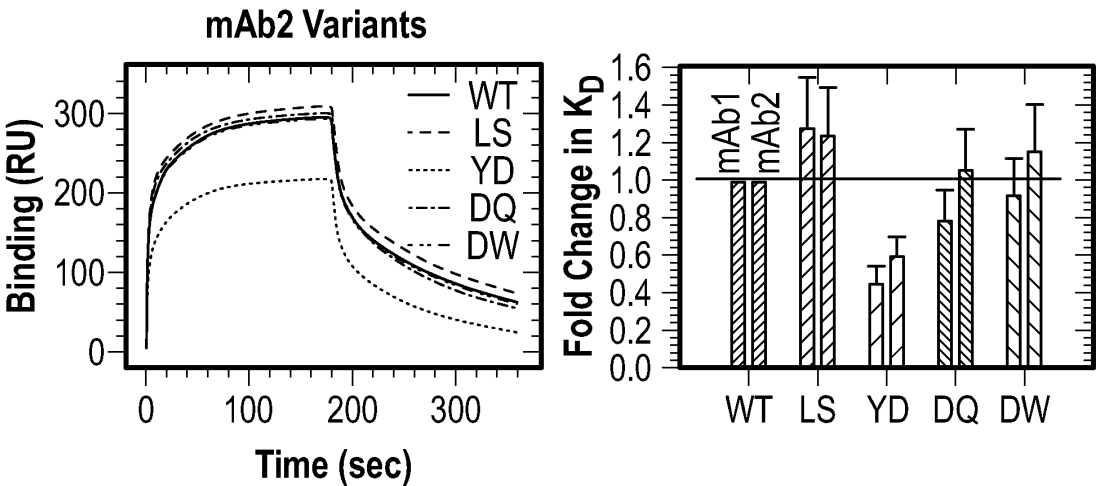


FIG. 21

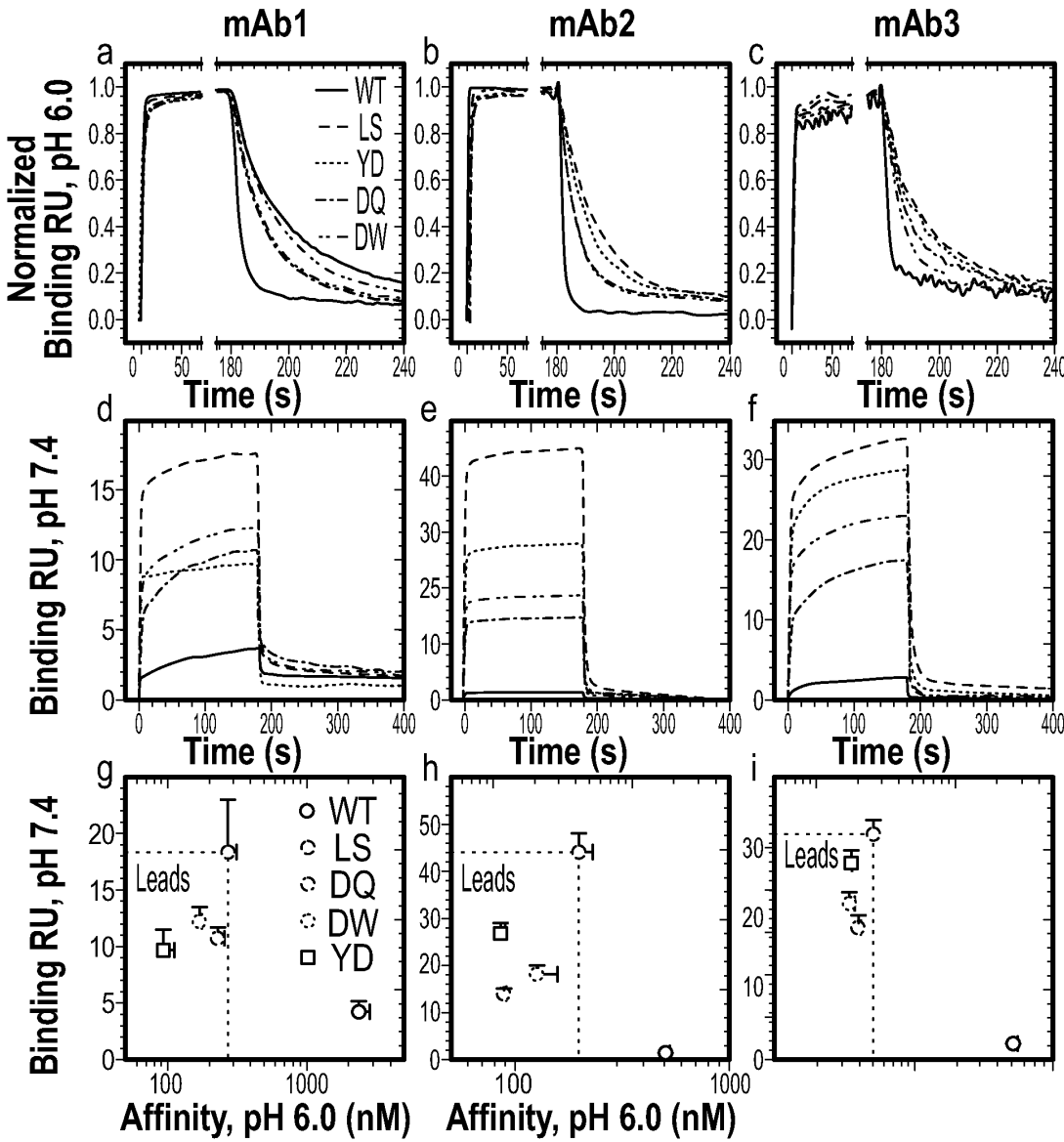


FIG. 22

FIG. 23A

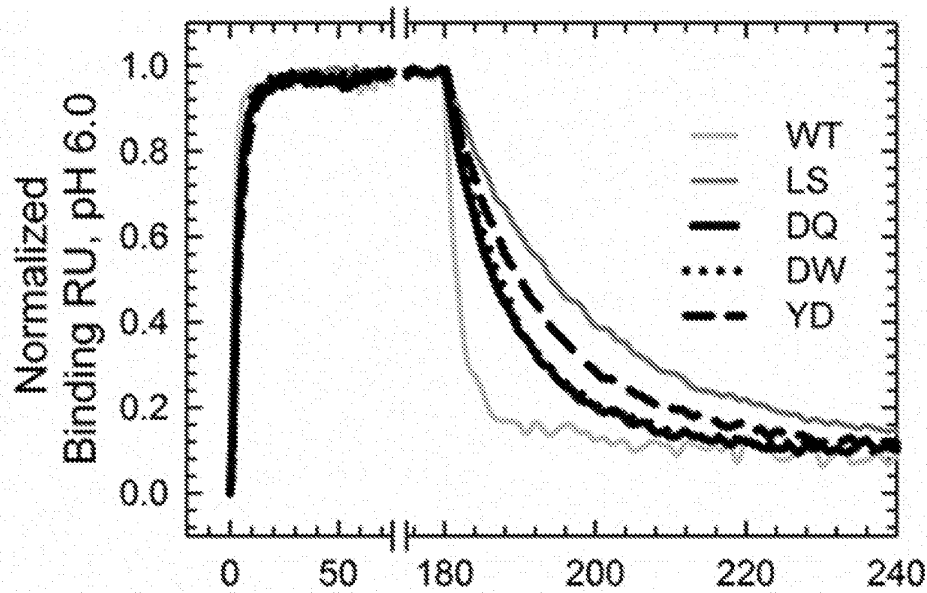


FIG. 23B

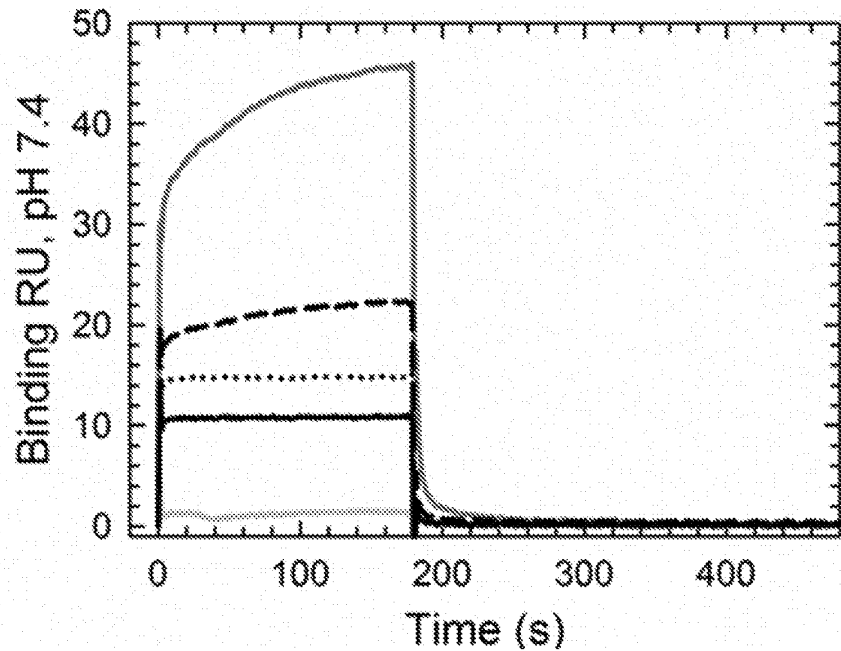
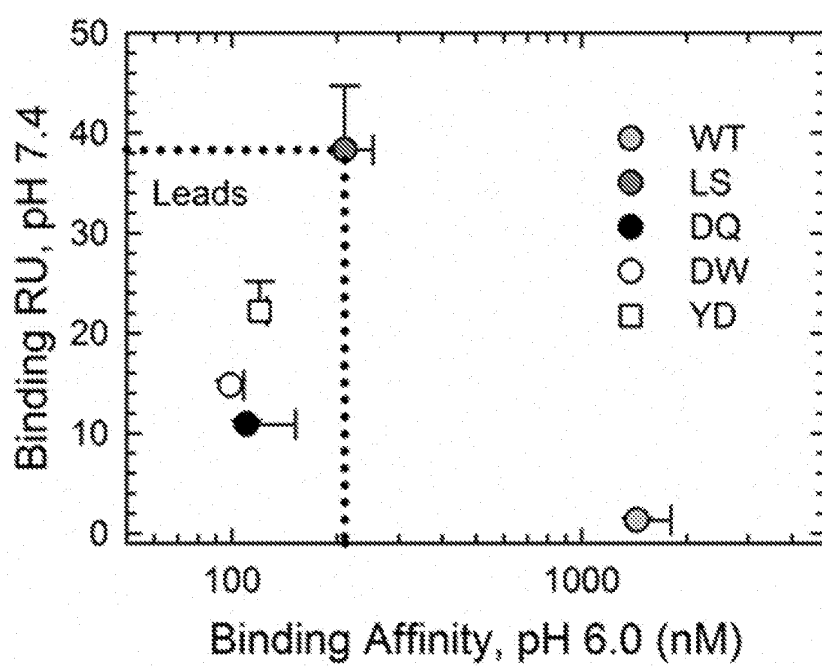


FIG. 23C

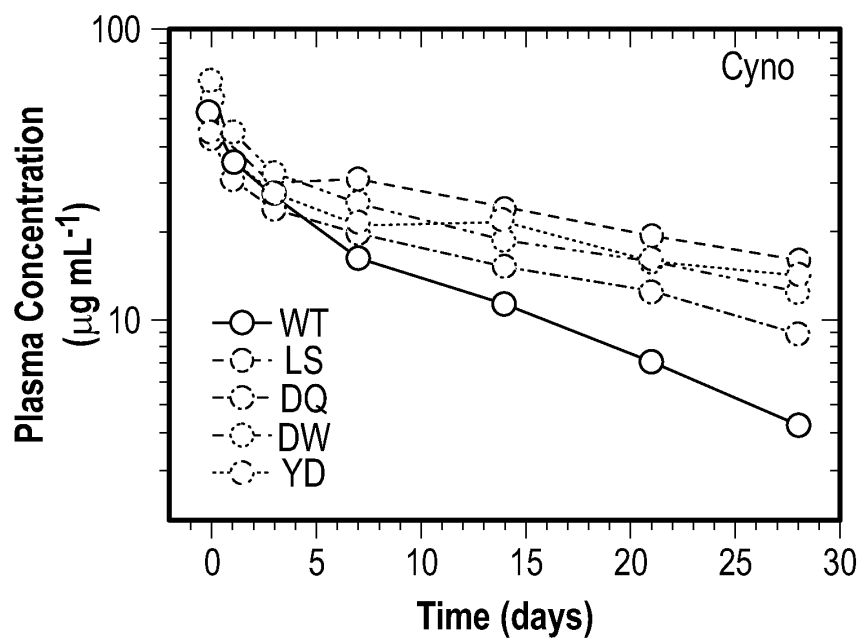


FIG. 24A

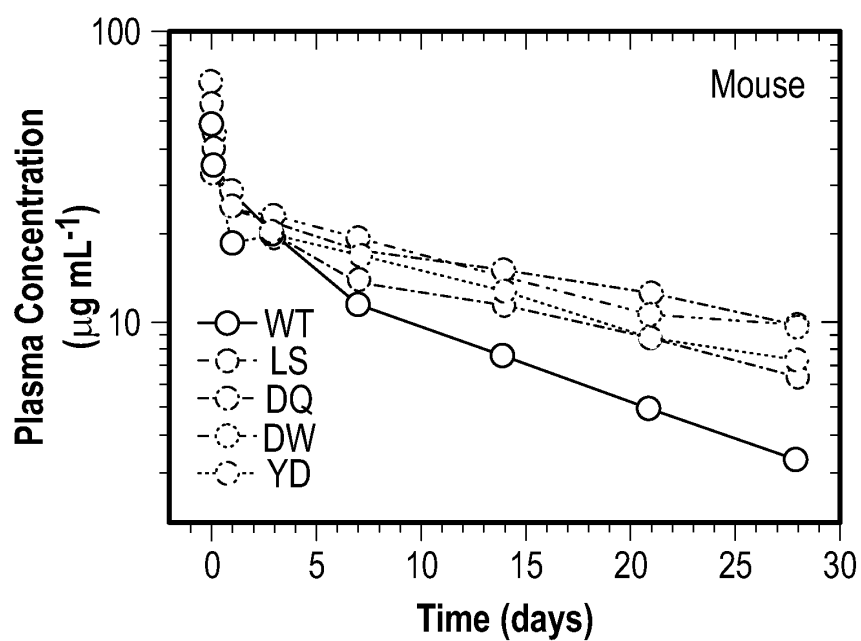


FIG. 24B

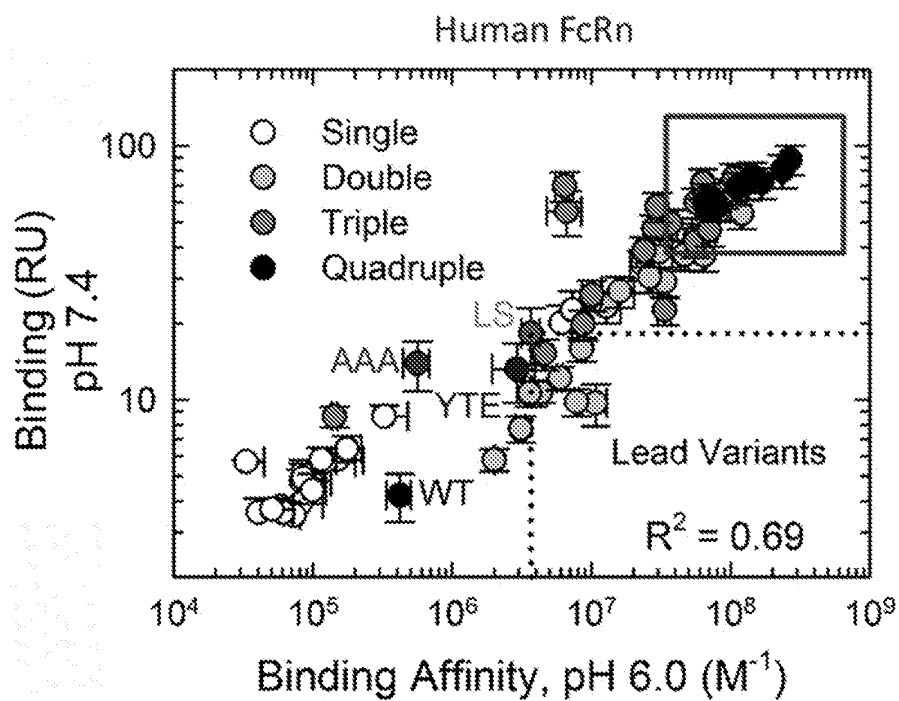
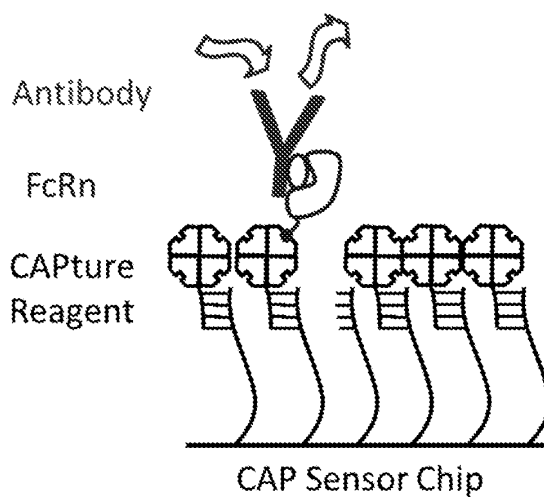
FIG. 25**FIG. 26**

FIG. 27A

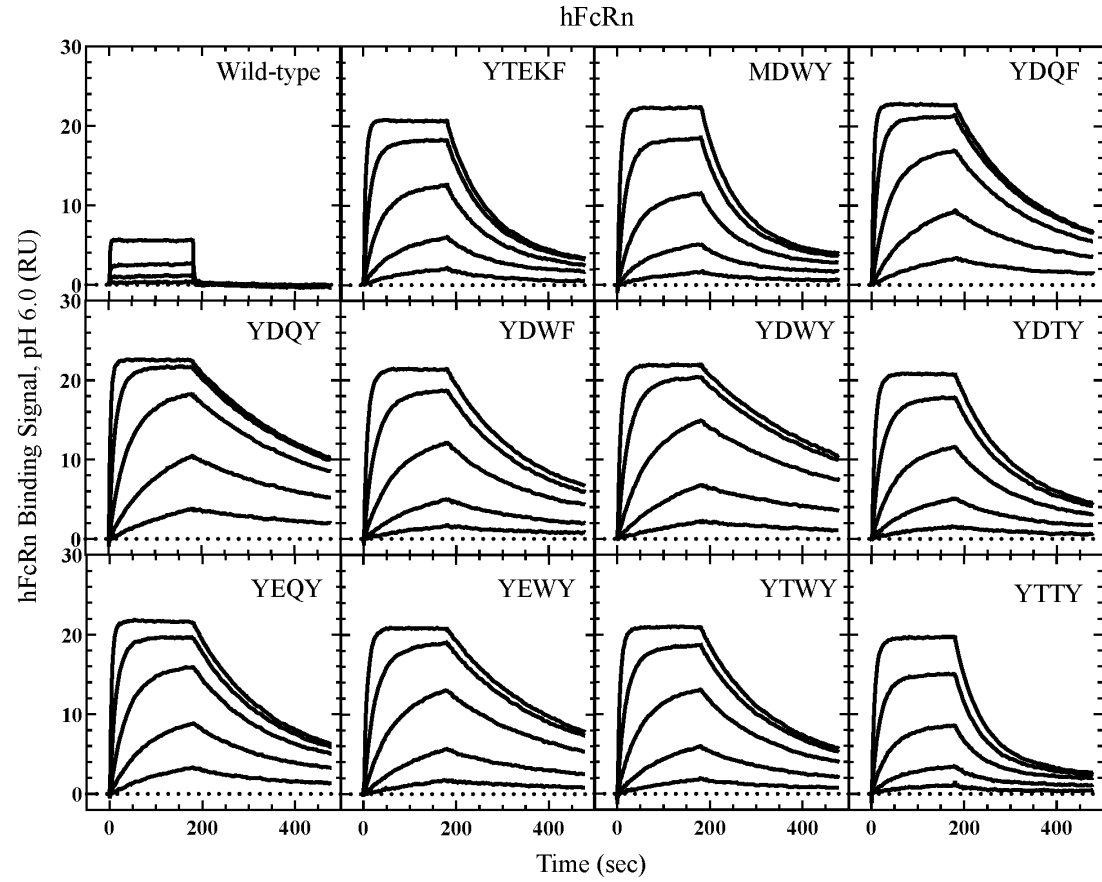


FIG. 27B

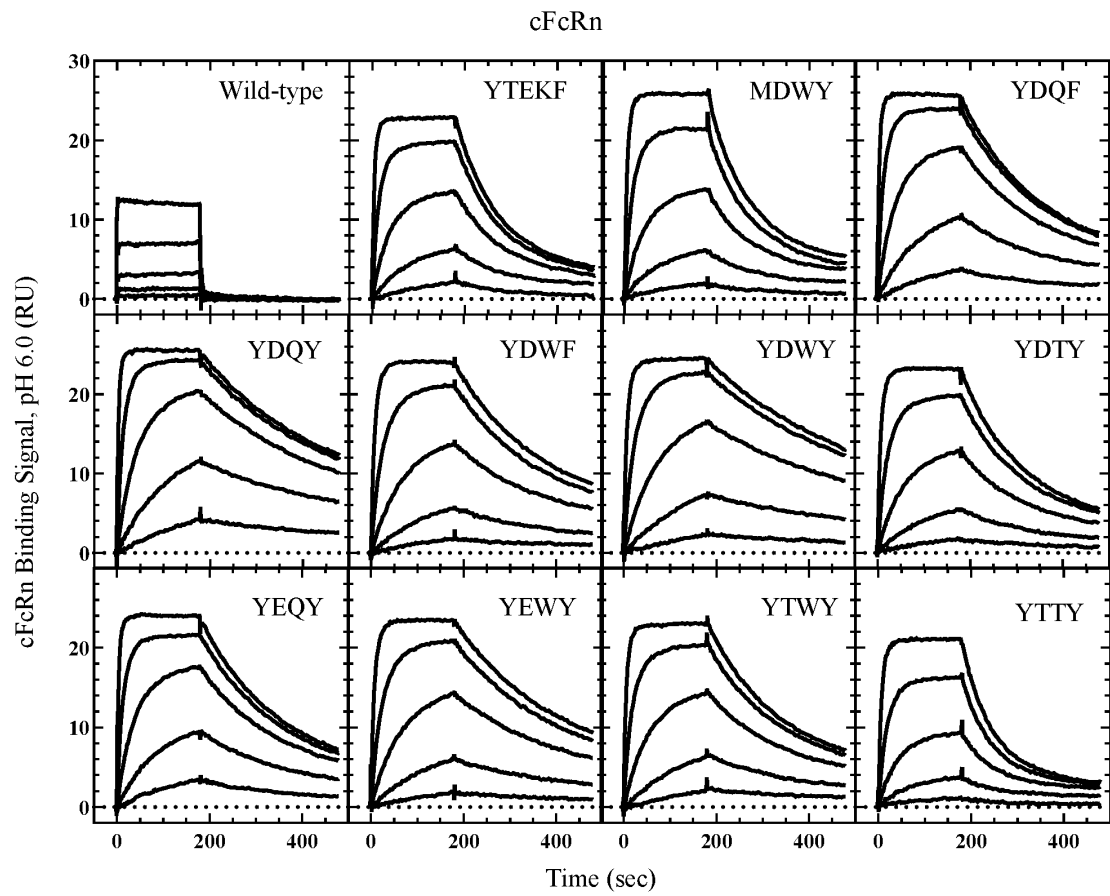


FIG. 27C

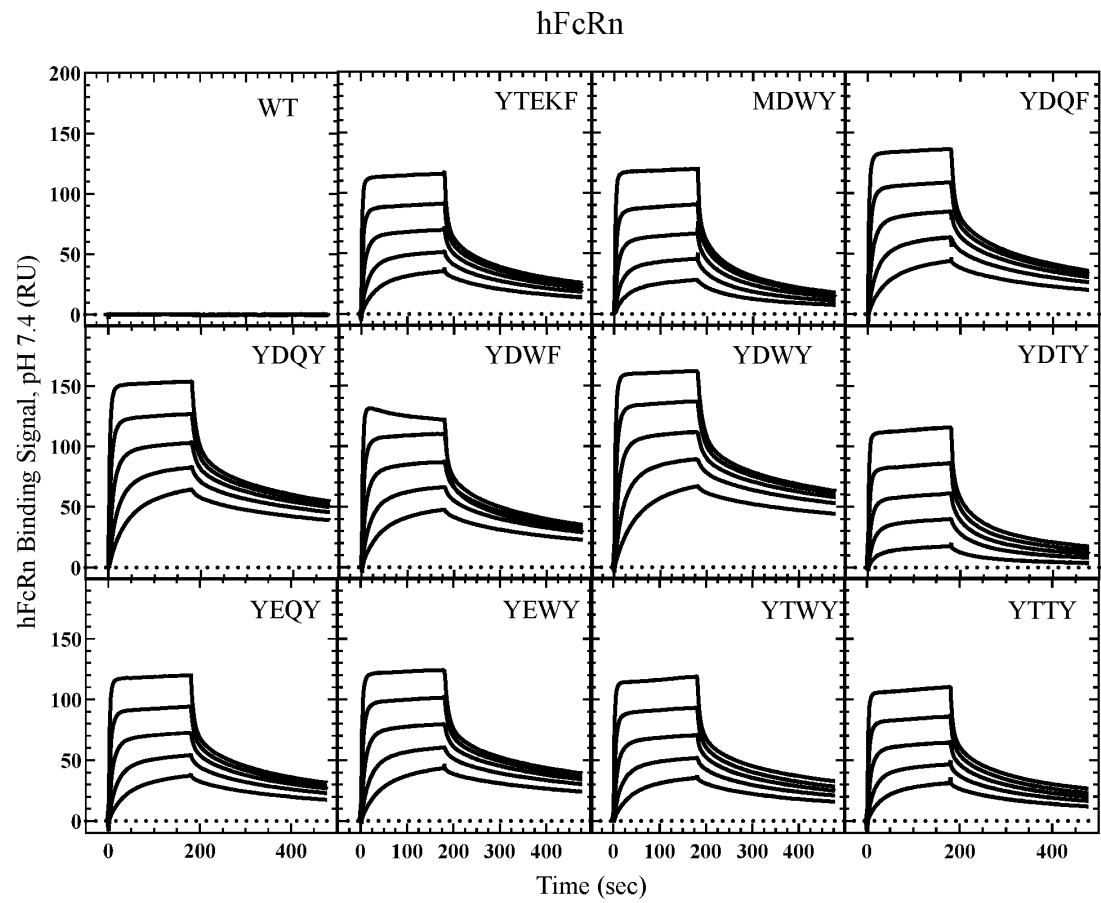


FIG. 27D

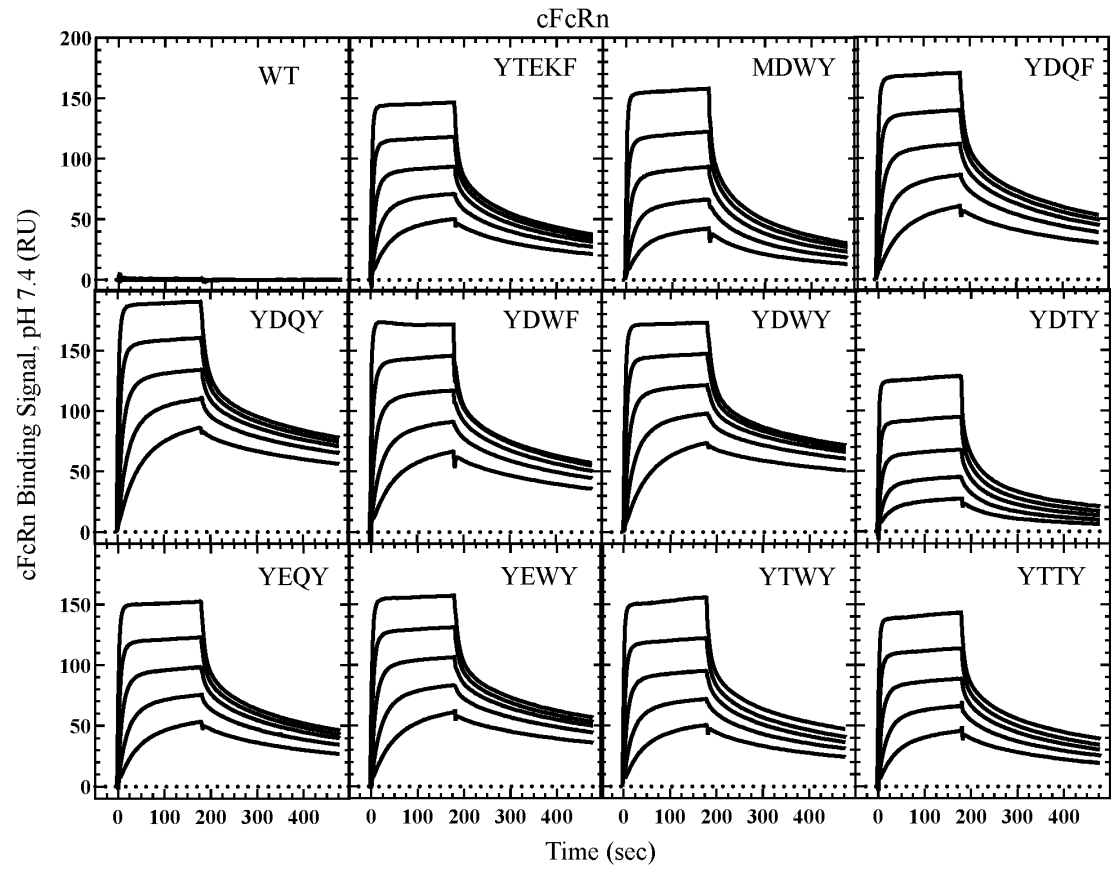


FIG. 27E

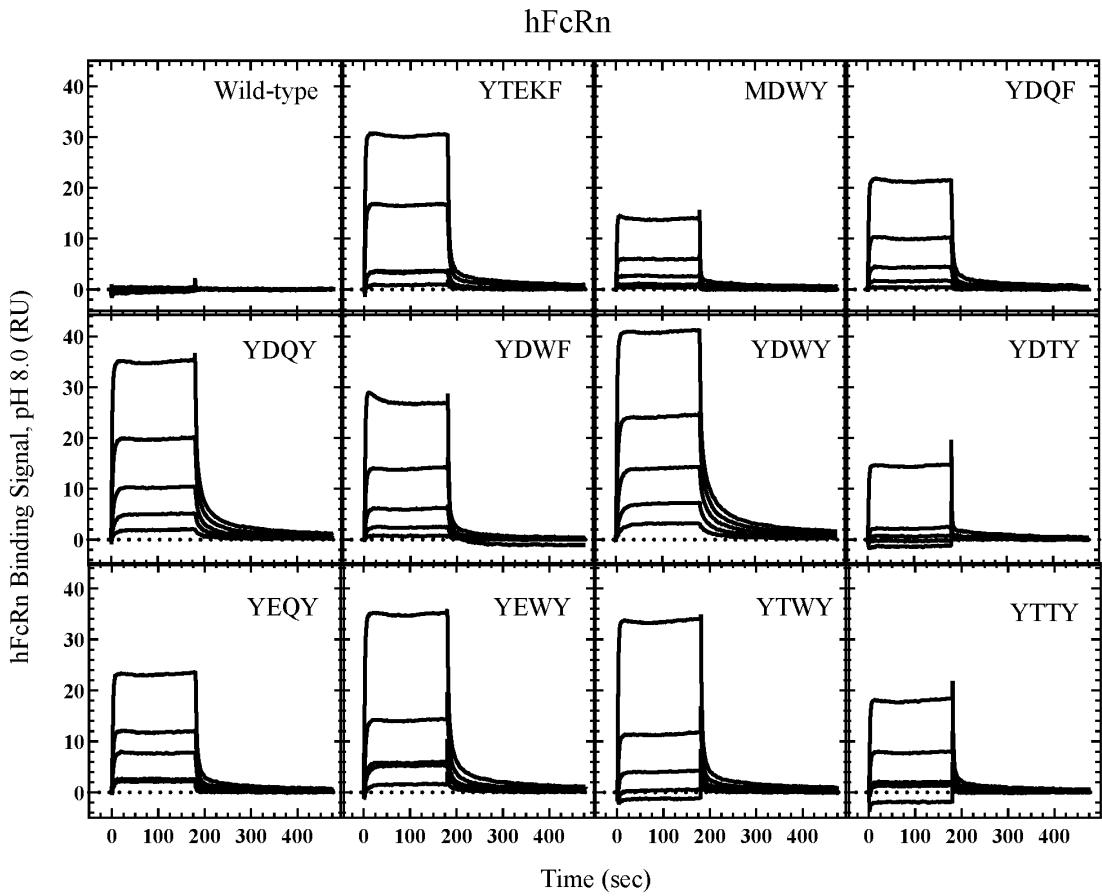


FIG. 27F

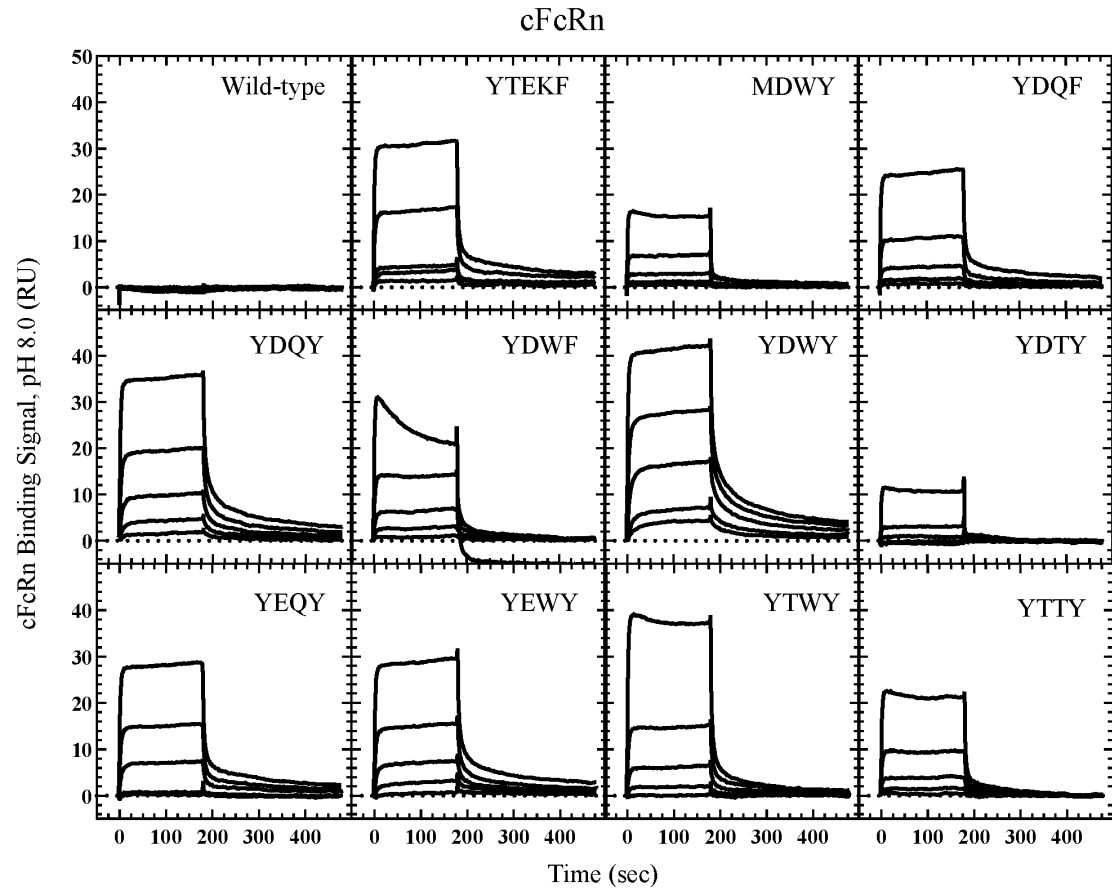


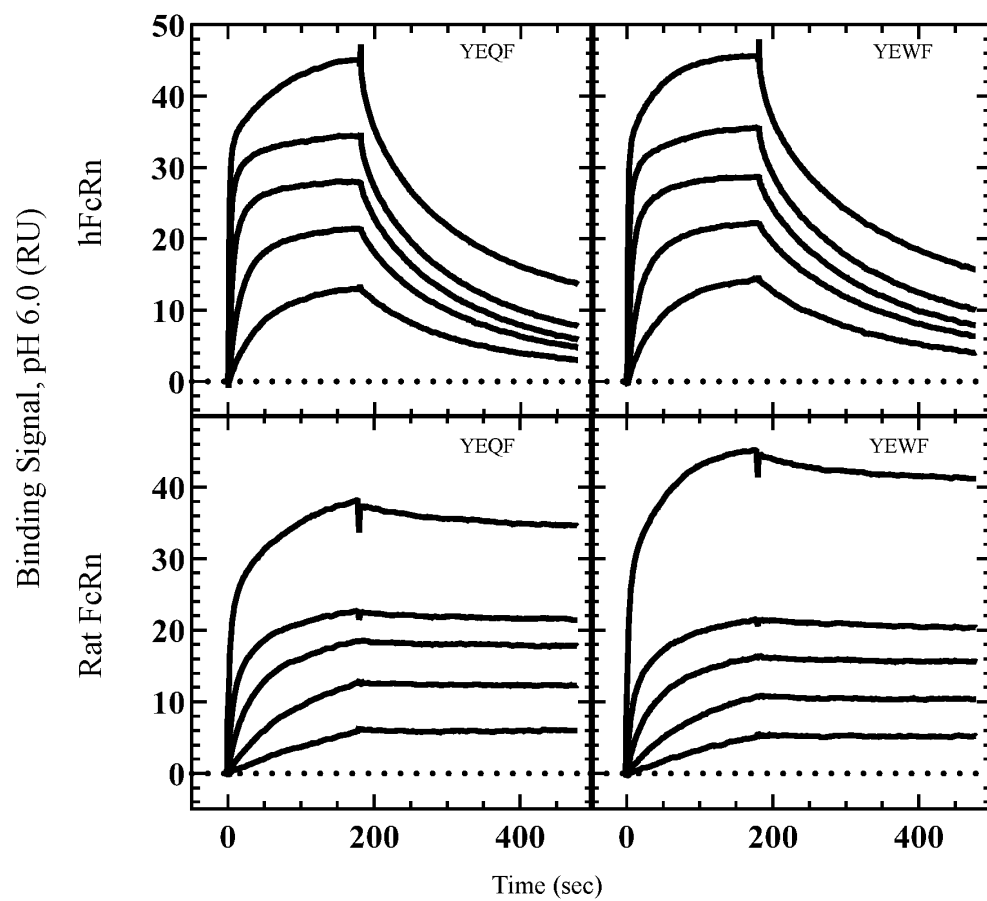
FIG. 27G

FIG. 28A

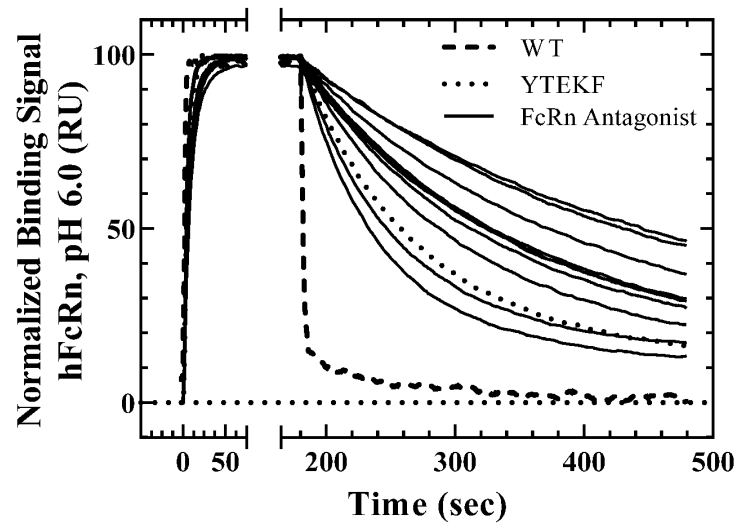


FIG. 28B

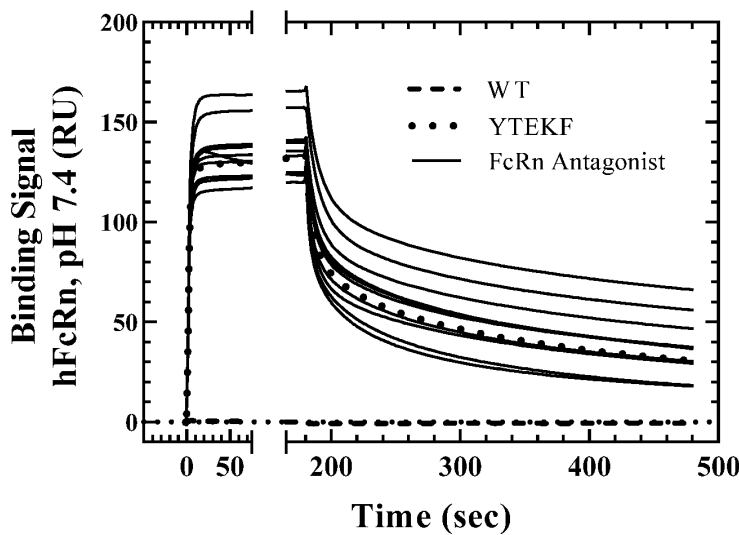


FIG. 28C

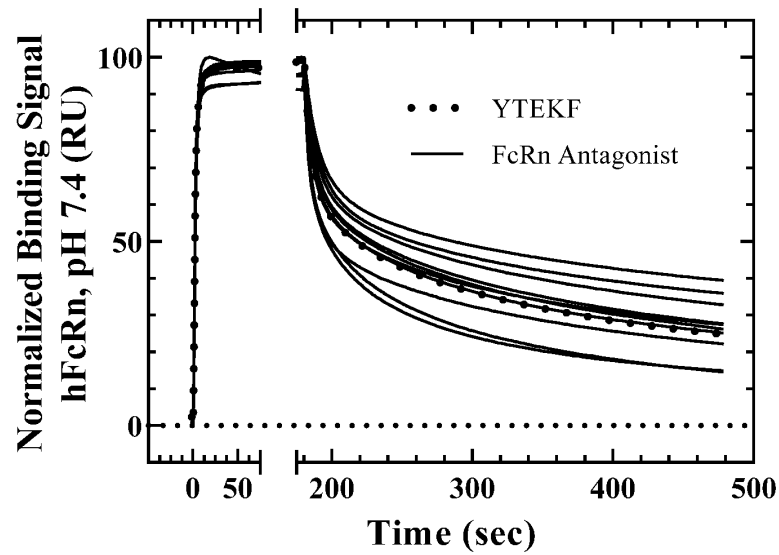


FIG. 28D

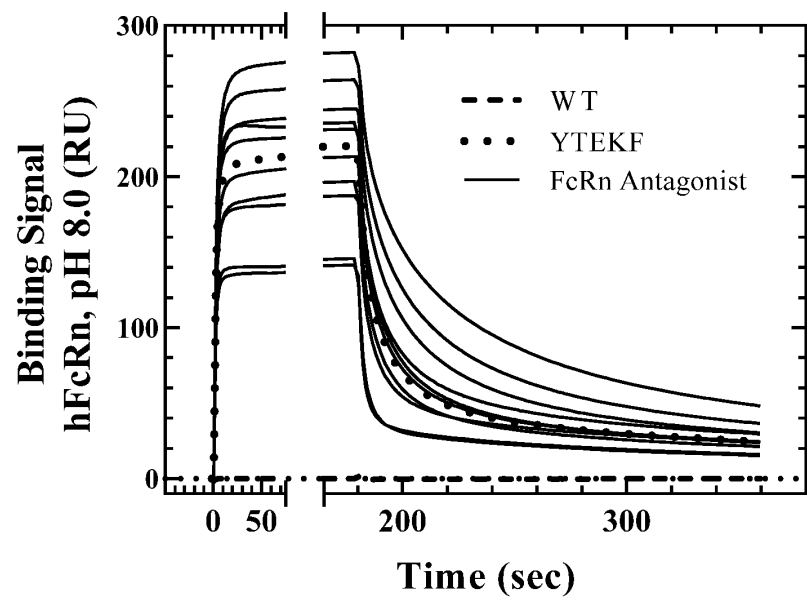


FIG. 28E

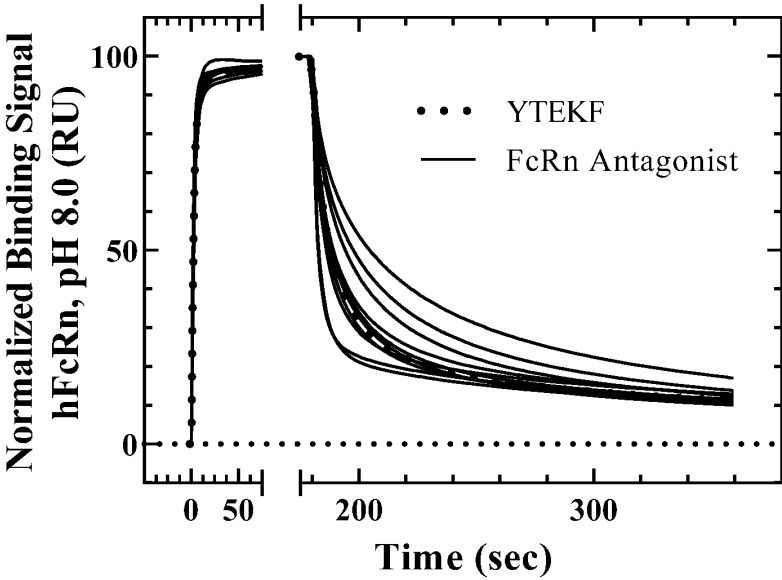


FIG. 28F

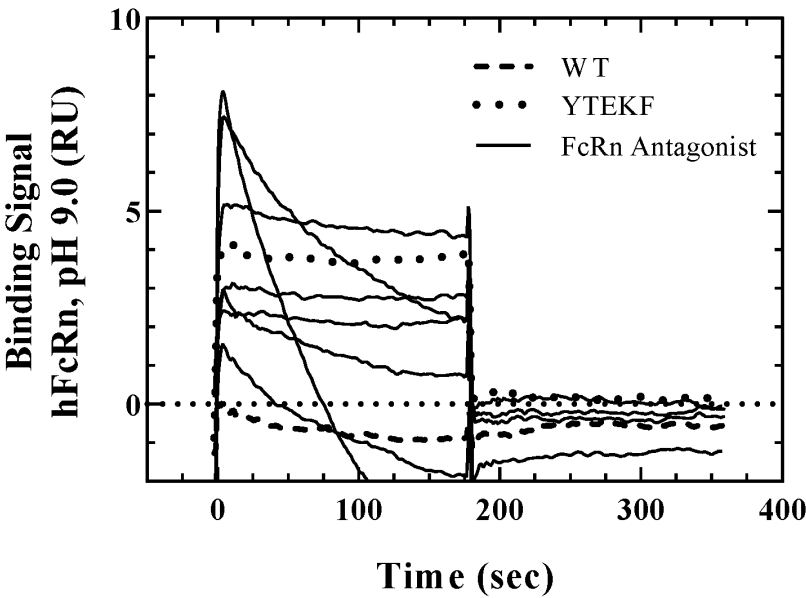


FIG. 28G

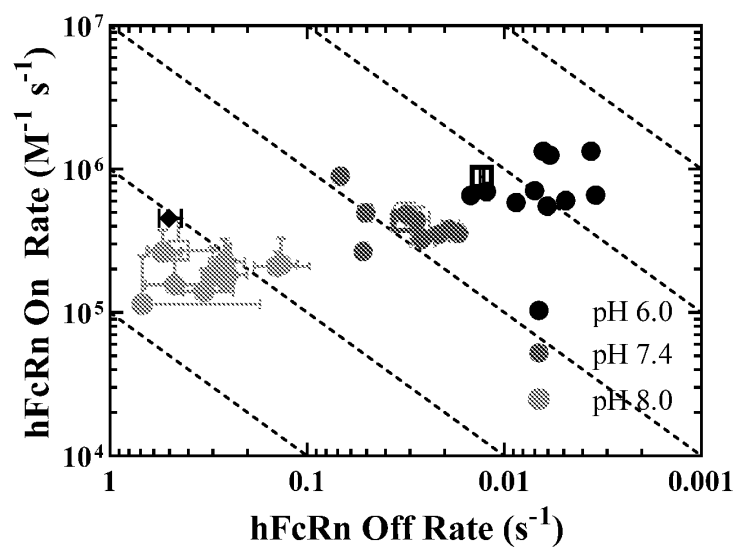


FIG. 28H

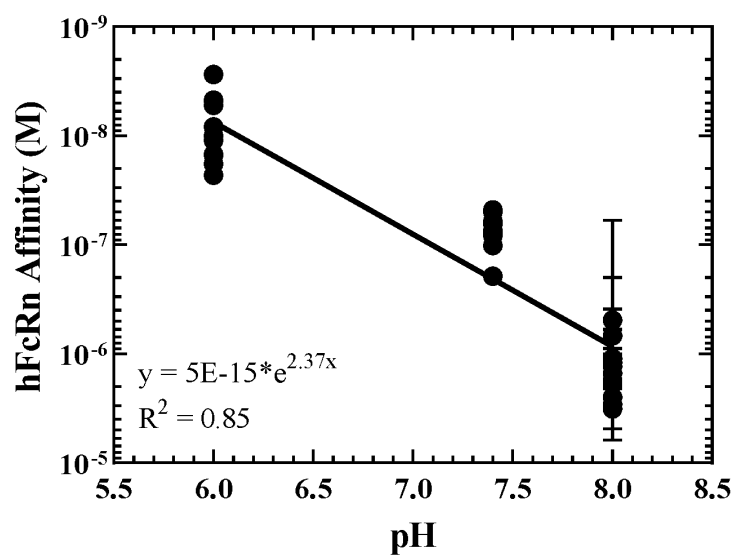


FIG. 29A

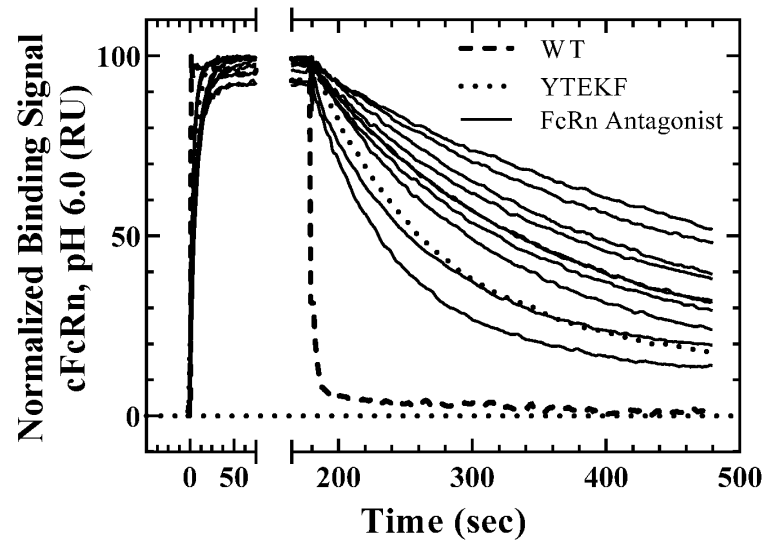


FIG. 29B

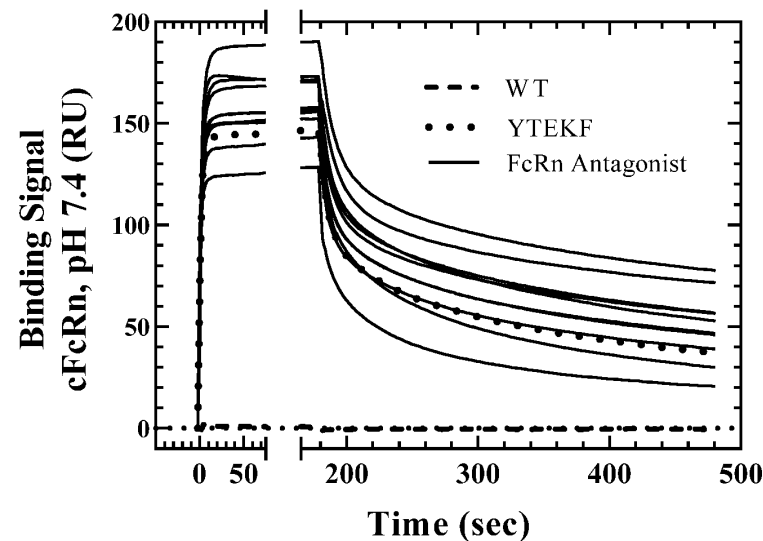


FIG. 29C

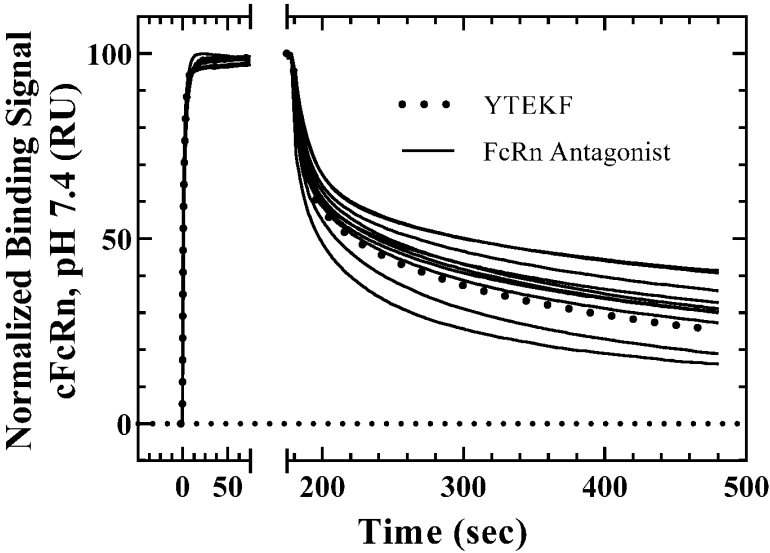


FIG. 29D

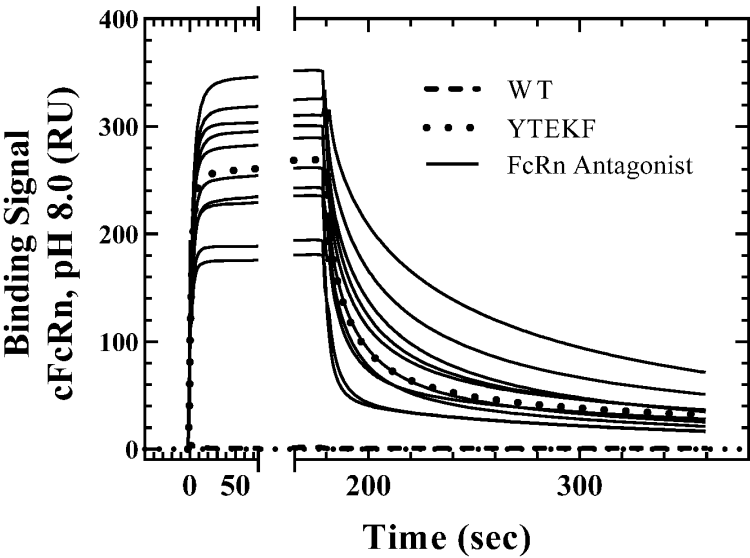


FIG. 29E

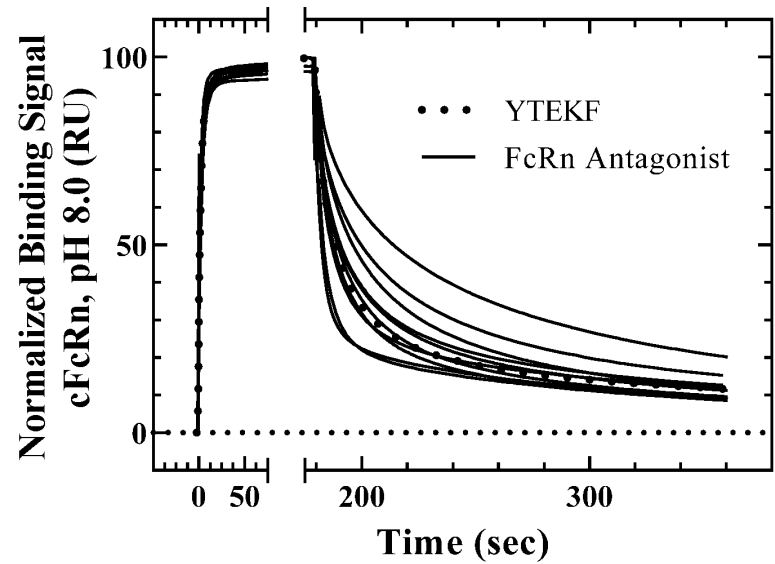


FIG. 29F

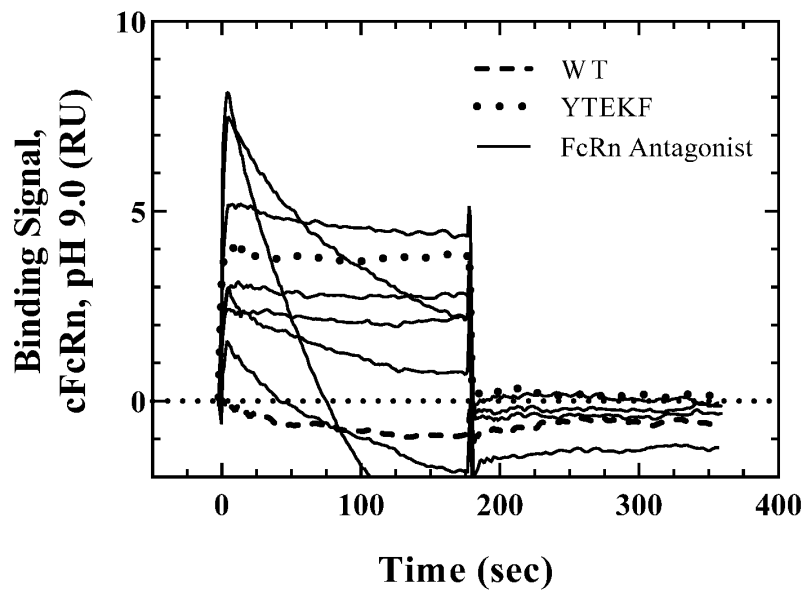


FIG. 29G

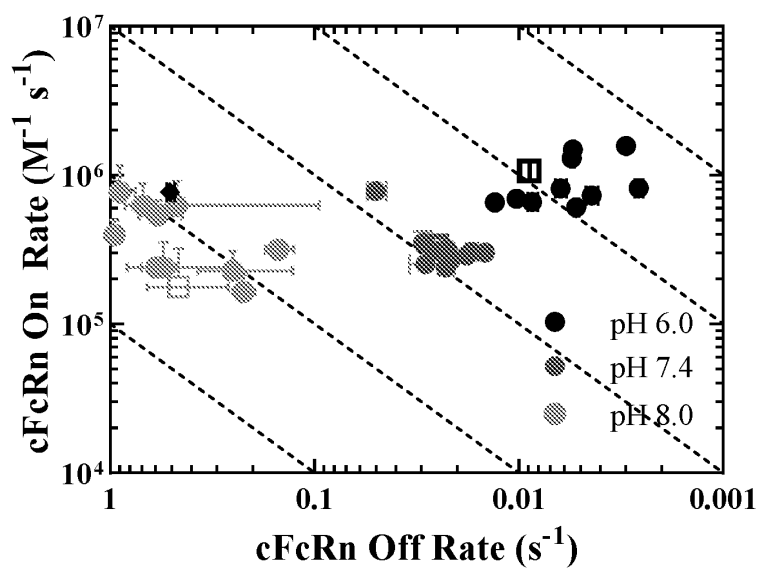
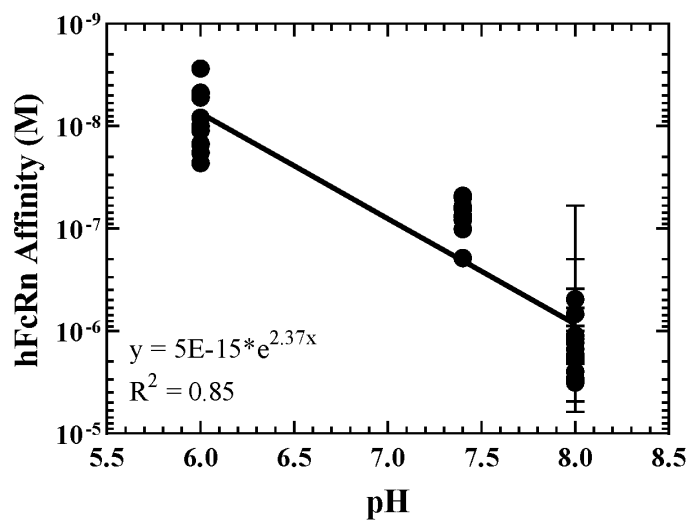


FIG. 29H



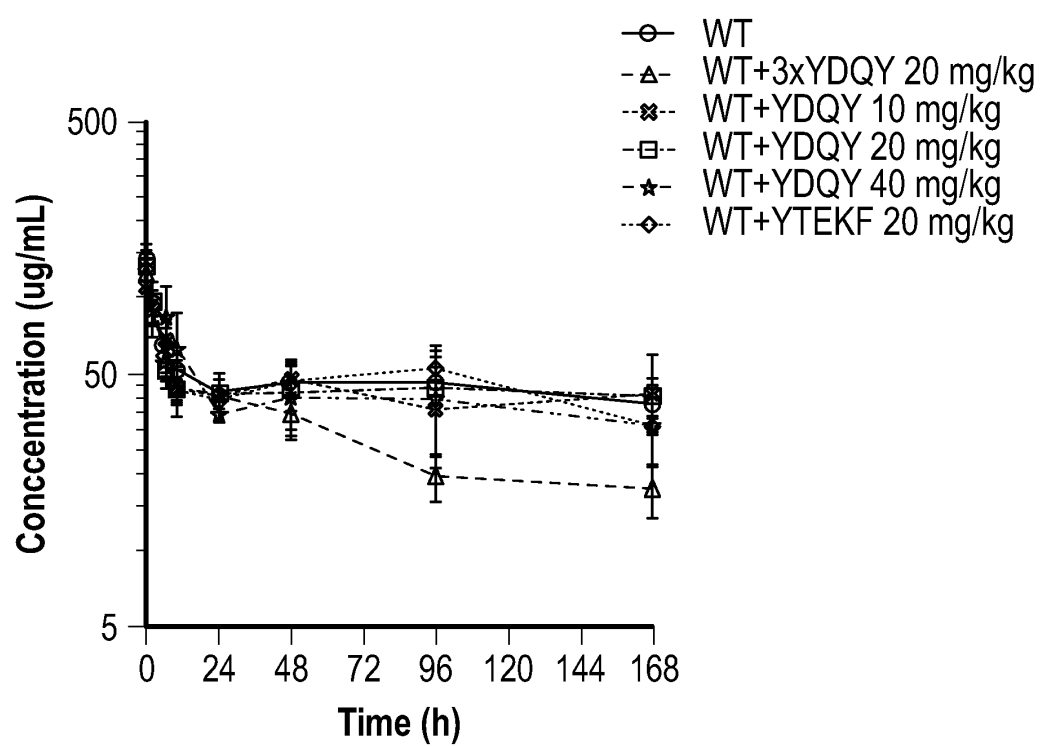


FIG. 30A

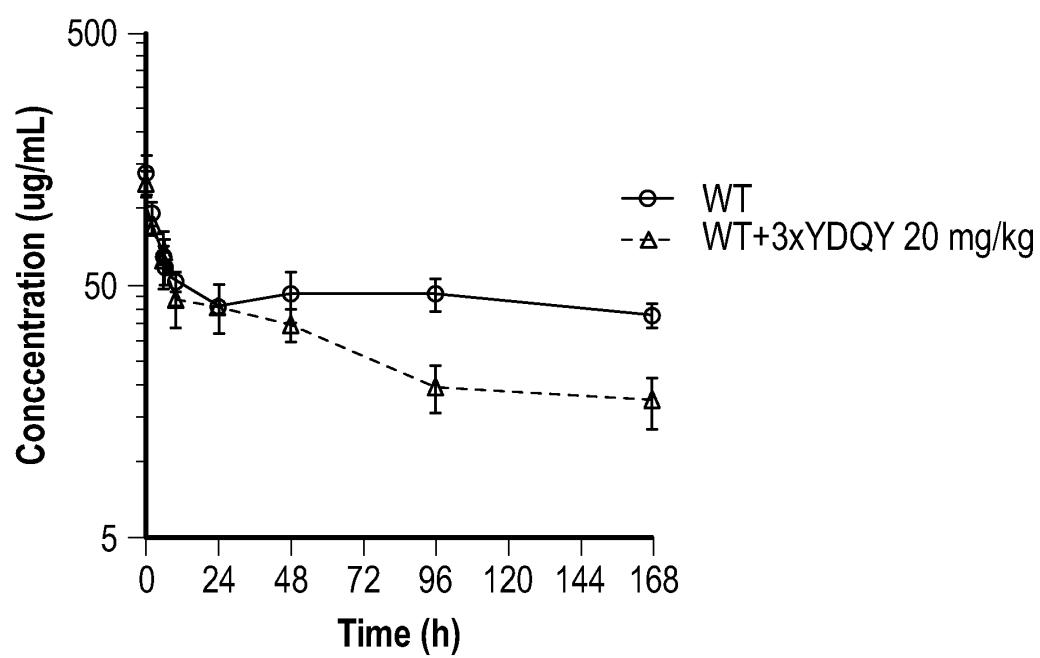


FIG. 30B

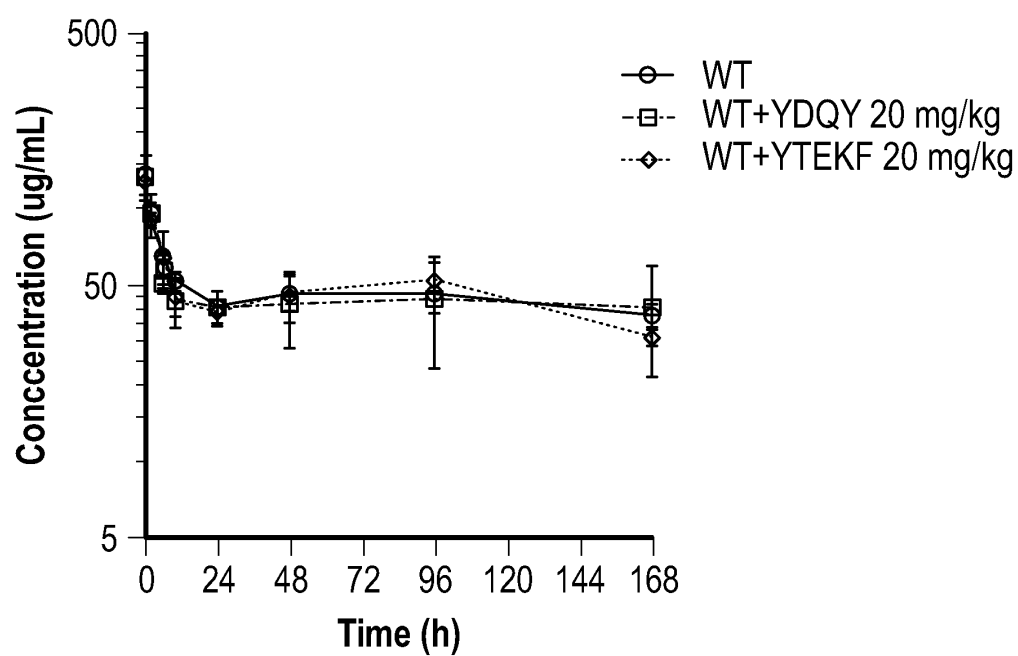


FIG. 30C

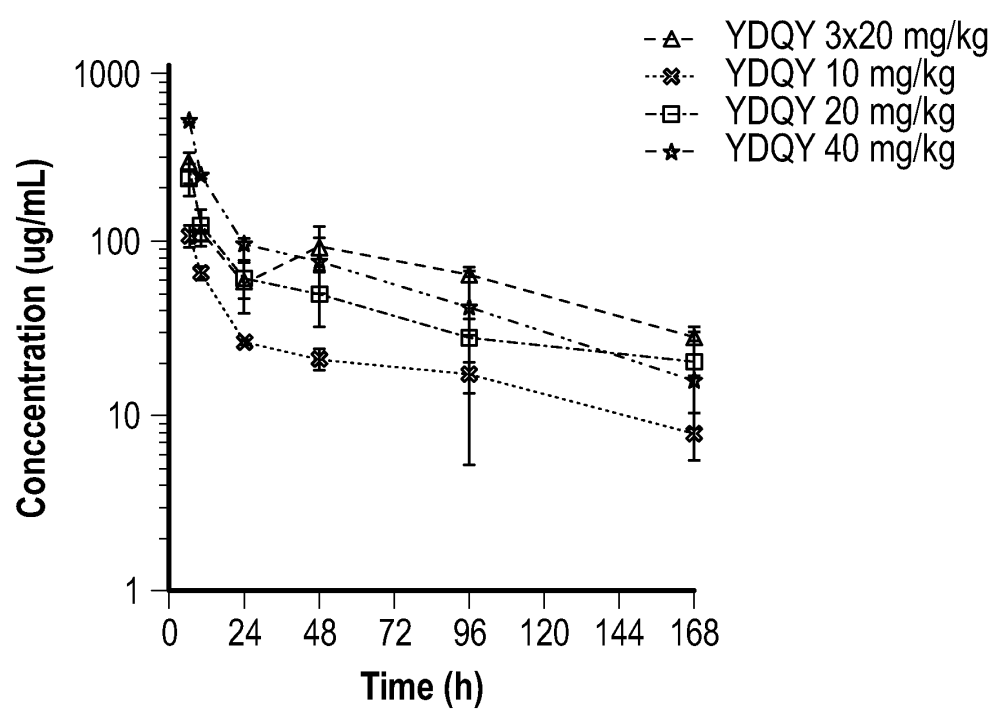


FIG. 31A

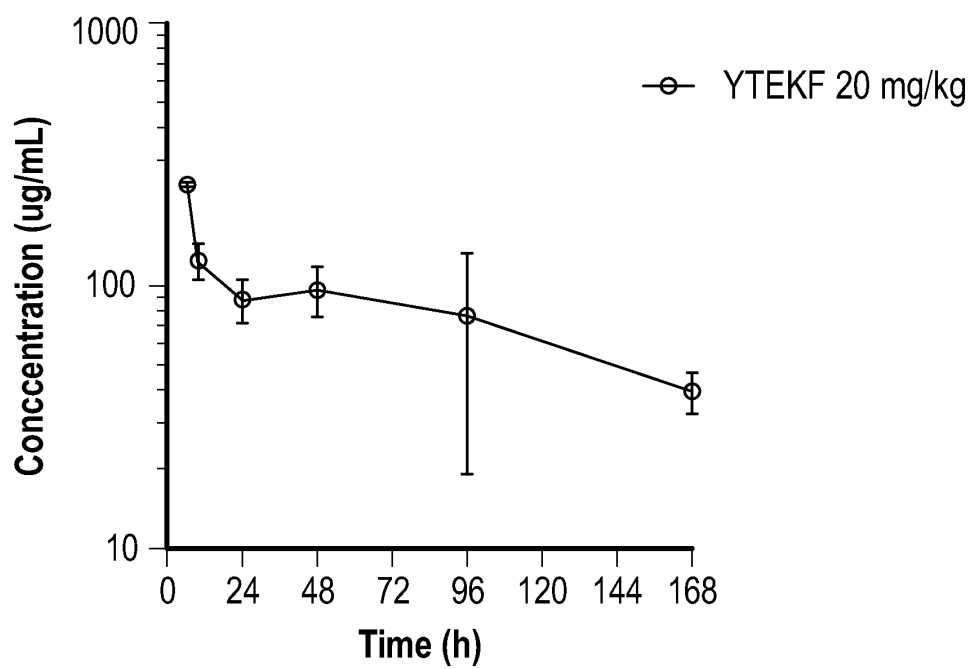


FIG. 31B

Mutation	hFcRn, pH 6.0			hFcRn, pH 7.4				hFcRn, pH 8.0				pH 9.0
	On Rate ($\times 10^5 \text{ M}^{-1} \text{ s}^{-1}$)	Off Rate ($\times 10^{-2} \text{ s}^{-1}$)	Affinity ($\times 10^9 \text{ M}$)	On Rate ($\times 10^5 \text{ M}^{-1} \text{ s}^{-1}$)	Off Rate ($\times 10^{-2} \text{ s}^{-1}$)	Affinity ($\times 10^9 \text{ M}$)	Steady State RU	On Rate ($\times 10^5 \text{ M}^{-1} \text{ s}^{-1}$)	Off Rate ($\times 10^{-2} \text{ s}^{-1}$)	Affinity ($\times 10^9 \text{ M}$)	Steady State RU	Steady State RU
Wild-type (MTTN)	4.5 ± 0.4	50 ± 2	1300 ± 200	N.D.	N.D.	N.D.	0.2 ± 0.3	N.D.	N.D.	N.D.	0.2 ± 0.4	-0.8 ± 0.4
<u>YTEKF</u>	8.8 ± 0.2	1.30 ± 0.01	15 ± 0.3	4.4 ± 0.5	3.2 ± 0.5	74 ± 3	132 ± 23	2.7 ± 1.9	45 ± 20	2400 ± 2000	220 ± 6	2.7 ± 0.9
<u>MDWY</u>	7.0 ± 0.3	1.23 ± 0.02	18 ± 1.1	5 ± 0.6	5 ± 0.3	101 ± 6	125 ± 7	2.6 ± 1.1	54 ± 10	2700 ± 1200	145 ± 14	0.7 ± 0.4
<u>YDQF</u>	12.5 ± 0.2	0.59 ± 0.01	4.7 ± 0.1	3.2 ± 0.3	2.6 ± 0.1	82 ± 6	140 ± 5	1.7 ± 0.9	26 ± 1	2700 ± 1400	196 ± 13	1.4 ± 0.4
<u>YDQY</u>	13.3 ± 0.4	0.36 ± 0	2.7 ± 0.1	3.8 ± 0.3	1.9 ± 0.2	50 ± 1	157 ± 6	2.1 ± 0.6	14 ± 4	670 ± 270	264 ± 11	4.6 ± 1.9
<u>YDTY</u>	5.9 ± 0.2	0.87 ± 0.05	15 ± 0.8	9 ± 0.5	6.8 ± 0.3	76 ± 1	120 ± 6	1.1 ± 1.3	68 ± 51	8700 ± 1210	141 ± 19	0.6 ± 0.4
<u>YDWF</u>	5.5 ± 0.1	0.60 ± 0.02	11 ± 0.4	2.7 ± 0.1	5.2 ± 0.2	194 ± 0	124 ± 2	2.3 ± 1	26 ± 5	1300 ± 600	235 ± 13	1.0 ± 1.9
<u>YDWY</u>	6.6 ± 0.2	0.34 ± 0.01	5.2 ± 0.2	3.6 ± 0.2	1.7 ± 0.1	48 ± 2	166 ± 5	2.2 ± 1.1	14 ± 2	700 ± 390	281 ± 7	10.4 ± 3.4
<u>YEQF</u>	7.9 ± 0.1	1.21 ± 0.01	15 ± 0.3	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
<u>YEQY</u>	13.4 ± 0.5	0.63 ± 0.01	4.8 ± 0.2	3.3 ± 0.3	2.6 ± 0.4	79 ± 4	136 ± 22	1.8 ± 1.1	30 ± 4	2100 ± 1300	213 ± 12	2.4 ± 0.6
<u>YEWY</u>	8.1 ± 0.2	1.03 ± 0.01	13 ± 0.4	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
<u>YEWY</u>	6.0 ± 0.2	0.49 ± 0.03	8.3 ± 0.5	3.5 ± 0.3	2.1 ± 0.2	61 ± 2	141 ± 24	1.8 ± 1.2	25 ± 5	1900 ± 1300	245 ± 10	3.9 ± 1.4
<u>YTTY</u>	6.6 ± 0.3	1.48 ± 0.02	23 ± 0.9	4.8 ± 1	3.1 ± 0.5	65 ± 4	125 ± 21	1.6 ± 1	47 ± 19	3300 ± 2500	188 ± 12	0.1 ± 0.5
<u>YTWY</u>	7.1 ± 0.2	0.70 ± 0.04	10 ± 0.4	4.4 ± 1.1	2.8 ± 0.4	65 ± 7	133 ± 21	1.4 ± 0.6	33 ± 10	2500 ± 1300	232 ± 12	4.0 ± 1.9

FIG. 33

Mutation	cFcRn, pH 6.0			cFcRn, pH 7.4				cFcRn, pH 8.0				pH 9.0
	On Rate ($\times 10^5 \text{ M}^{-1} \text{ s}^{-1}$)	Off Rate ($\times 10^{-2} \text{ s}^{-1}$)	Affinity ($\times 10^9 \text{ M}$)	On Rate ($\times 10^5 \text{ M}^{-1} \text{ s}^{-1}$)	Off Rate ($\times 10^{-2} \text{ s}^{-1}$)	Affinity ($\times 10^9 \text{ M}$)	Steady State RU	On Rate ($\times 10^5 \text{ M}^{-1} \text{ s}^{-1}$)	Off Rate ($\times 10^{-2} \text{ s}^{-1}$)	Affinity ($\times 10^9 \text{ M}$)	Steady State RU	Steady State RU
Wild-type (MTTN)	7.7 ± 0.5	51 ± 2	660 ± 10	N.D.	N.D.	N.D.	1.5 ± 1	N.D.	N.D.	N.D.	1.4 ± 0.6	-0.3 ± 0.2
<u>YTEKF</u>	10.7 ± 0.3	0.89 ± 0.01	8.3 ± 0.1	3.3 ± 0.3	2.5 ± 0.1	76 ± 4	152 ± 8	1.8 ± 1.5	46 ± 20	3200 ± 300	268 ± 9	3.8 ± 0.7
<u>MDWY</u>	7.0 ± 0.4	1.03 ± 0.02	15 ± 1	3.5 ± 0.7	2.9 ± 0	85 ± 15	165 ± 10	6.2 ± 2.6	69 ± 9	1200 ± 500	197 ± 17	1.3 ± 0.4
<u>YDQF</u>	13 ± 1	0.55 ± 0.01	4.3 ± 0.3	2.4 ± 0.2	2.3 ± 0.2	95 ± 1	176 ± 8	2.4 ± 1.1	55 ± 28	2900 ± 2000	245 ± 15	2.2 ± 0.4
<u>YDQY</u>	15.7 ± 1.2	0.3 ± 0	1.9 ± 0.1	3.1 ± 0.1	1.7 ± 0.1	56 ± 2	196 ± 8	3.2 ± 0.4	15 ± 2	490 ± 100	325 ± 12	6.3 ± 2.1
<u>YDTY</u>	6.6 ± 0.5	0.86 ± 0.05	13 ± 2	7.8 ± 1.2	5 ± 0.5	64 ± 3	134 ± 7	4.0 ± 1.0	95 ± 5	2500 ± 700	183 ± 24	1.9 ± 0.8
<u>YDWF</u>	6.1 ± 0.2	0.52 ± 0.02	8.6 ± 0.6	2.5 ± 0.3	2.9 ± 0.6	115 ± 39	173 ± 2	6.3 ± 2.8	47 ± 38	680 ± 620	313 ± 15	4.6 ± 2.8
<u>YDWY</u>	8.2 ± 0.3	0.26 ± 0.01	3.2 ± 0.3	3.0 ± 0.2	1.5 ± 0.1	49 ± 3	178 ± 7	1.6 ± 0.5	22 ± 3	1500 ± 500	354 ± 7	16 ± 5
<u>YEQF</u>	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
<u>YEQY</u>	15 ± 1	0.54 ± 0.01	3.7 ± 0.3	2.7 ± 0.2	2.2 ± 0.1	80 ± 5	157 ± 7	2.4 ± 0.3	59 ± 11	2500 ± 600	264 ± 14	3.4 ± 0.6
<u>YEWY</u>	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
<u>YEWY</u>	7.3 ± 0.5	0.44 ± 0.03	6.1 ± 0.8	2.9 ± 0.2	1.8 ± 0.1	63 ± 4	162 ± 8	2.3 ± 0.8	25 ± 12	1300 ± 800	303 ± 11	5.4 ± 1.7
<u>YTTY</u>	6.5 ± 0.1	1.31 ± 0.02	20 ± 1	3.1 ± 0.1	2.6 ± 0.2	83 ± 3	147 ± 6	7.7 ± 3.9	90 ± 14	1300 ± 700	238 ± 12	1.0 ± 0.8
<u>YTWY</u>	8.2 ± 0.3	0.62 ± 0.04	7.7 ± 0.8	3.2 ± 0.1	2.2 ± 0.1	70 ± 2	159 ± 5	5.4 ± 1.4	59 ± 14	1100 ± 400	292 ± 12	6.5 ± 2.7

FIG. 34