

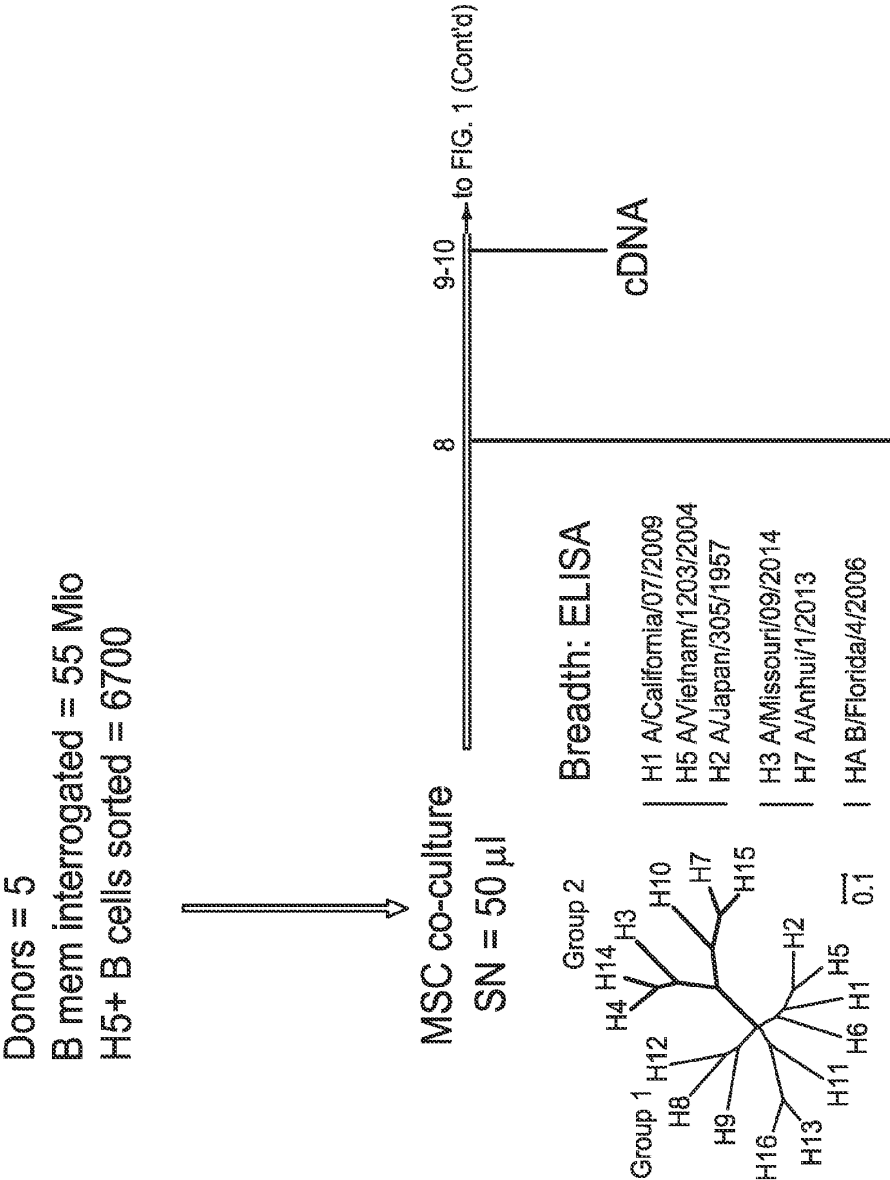


FIG. 1

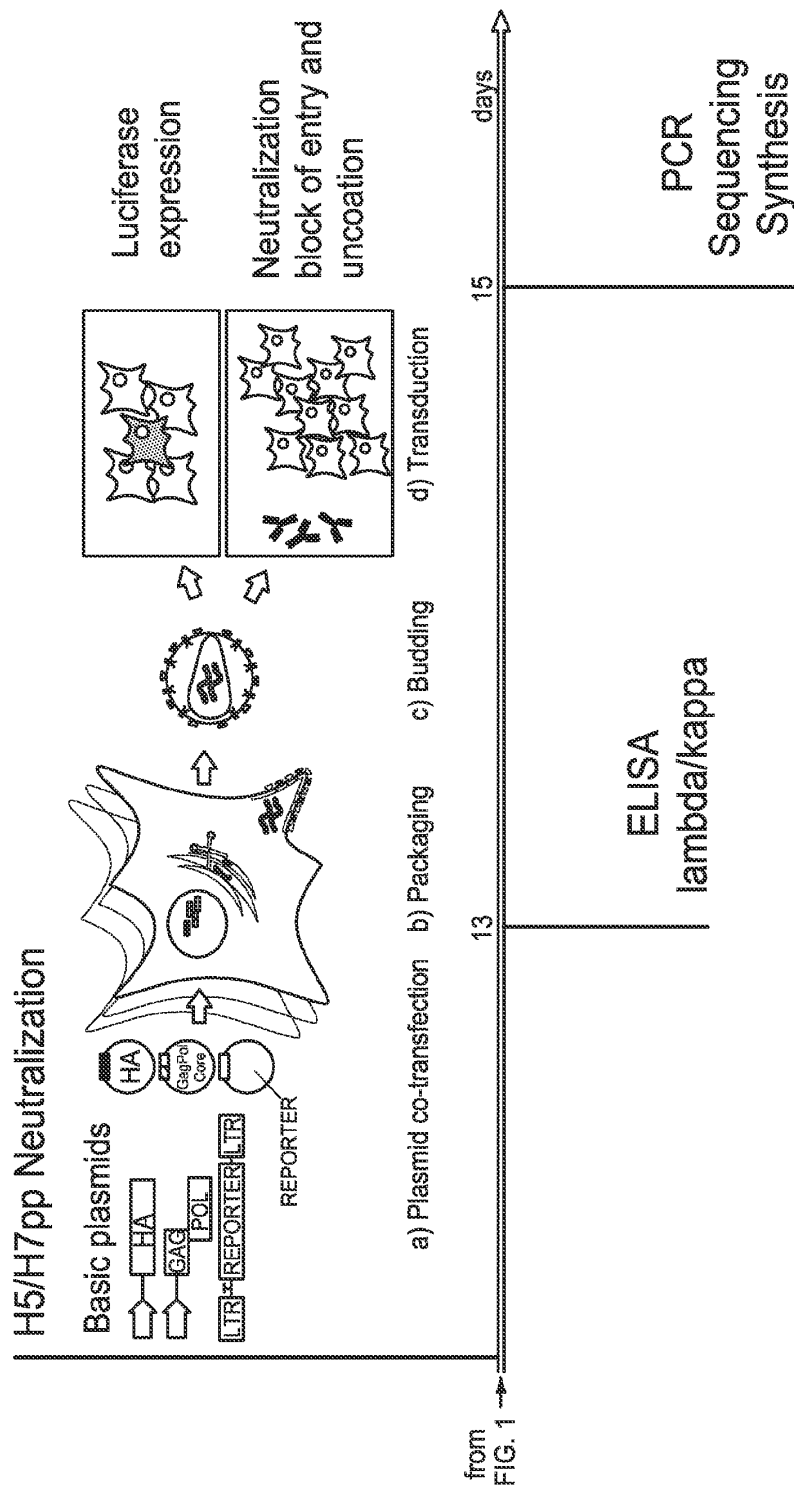


FIG. 1 (Cont'd)

FACS binding of FHF11 and FHF12 to IAV HAs circulating in the animal reservoir expressed on mammalian cells

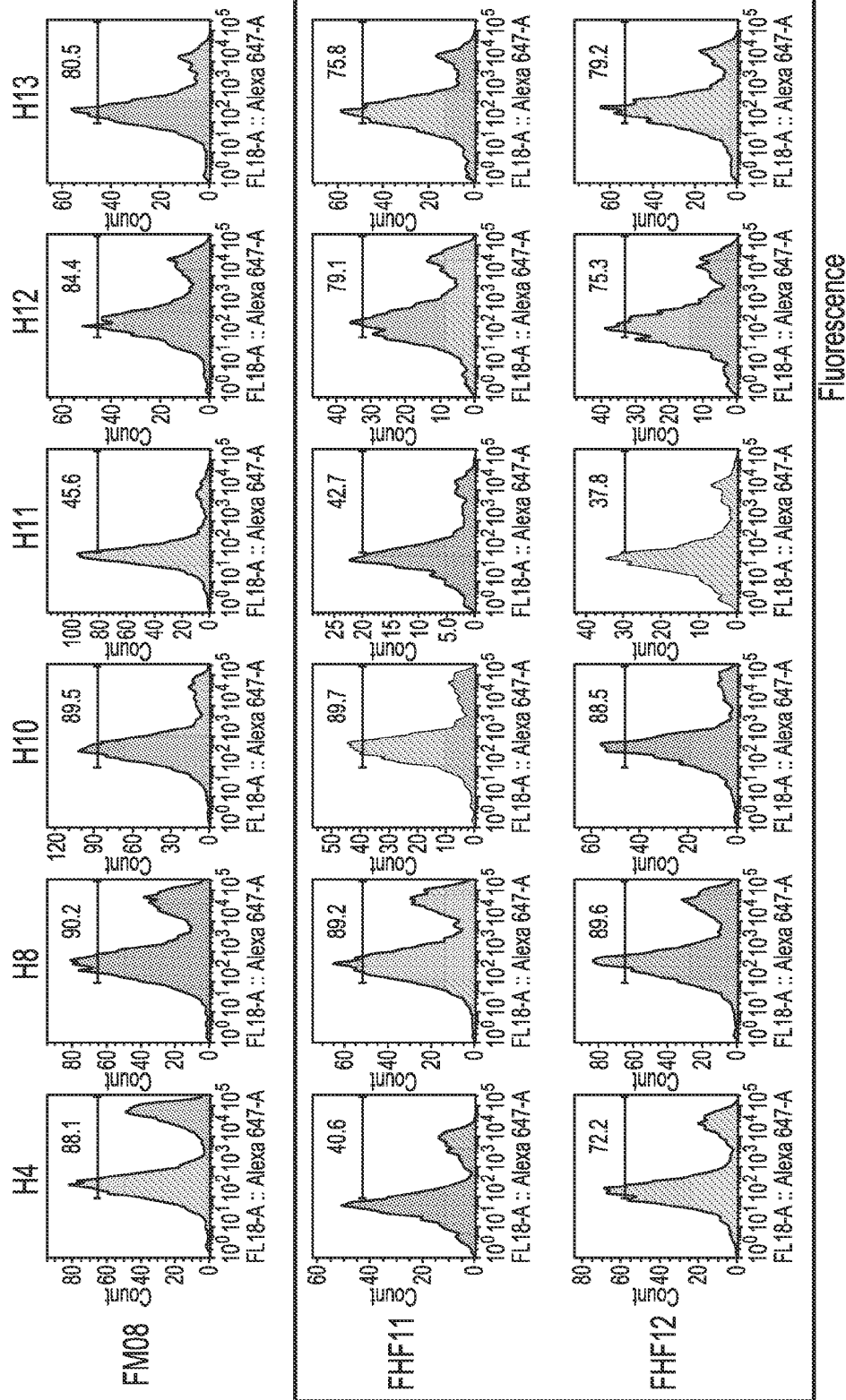
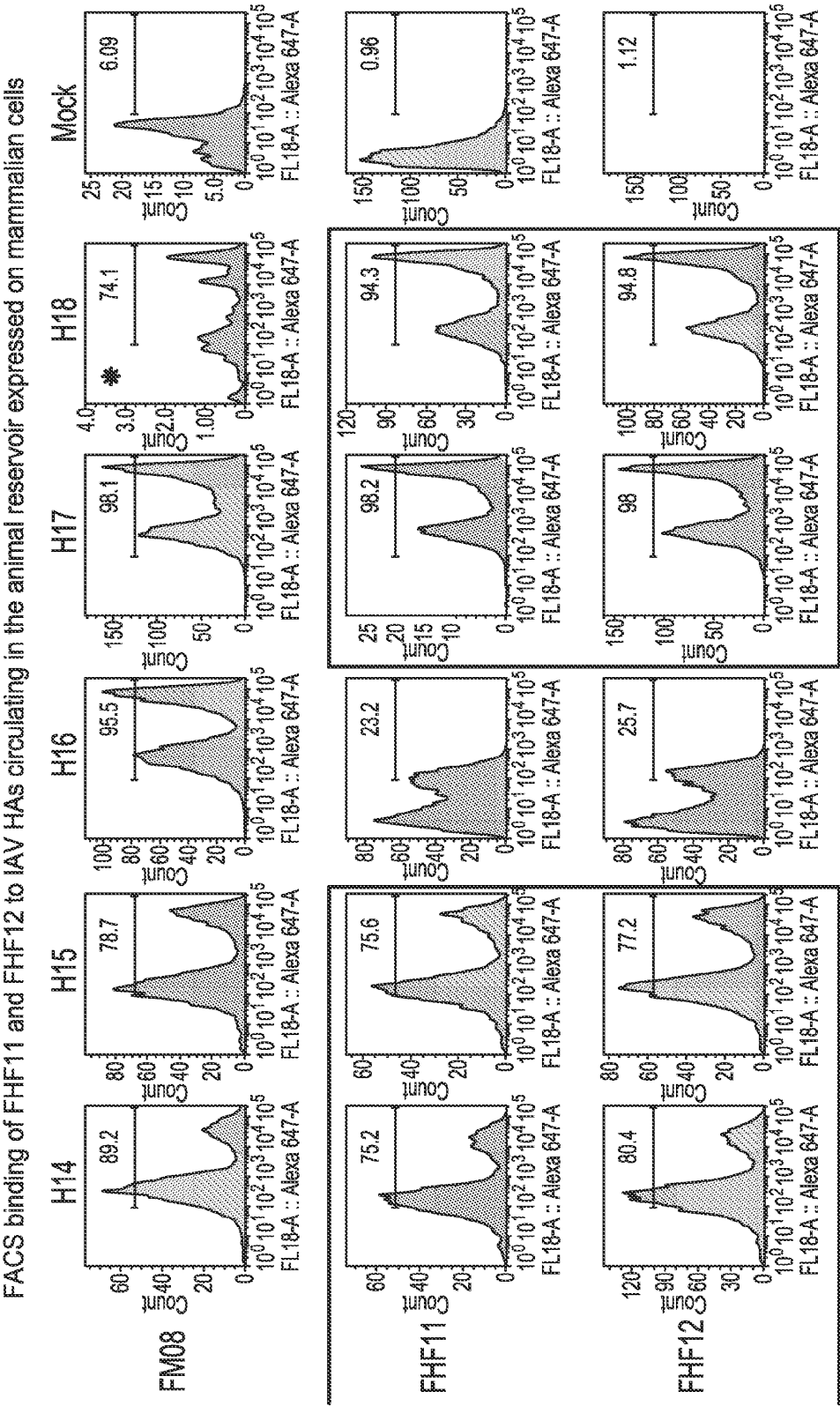


FIG. 2



* wellused for set-up

FIG. 2 (cont'd)

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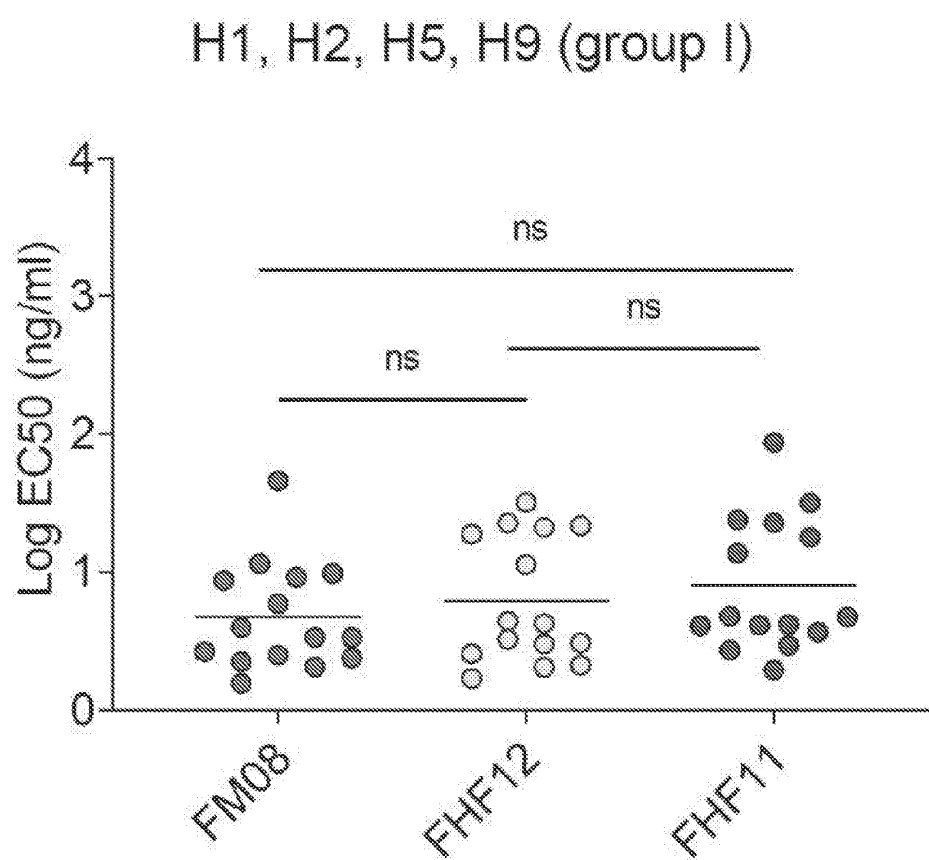


FIG. 3A

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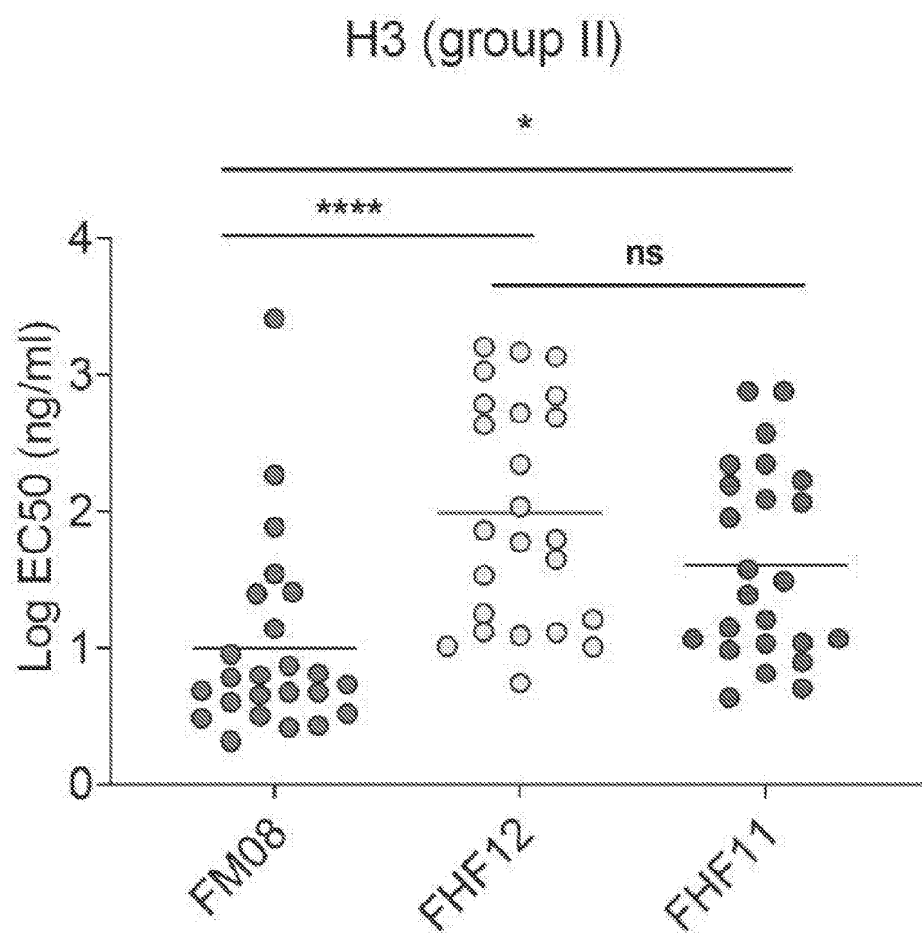


FIG. 3B

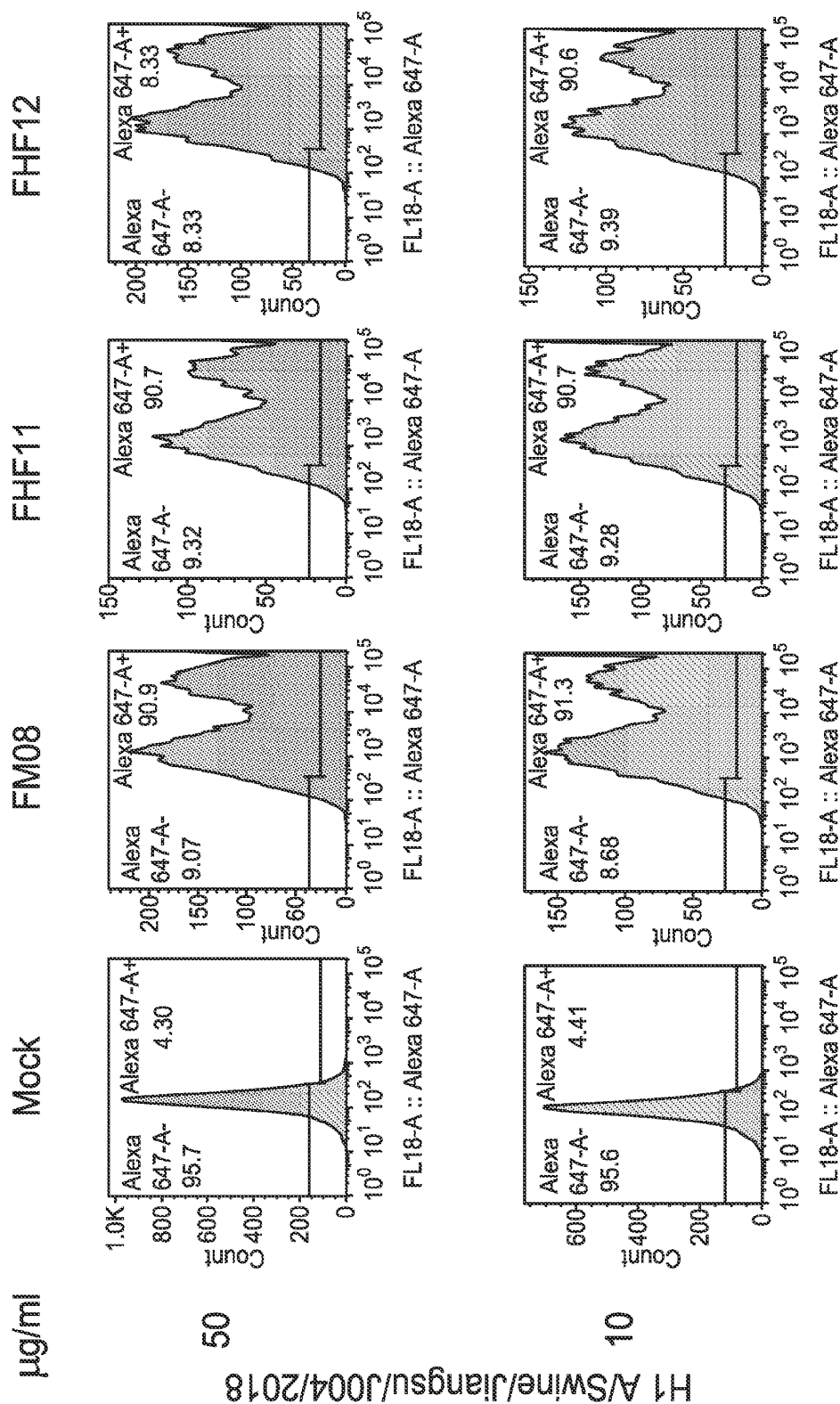


FIG. 4

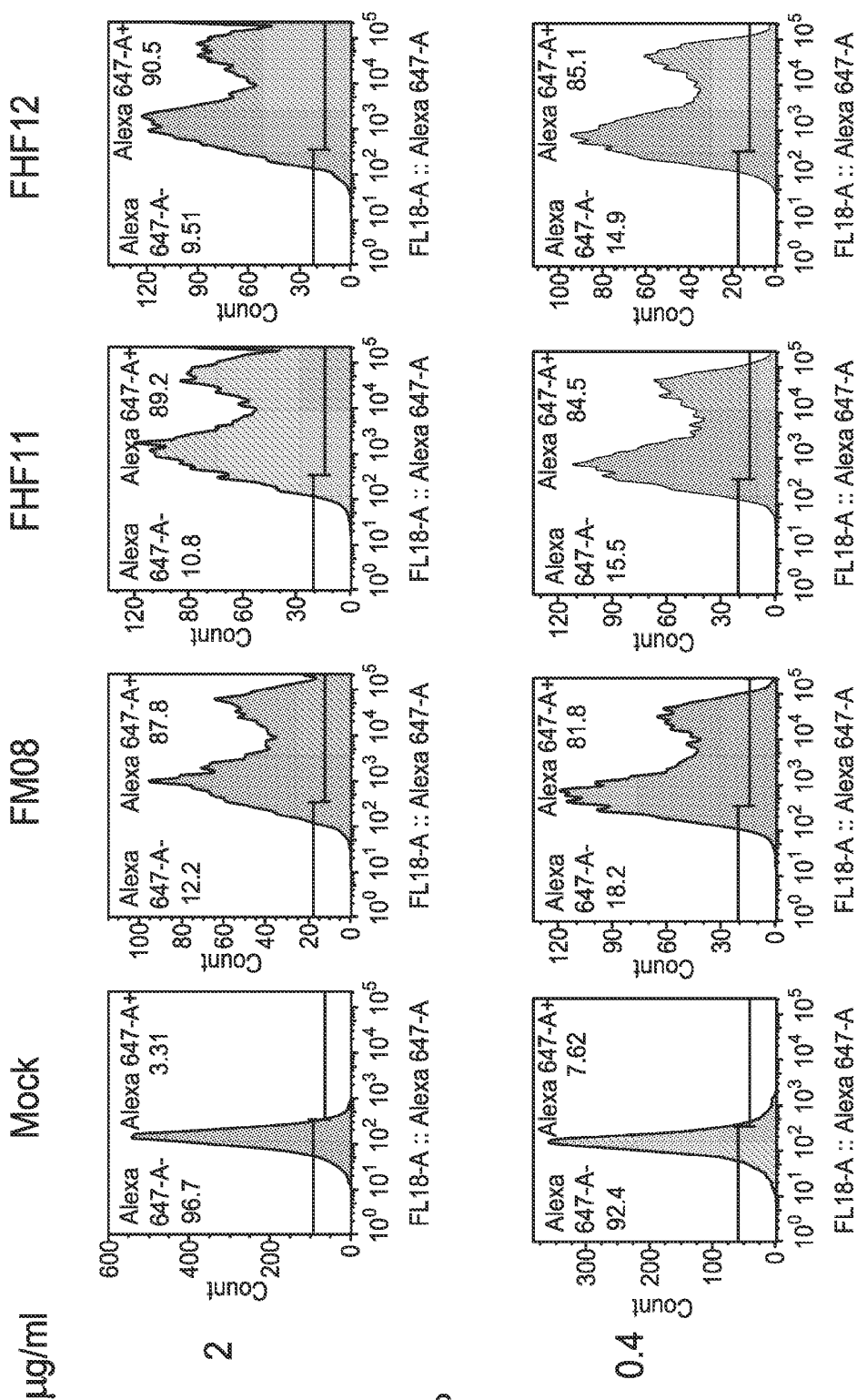


FIG. 4 (Cont'd)

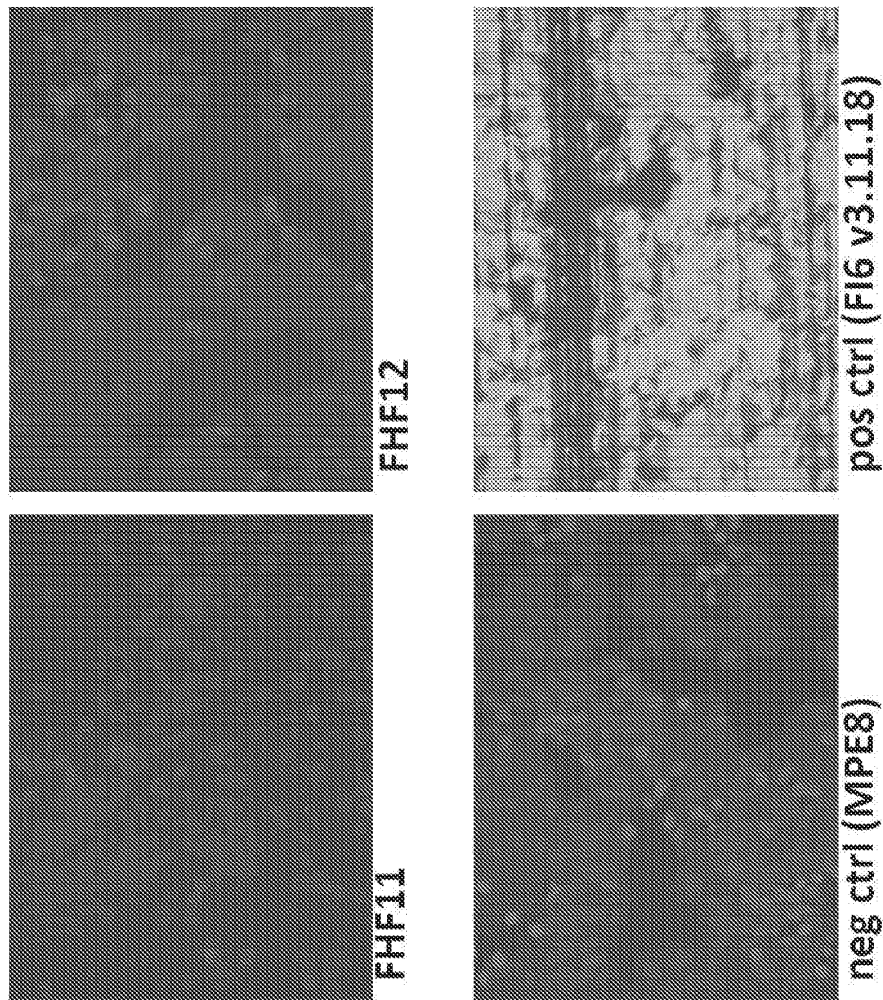


FIG. 5

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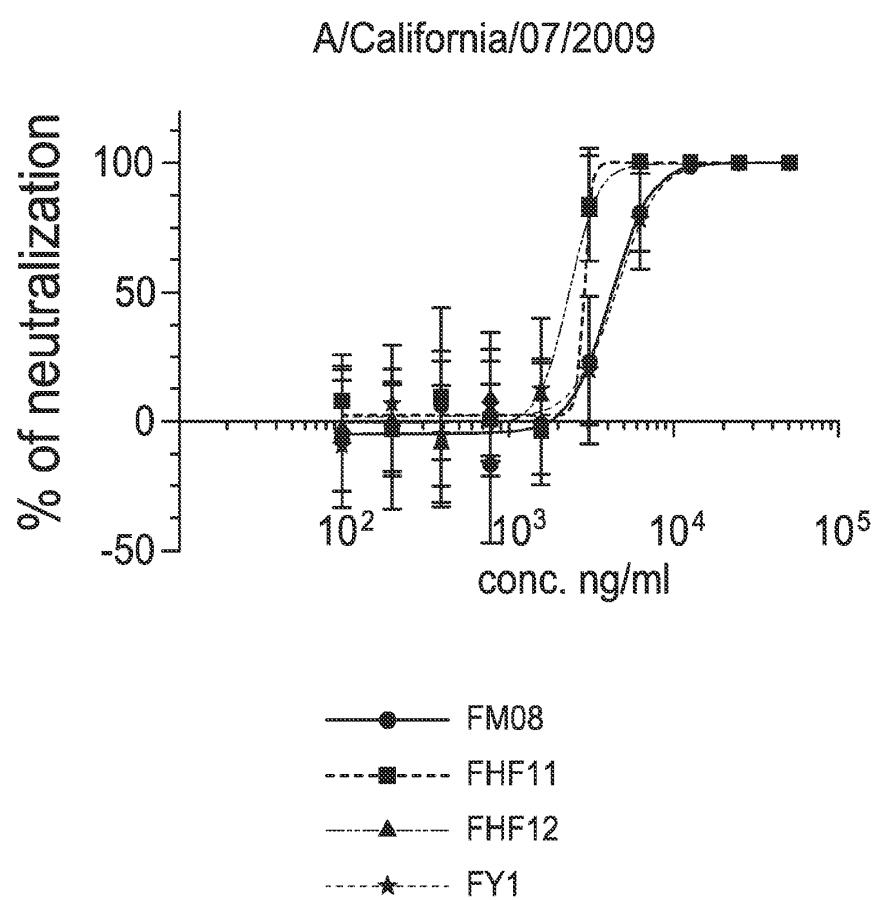


FIG. 6A

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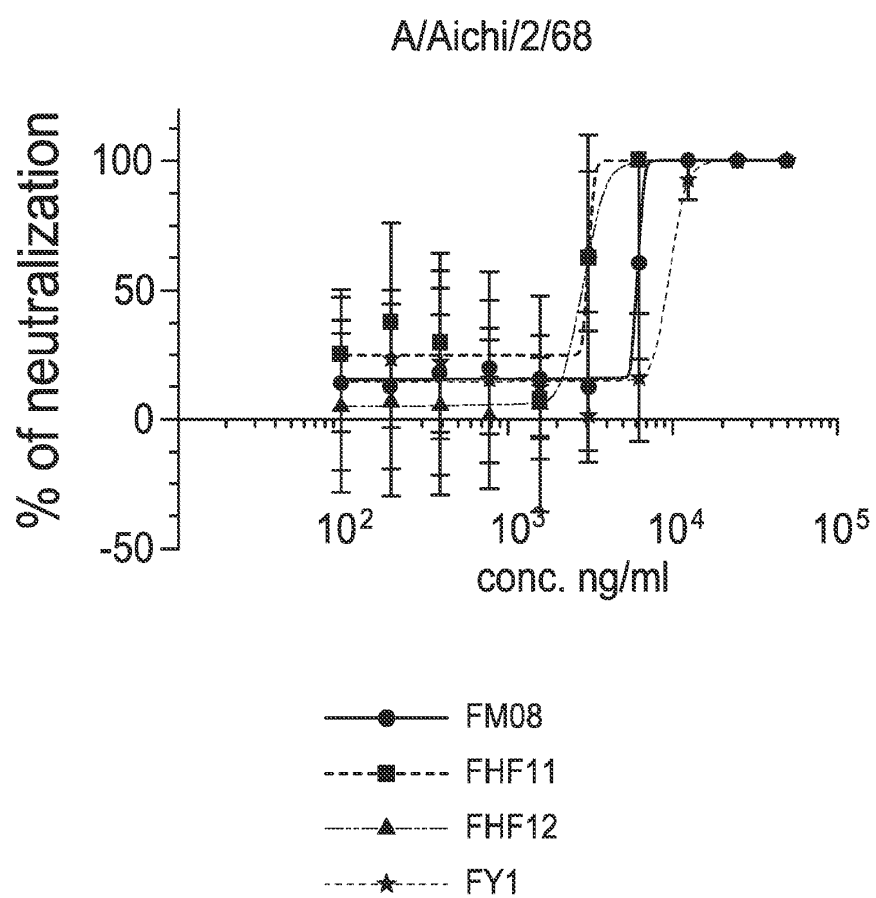


FIG. 6B

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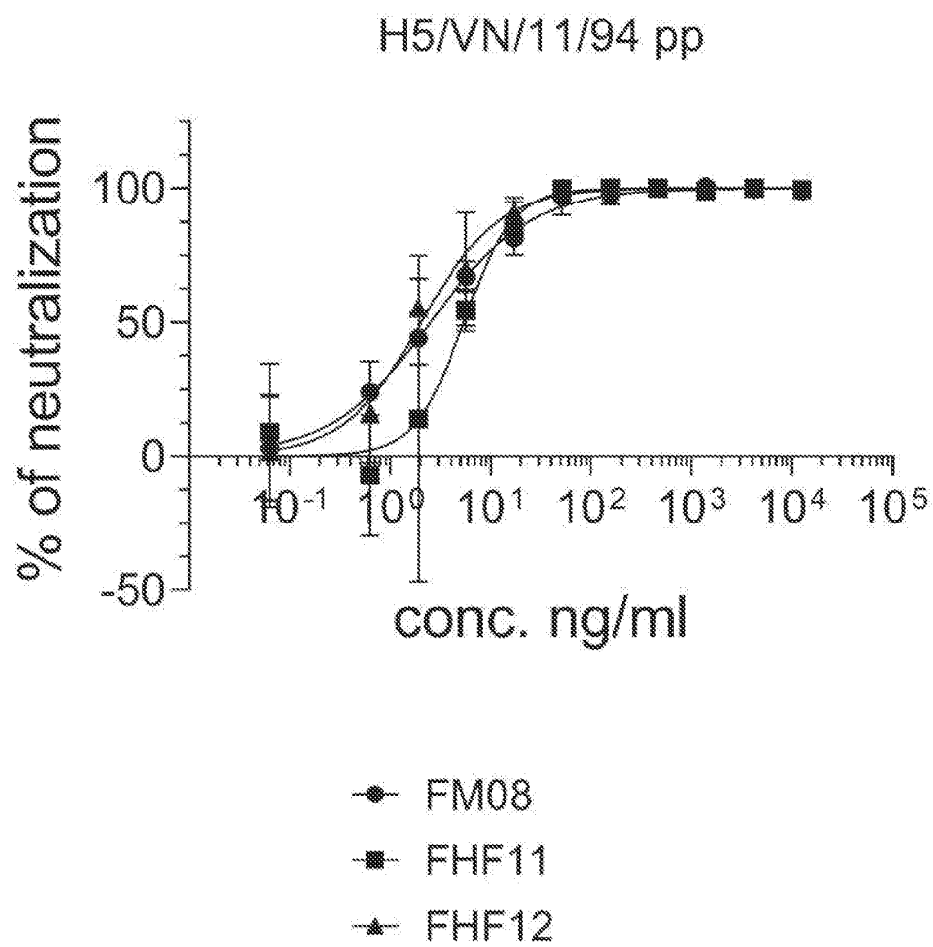


FIG. 7A

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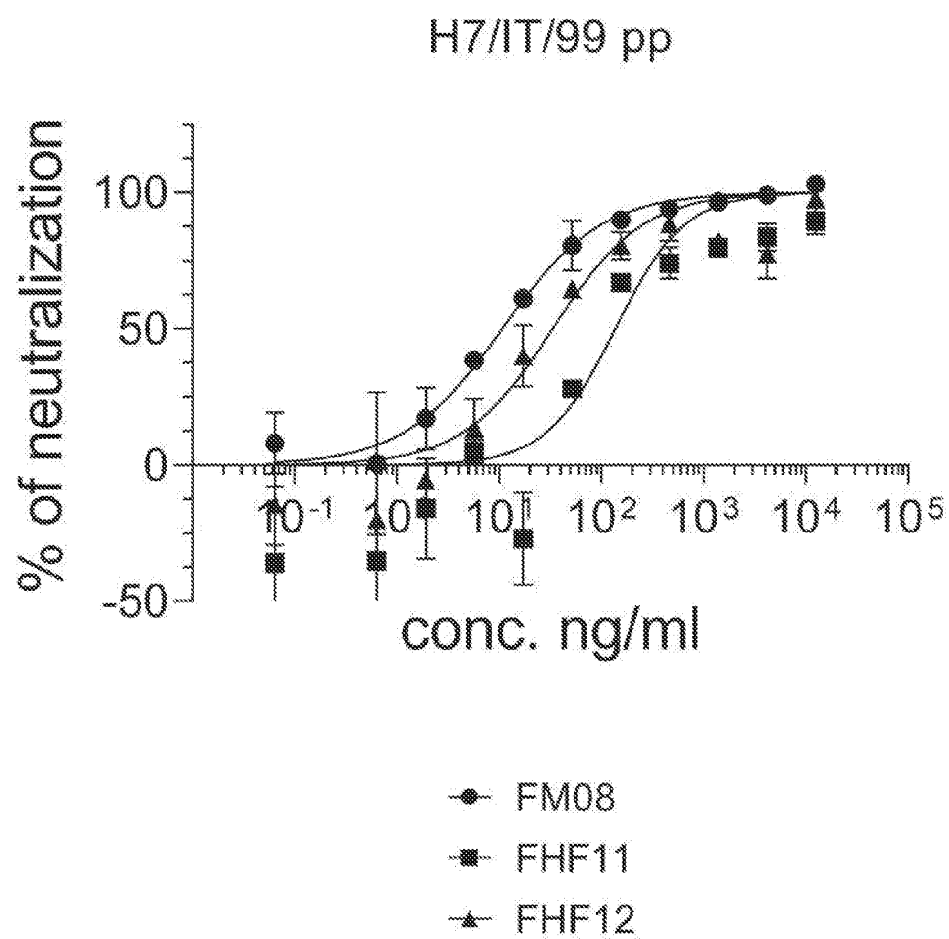
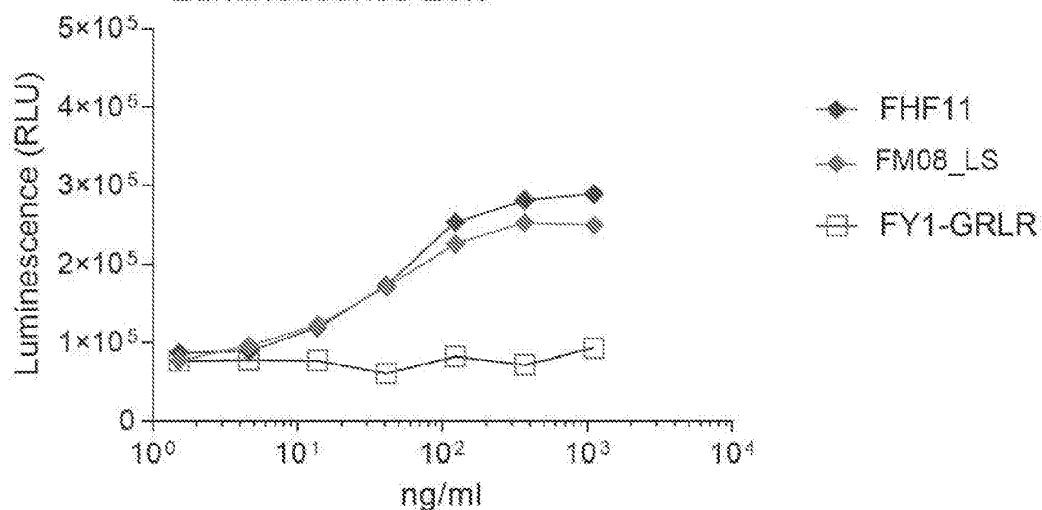


FIG. 7B

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Activation of Jurkat-FcγRIIIa (F158)
with A549 infected H1N1 PR8 (A/PR/8/34) (MOI 6)
Luminescence 20h



Activation of Jurkat-FcγRIIIa (F158)
with A549 infected H3N2 (A/Aichi/2/68) (MOI 18)
Luminescence 20h

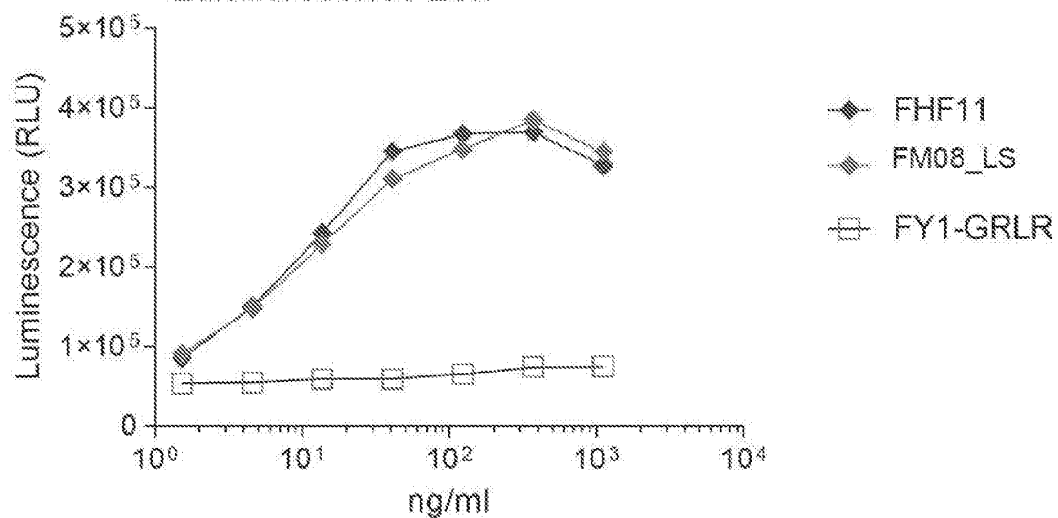
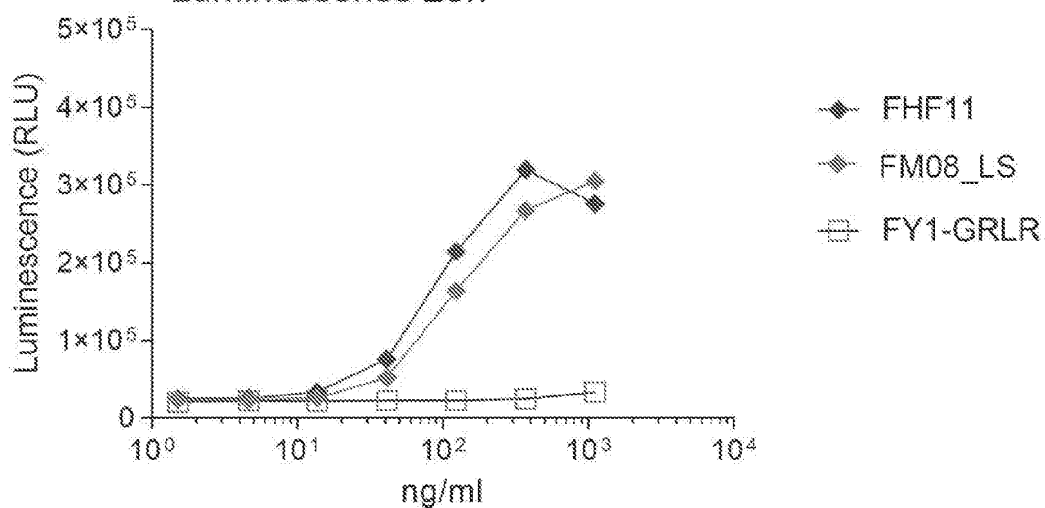


FIG. 8A

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Activation of Jurkat-FcγRIIa (H131)
with A549 infected H1N1 PR8 (A/PR/8/34) (MOI 6)
Luminescence 20h



Activation of Jurkat-FcγRIIa (H131)
with A549 infected H3N2 (A/Aichi/2/68) (MOI 18)
Luminescence 20h

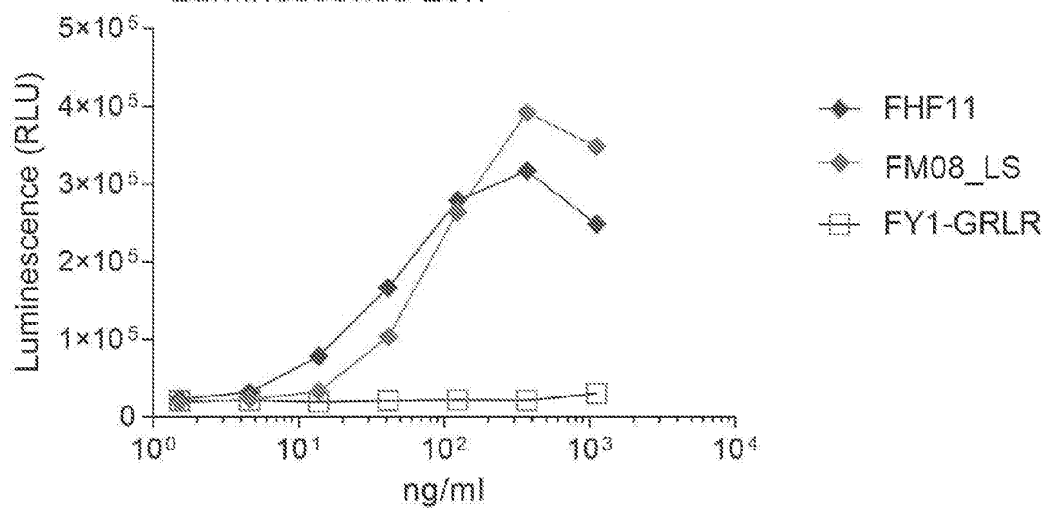


FIG. 8B

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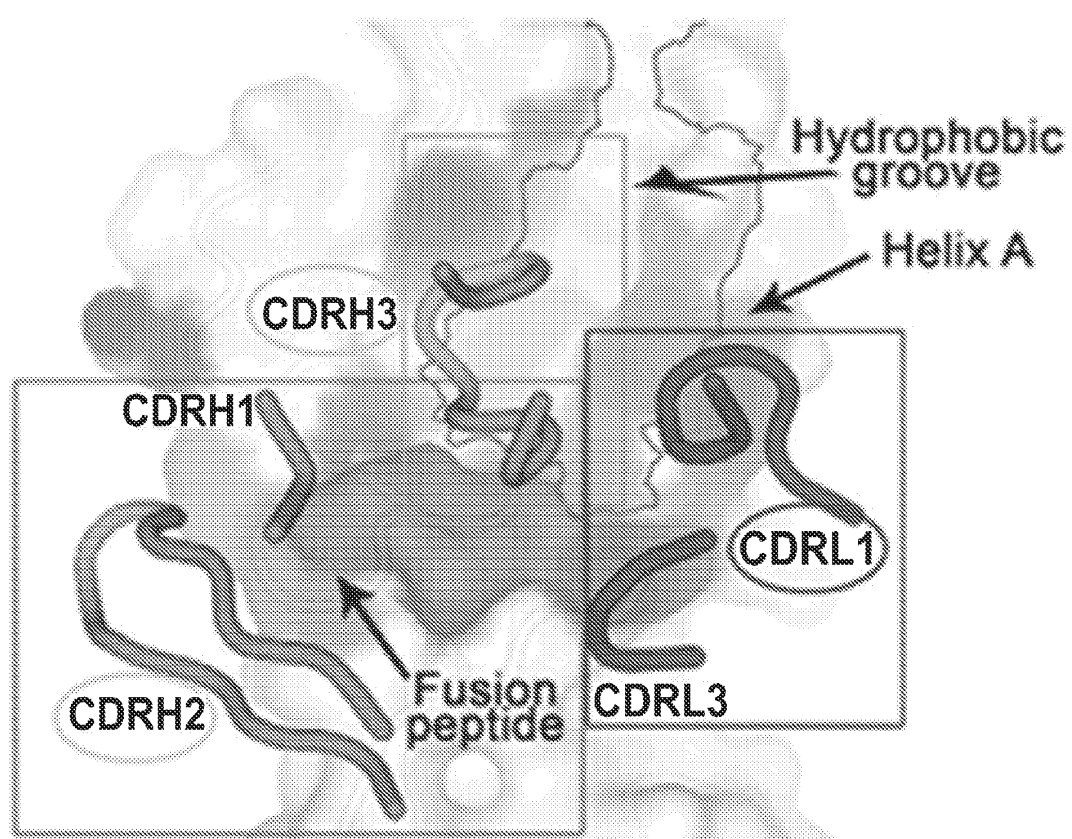


FIG. 9A

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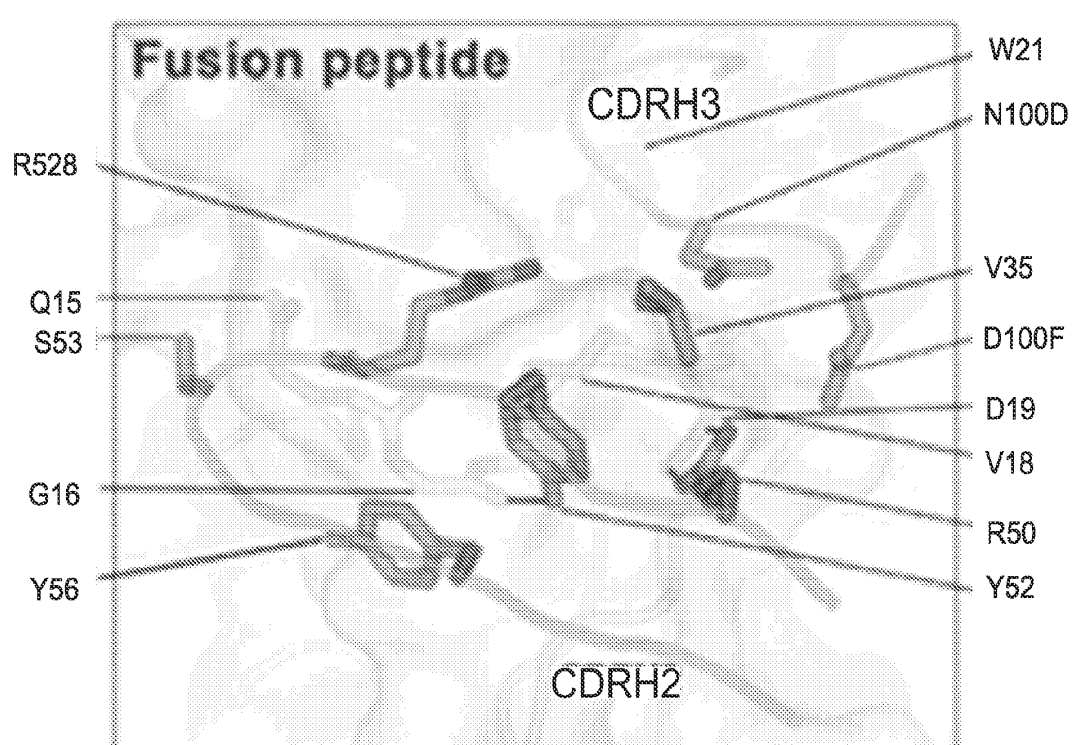


FIG. 9B

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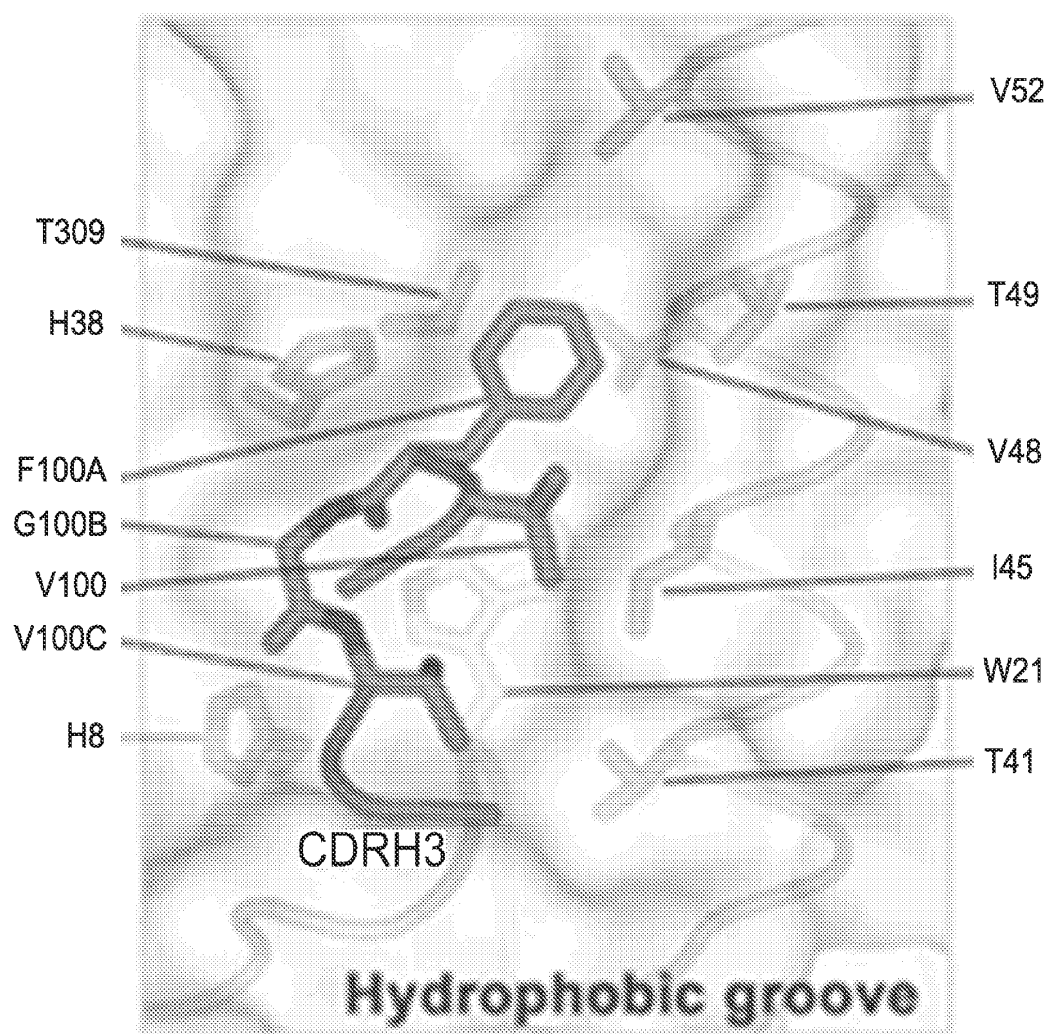


FIG. 9C

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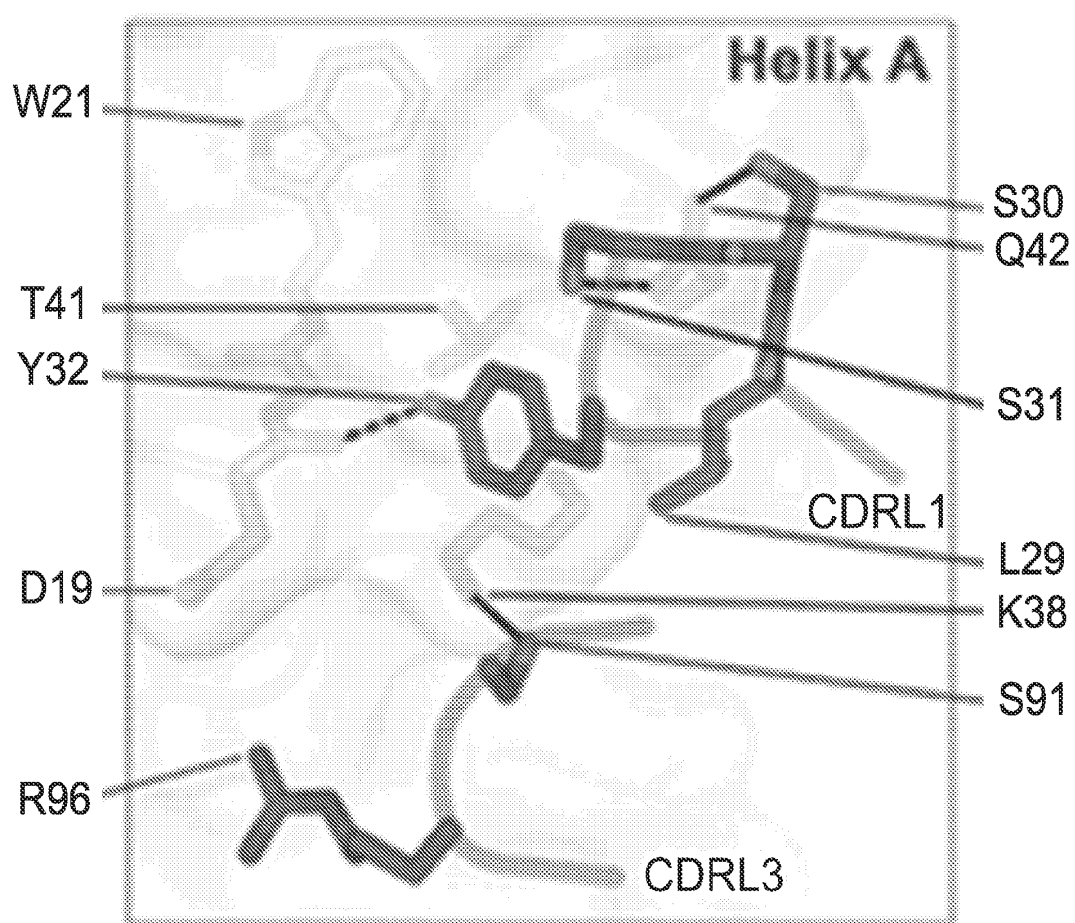


FIG. 9D

FACS binding

% cells binding to HA	TH11WT	v1	v2	v3	v4	v5	v6	v7	v8	v9	v10	v11	v12	v13	v14	v15	TM08	2nd only
H1-5C	83	82	82	82	78	81	82	76	82	80	76	81	78	65	77	78	79	7.5
H1-CAL	88	87	84	84	84	85	85	83	85	85	84	86	79	69	77	78	85	7.4
H4	54	18	30	48	15	26	49	15	37	47	19	33	14	42	11	13	68	11
H8	80	61	67	78	61	73	77	34	67	78	41	67	12	73	9.8	12	76	7.9
H10	82	77	78	77	73	77	82	75	80	79	75	77	37	69	57	61	78	8.7
H11	62	17	54	59	16	57	59	17	55	59	20	57	13	67	10	13	59	8.1
H12	86	19	15	85	18	16	87	18	16	86	19	15	15	70	12	15	84	9.7
H13	79	25	60	79	25	67	69	23	64	75	24	69	17	63	14	20	77	12
H14	79	26	39	70	24	39	70	25	48	70	25	49	17	66	16	20	85	12
H15	76	23	51	66	21	48	75	22	87	63	74	64	15	46	14	16	76	12
H16	20	14	11	22	12	11	11	12	8.9	13	14	12	9.5	15	8.5	8.5	79	6.9
H17	82	73	81	82	73	79	82	58	75	82	63	80	7.7	15	6.1	11	82	4.1
H18	80	78	82	79	79	81	79	74	78	78	75	80	29	49	41	50	79	5.5
MOCK	7.1	9	6.2	5.7	7.7	5.9	5	7.4	5	7.5	37	5.8	6.2	7.1	4.2	5.3	4.7	3.5

FIG. 10A

	FHF11_VK (WT)	FHF11_VK Δ R31	FHF11_VK Δ92-96	FHF11_VK Δ R31/ Δ92-96
FHF11_VH (WT)	WT	v1	v2	v12
FHF11_VH H32Y	v3	v4	v5	v13
FHF11_VH K58G	v6	v7	v8	v14
FHF11_VH H32Y/K58G	v9	v10	v11	v15

FIG. 10B

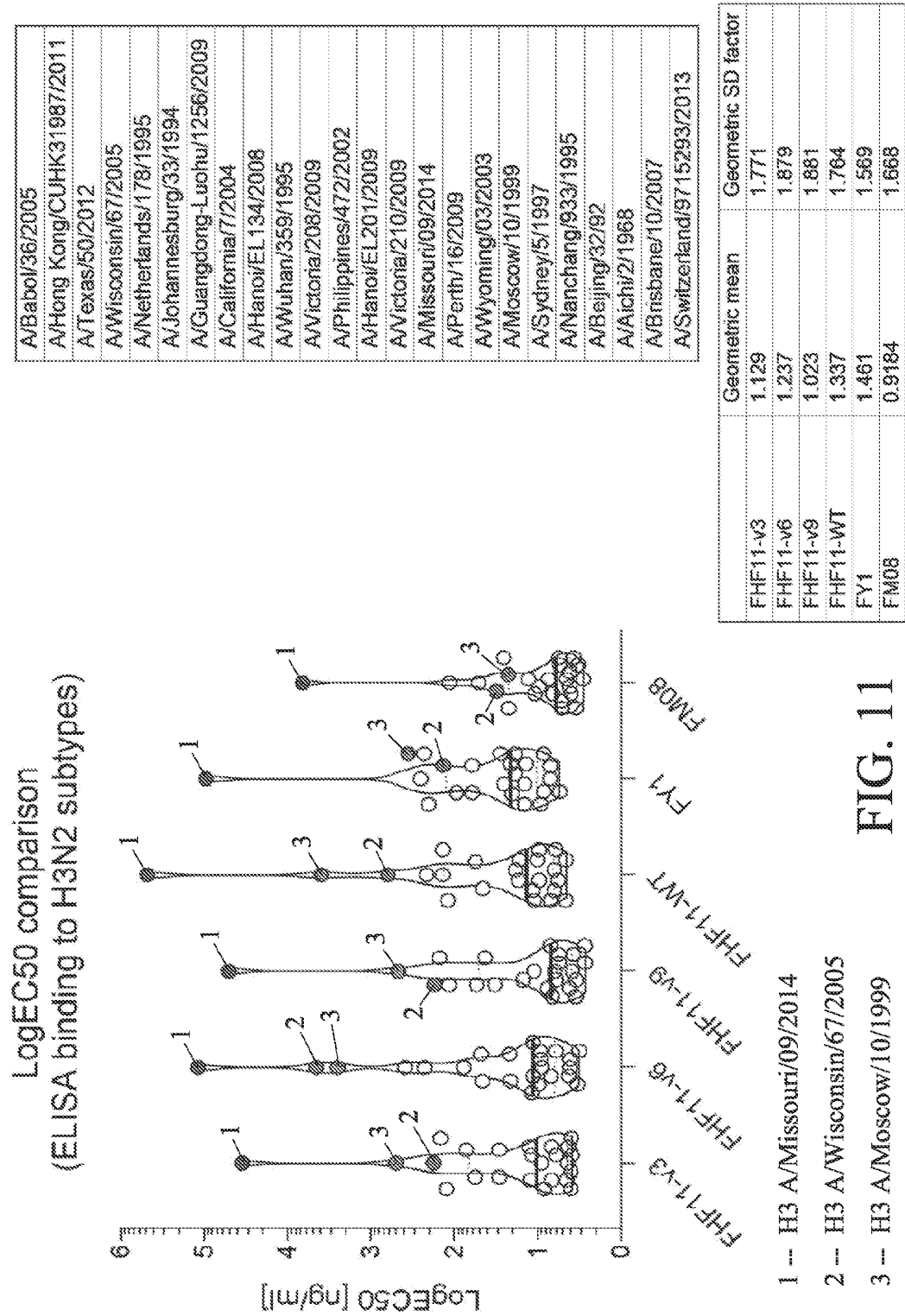
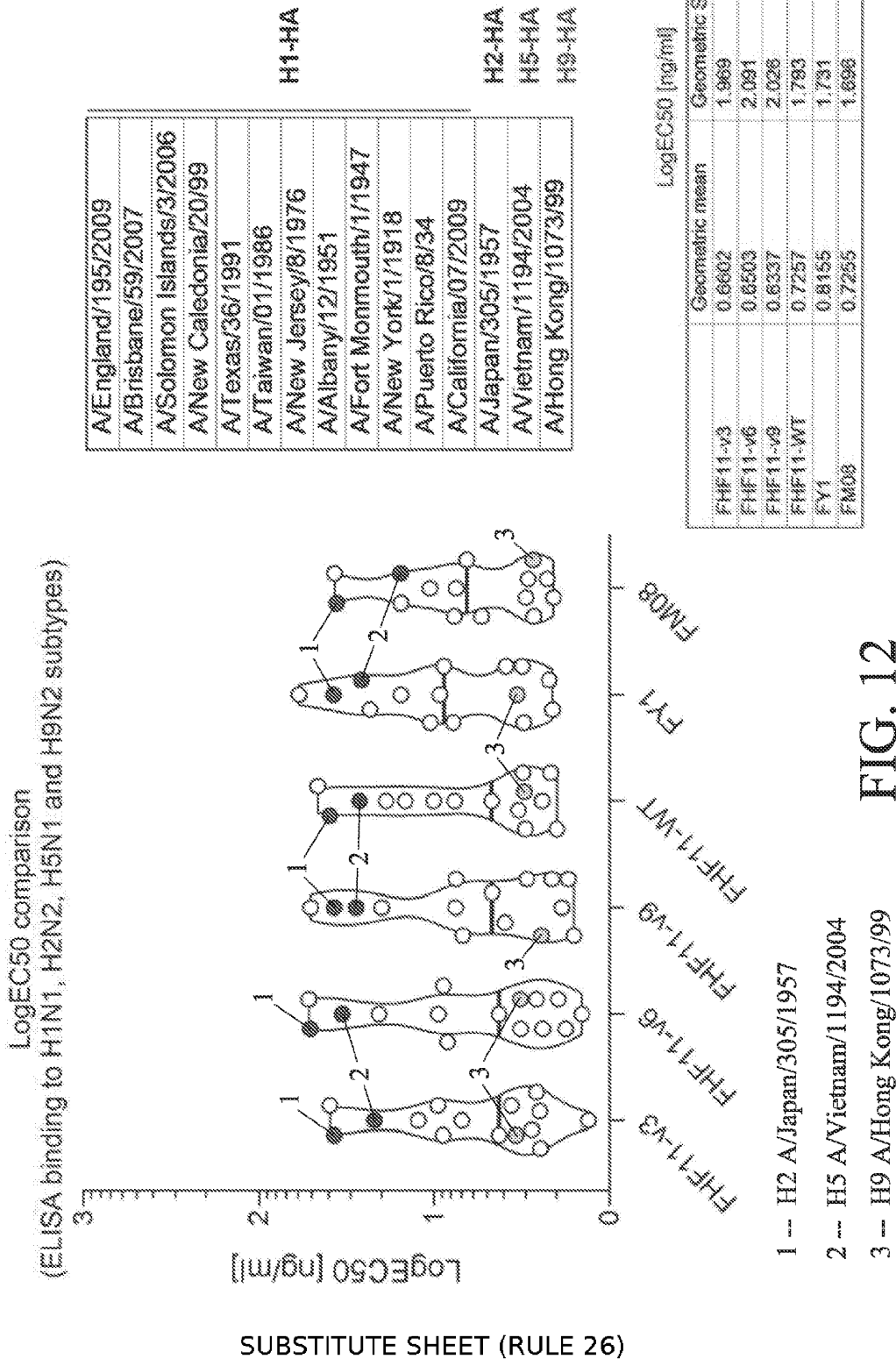


FIG. 11



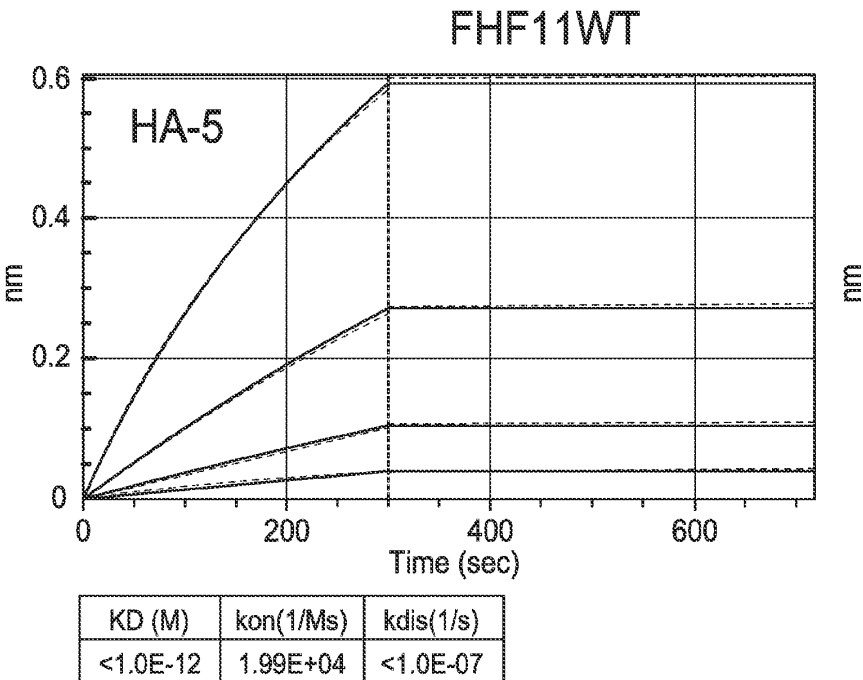
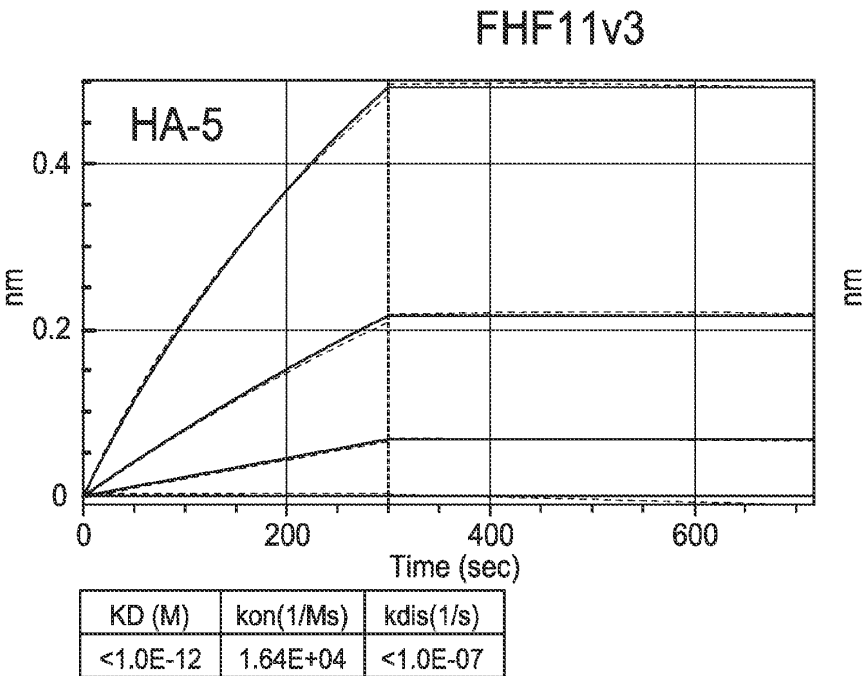


FIG. 13

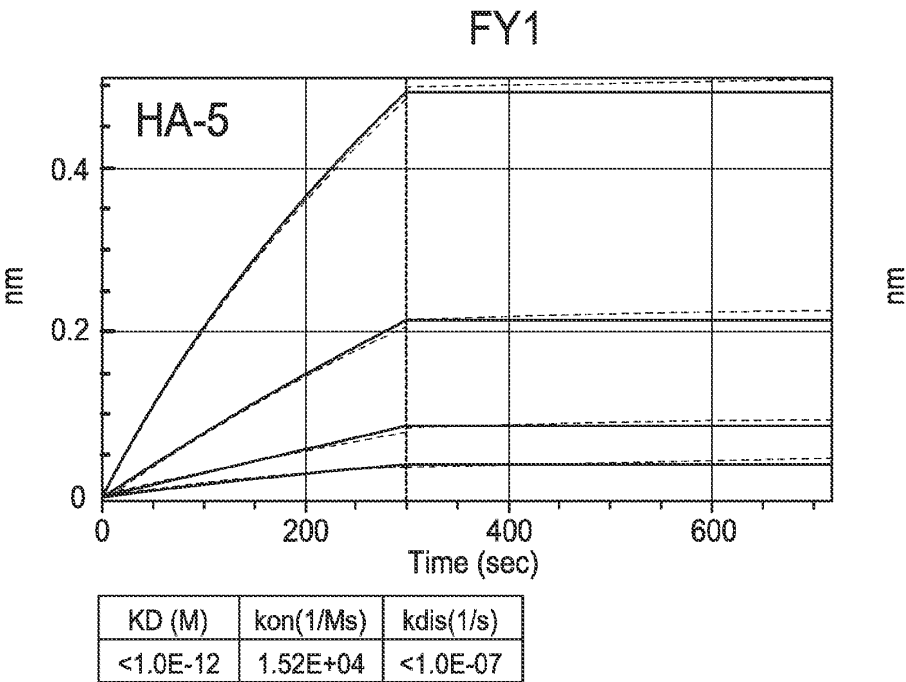
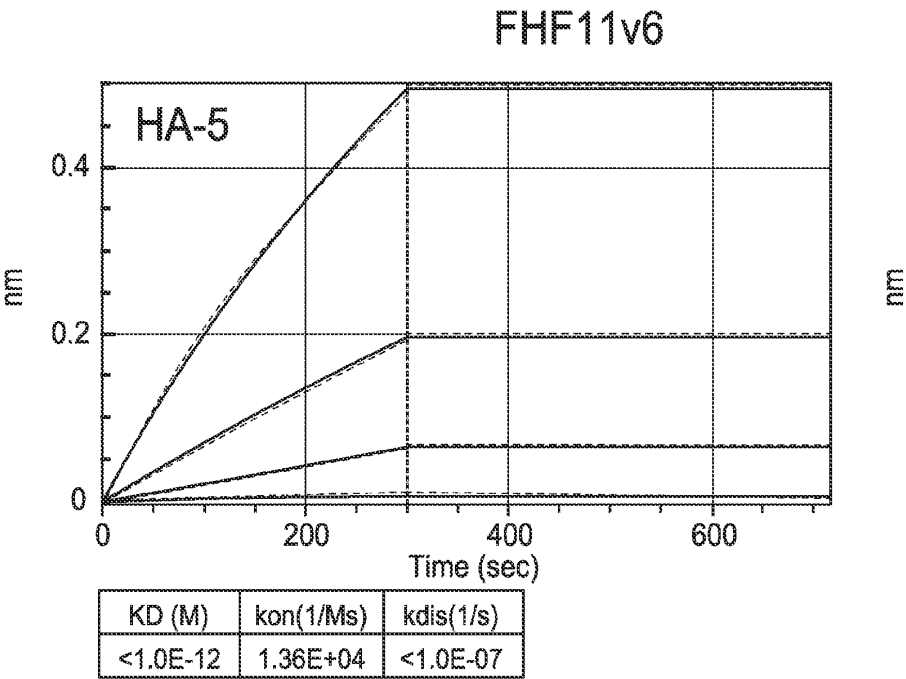


FIG. 13 (Cont'd)

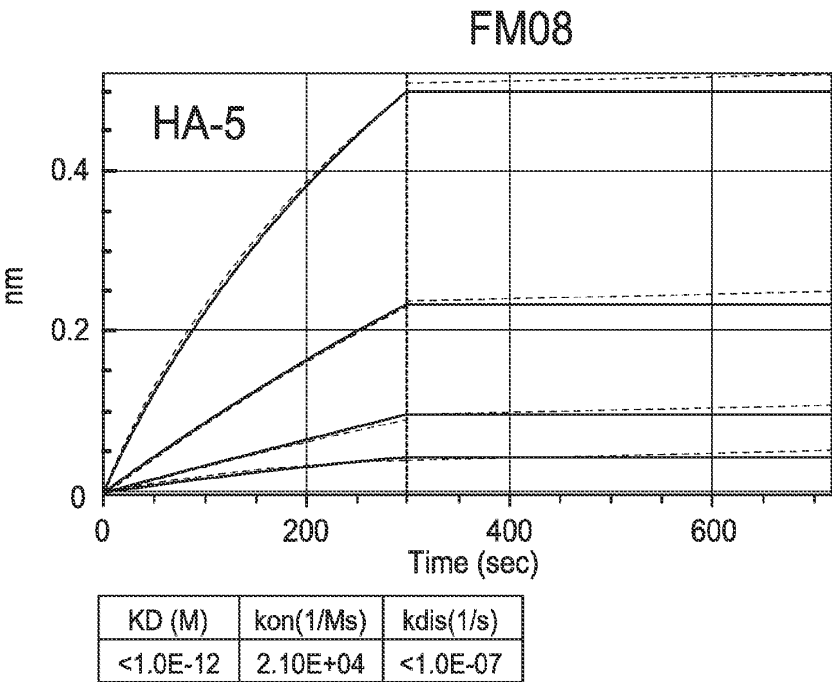
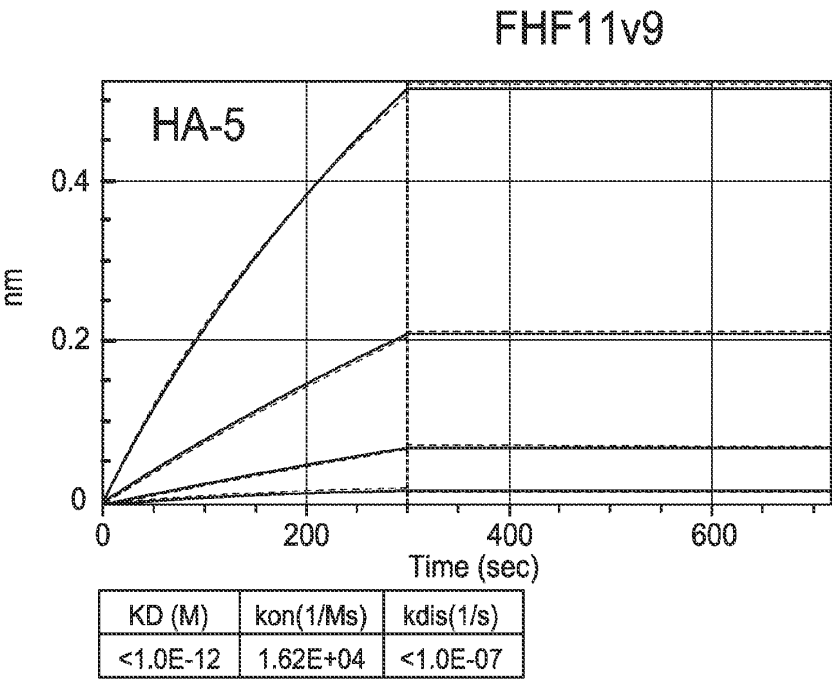


FIG. 13 (Cont'd)

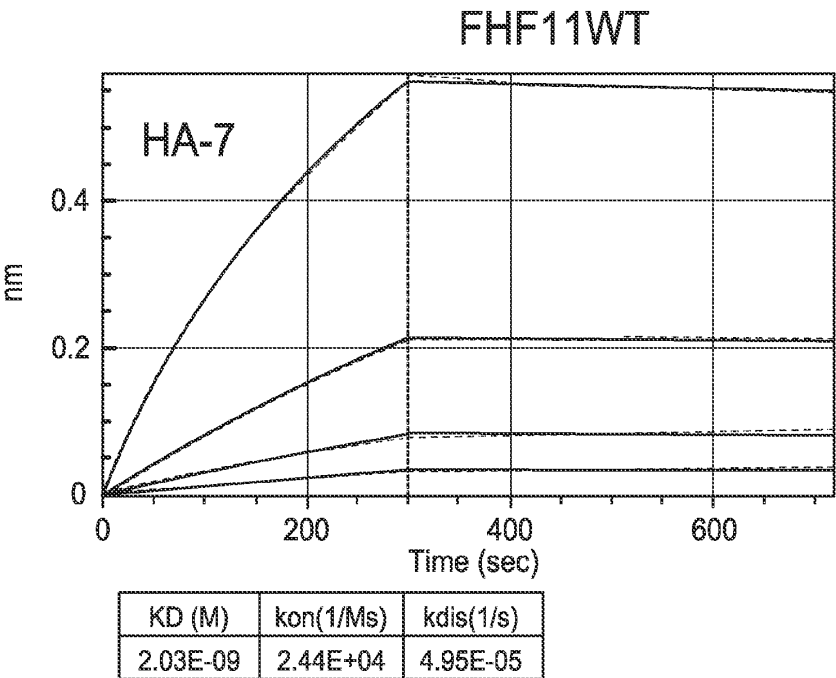
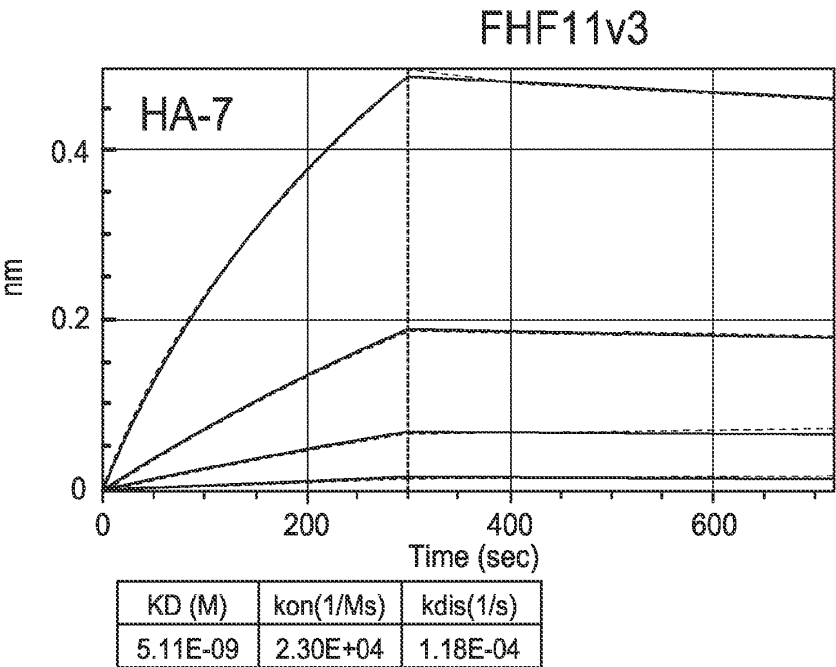


FIG. 14

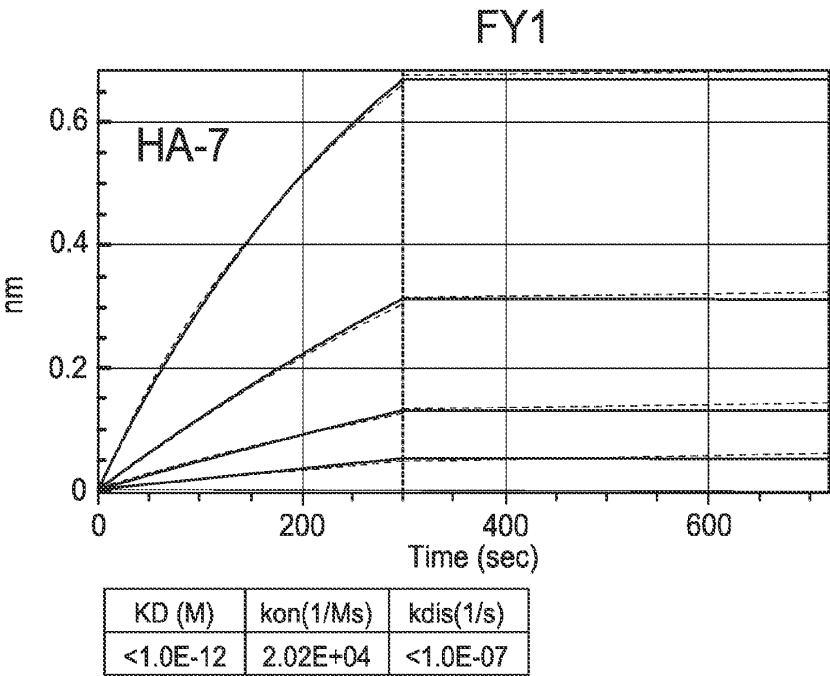
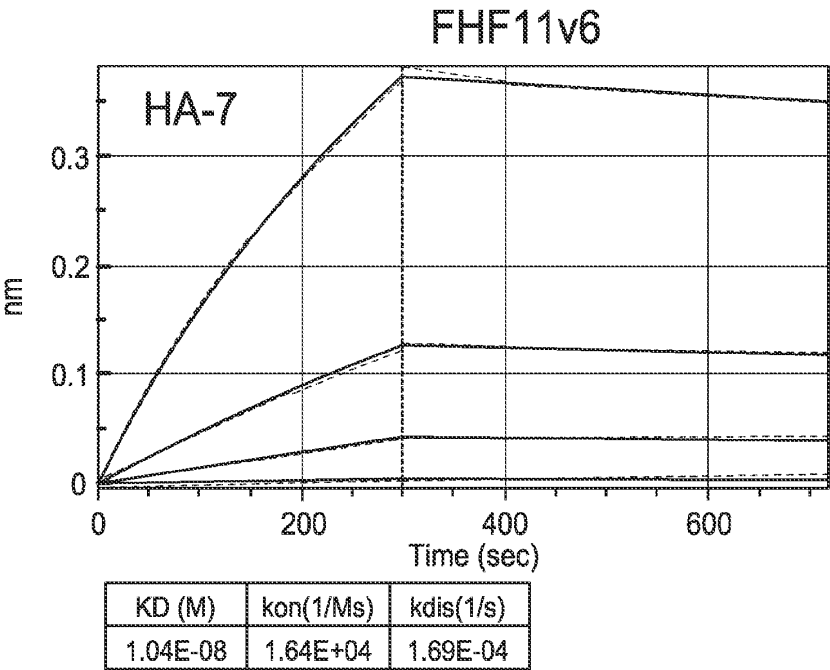


FIG. 14 (Cont'd)

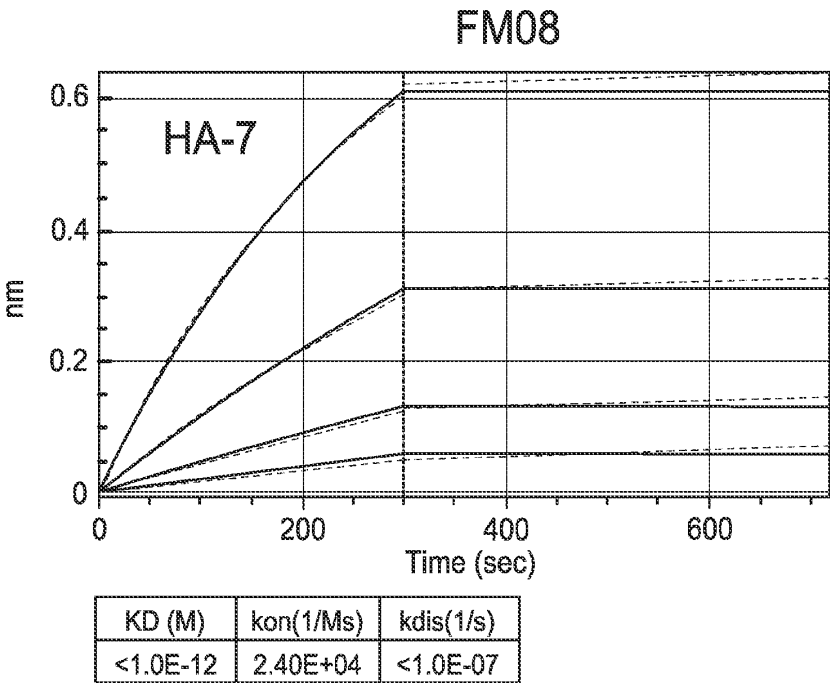
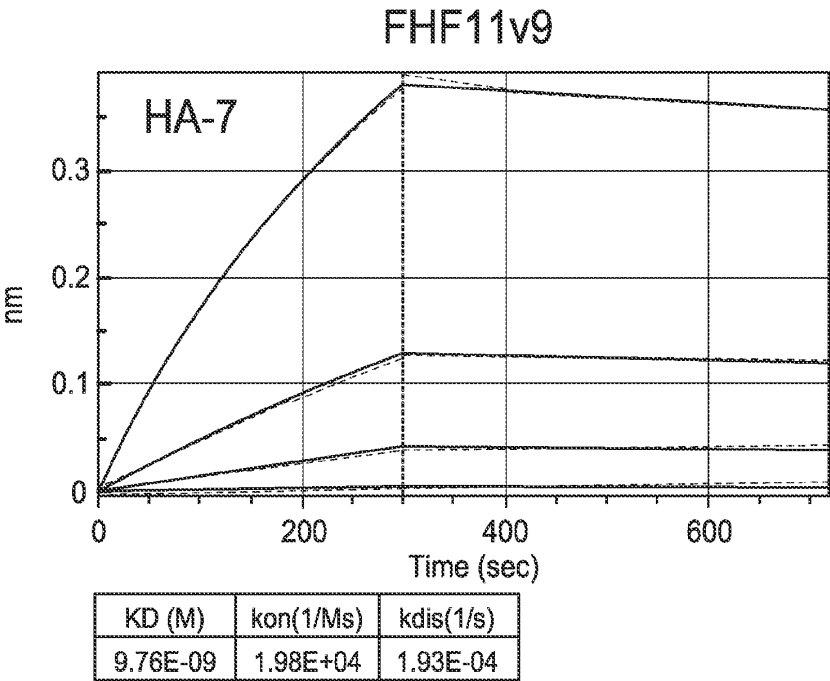


FIG. 14 (Cont'd)

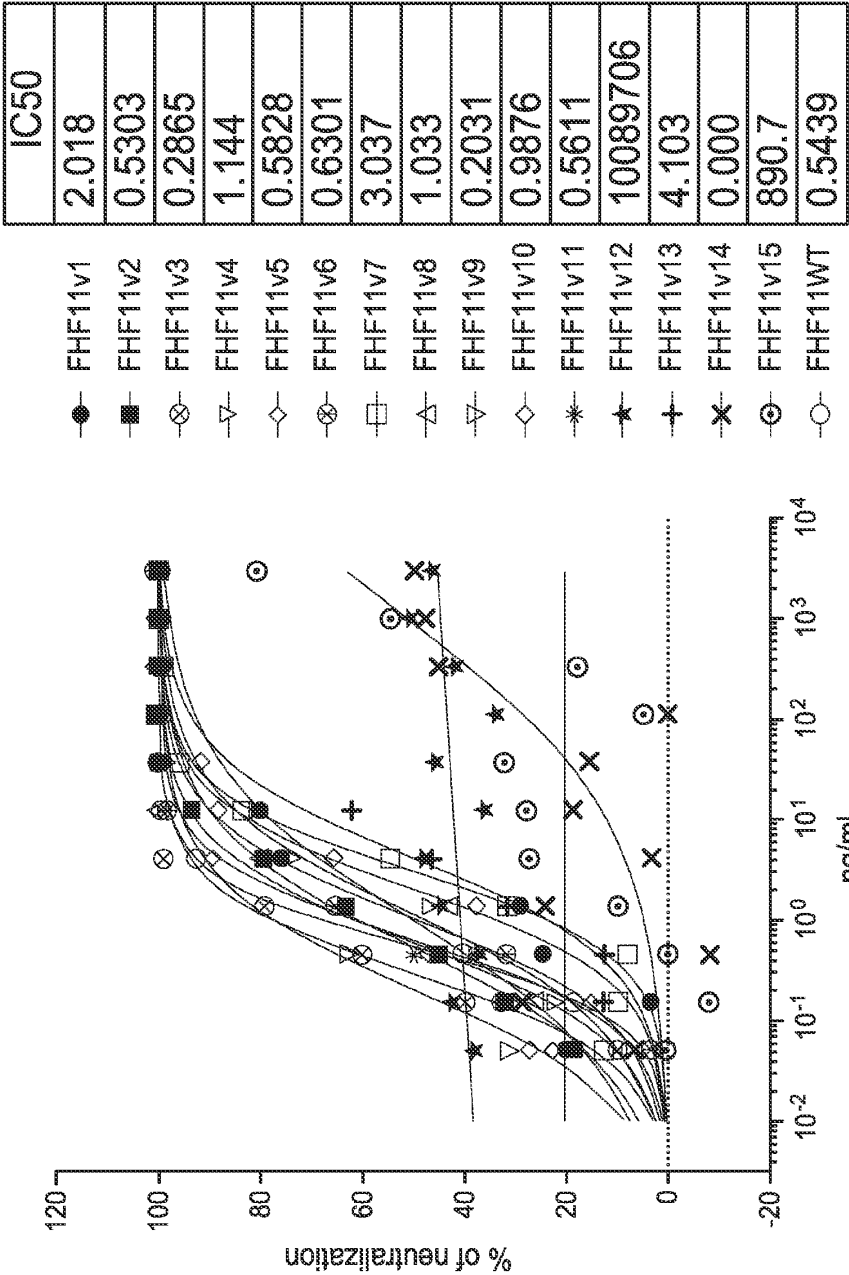


FIG. 15A

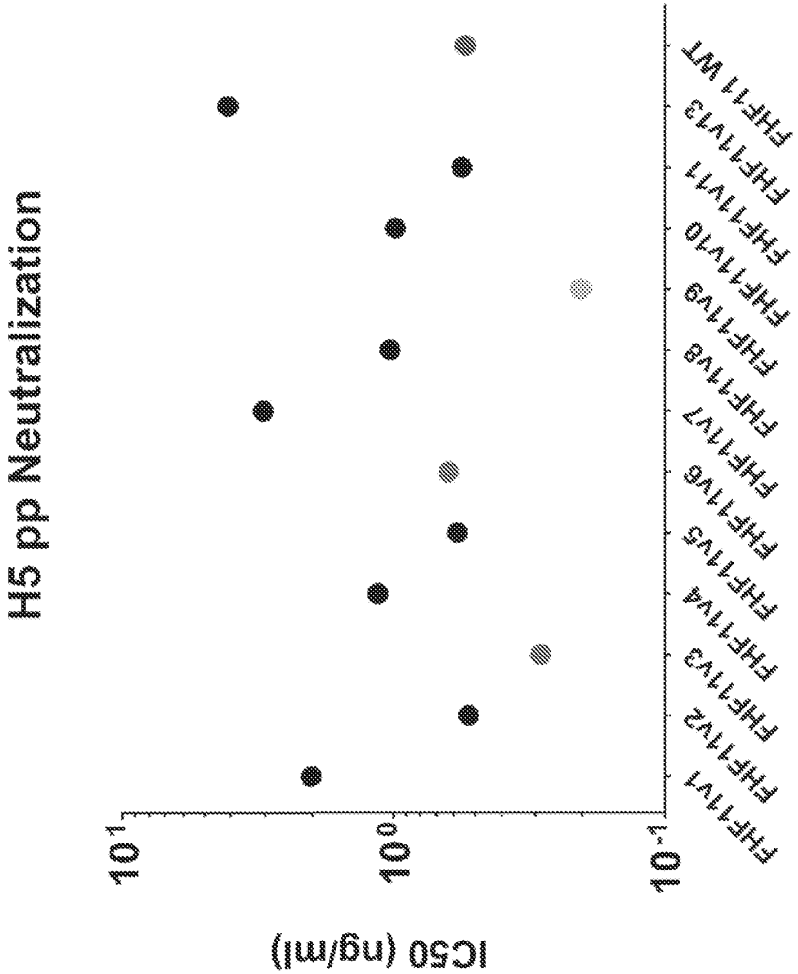


FIG. 15B

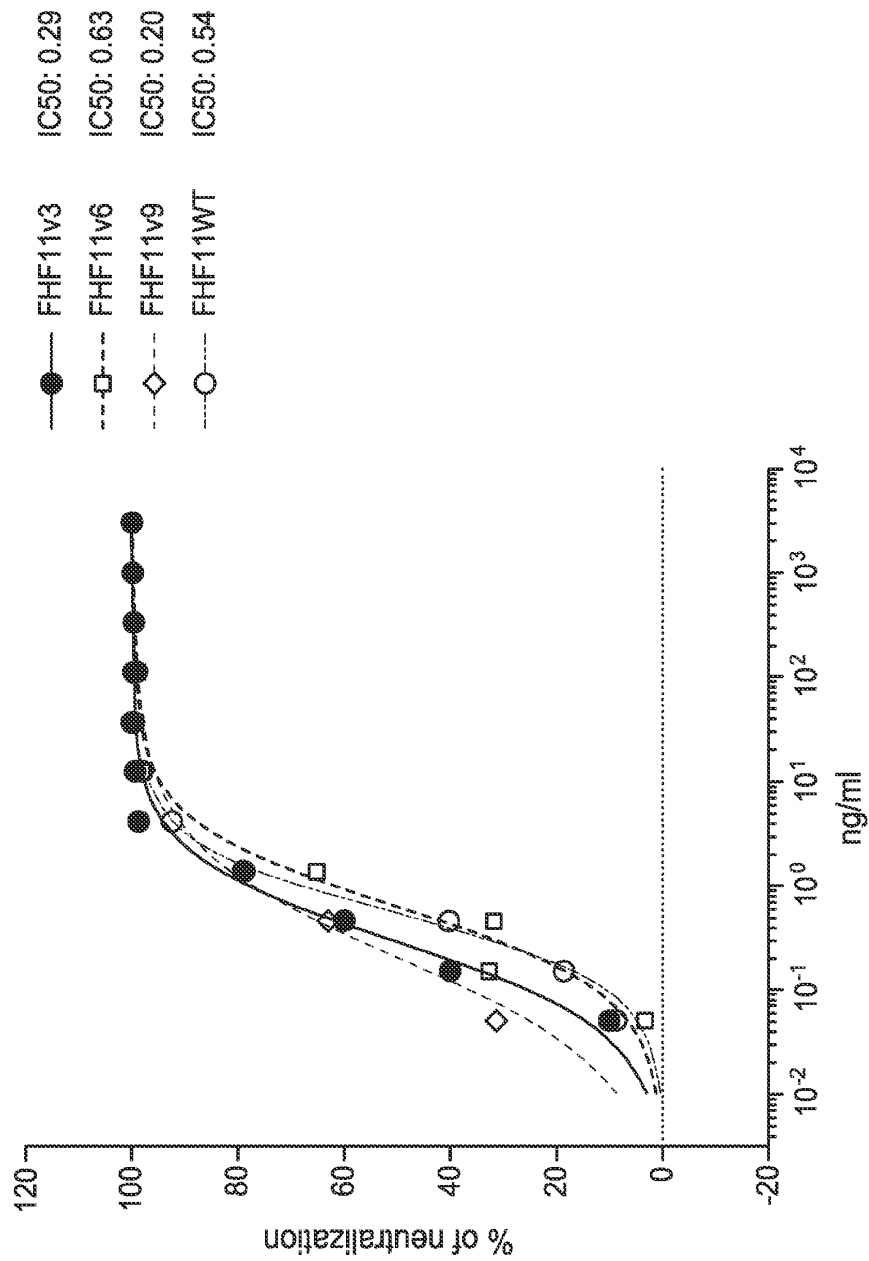


FIG. 15C

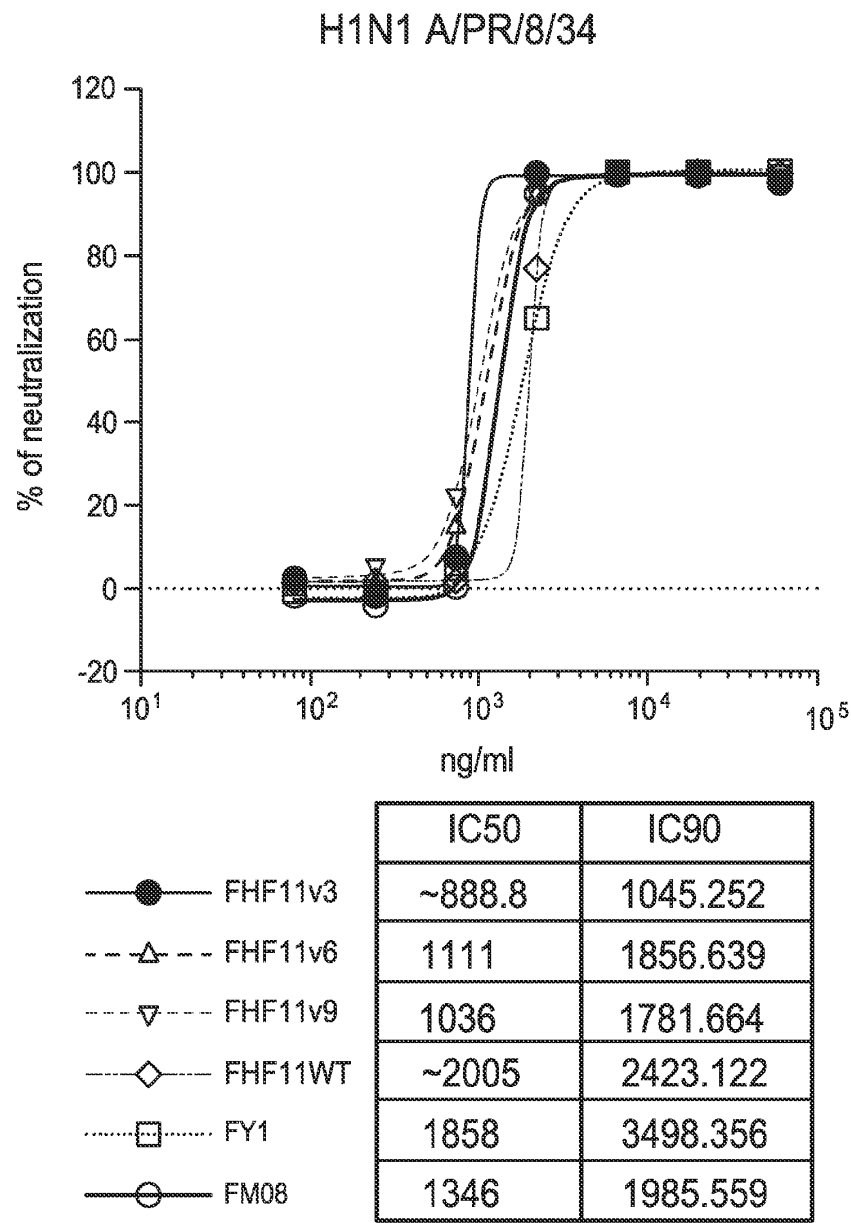


FIG. 16A

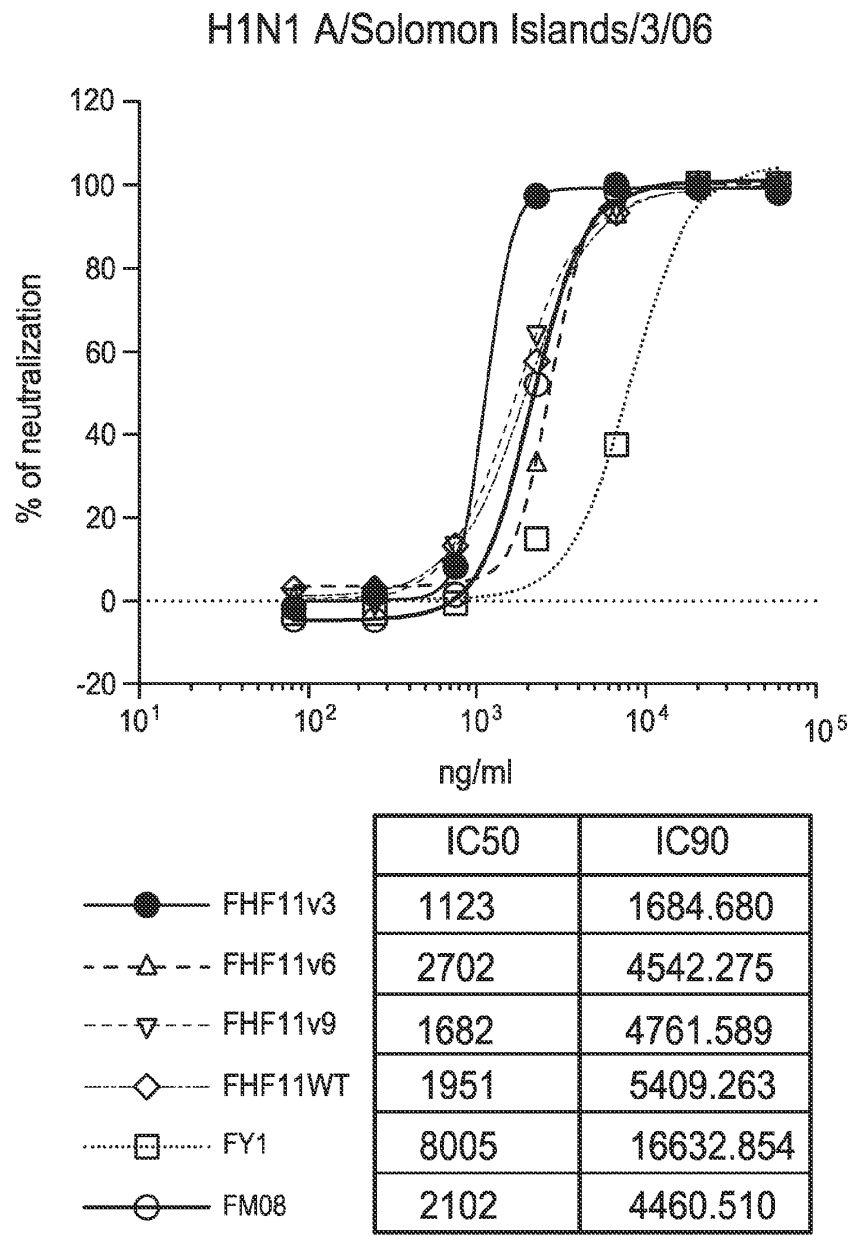


FIG. 16B

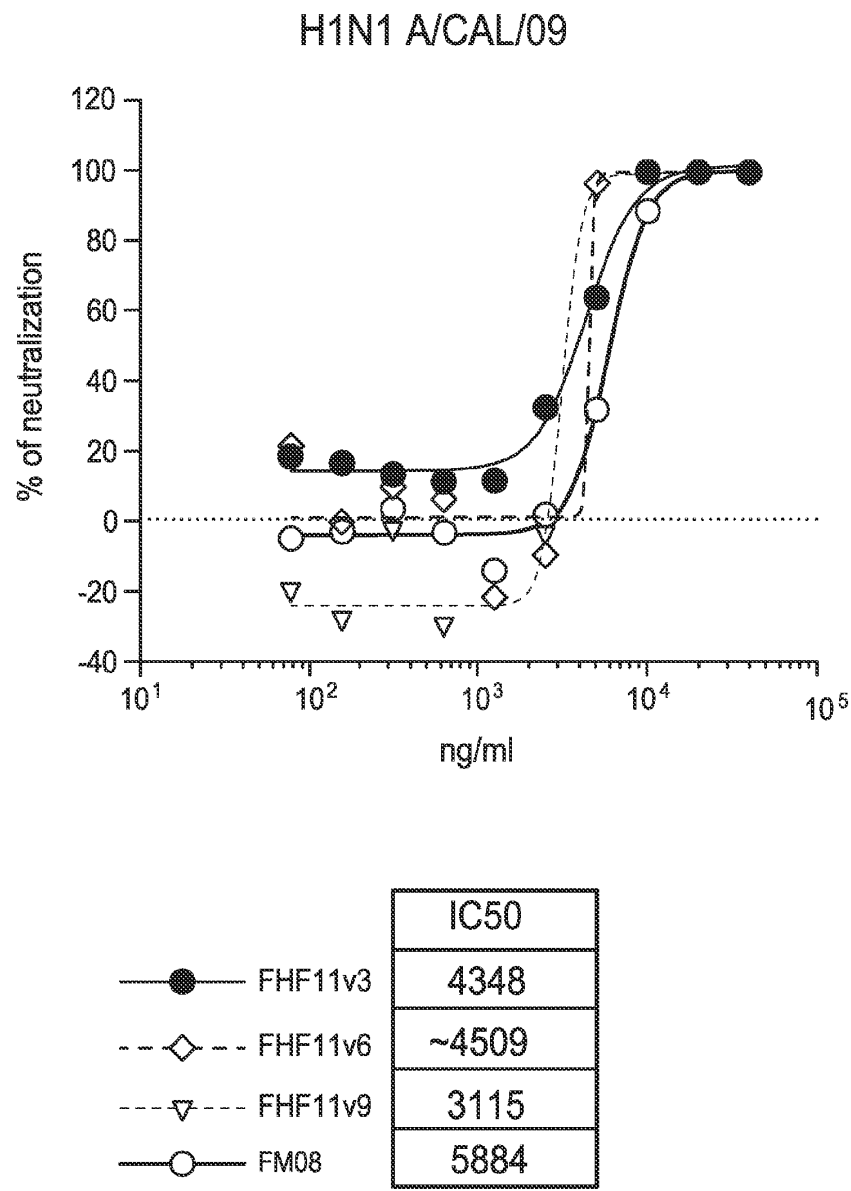


FIG. 16C

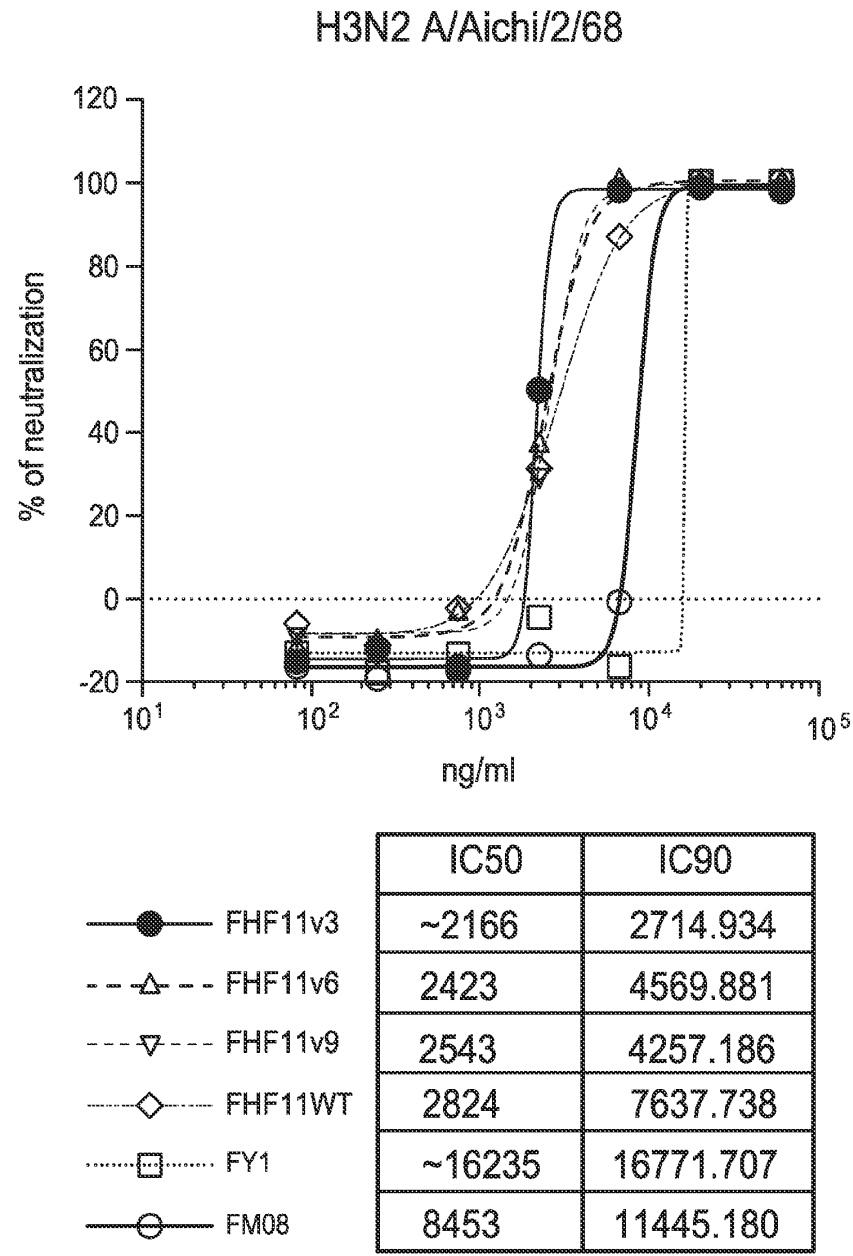


FIG. 16D

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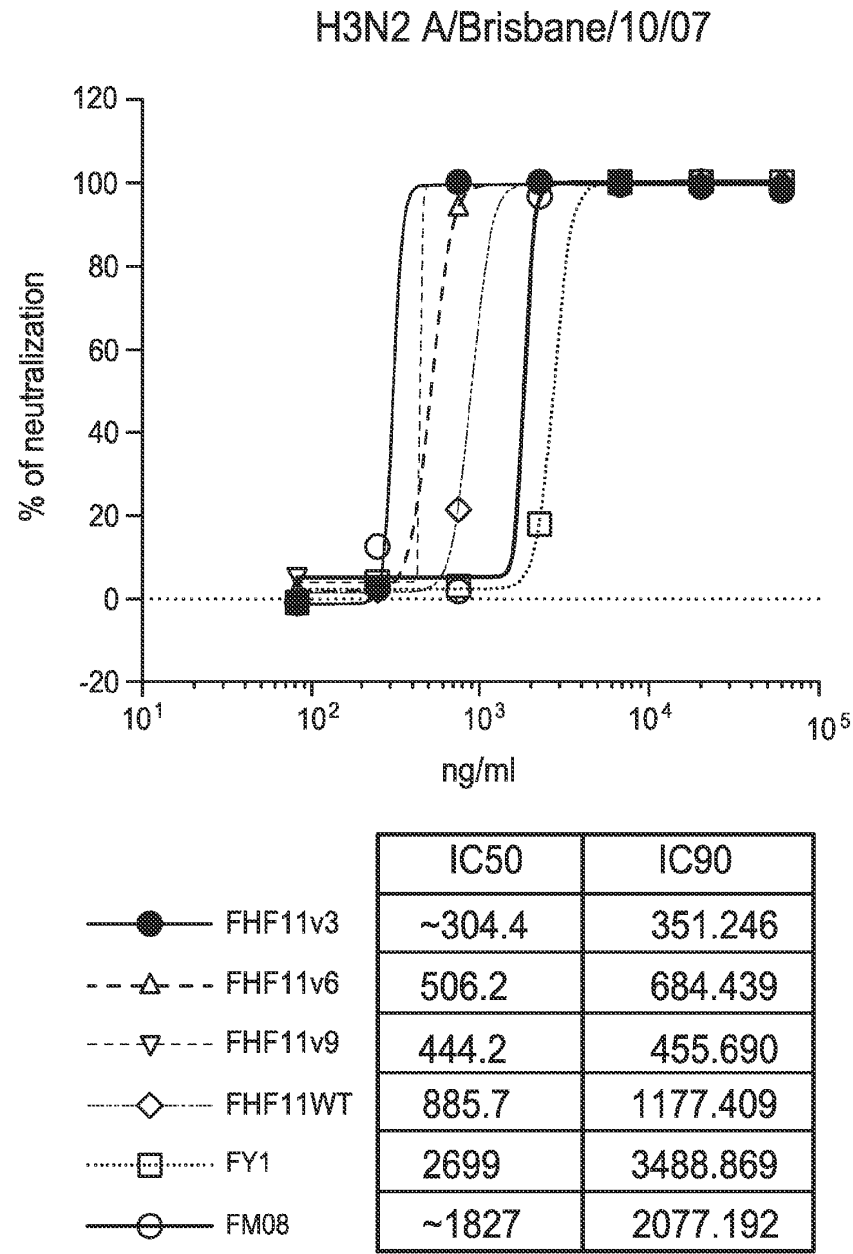


FIG. 16E

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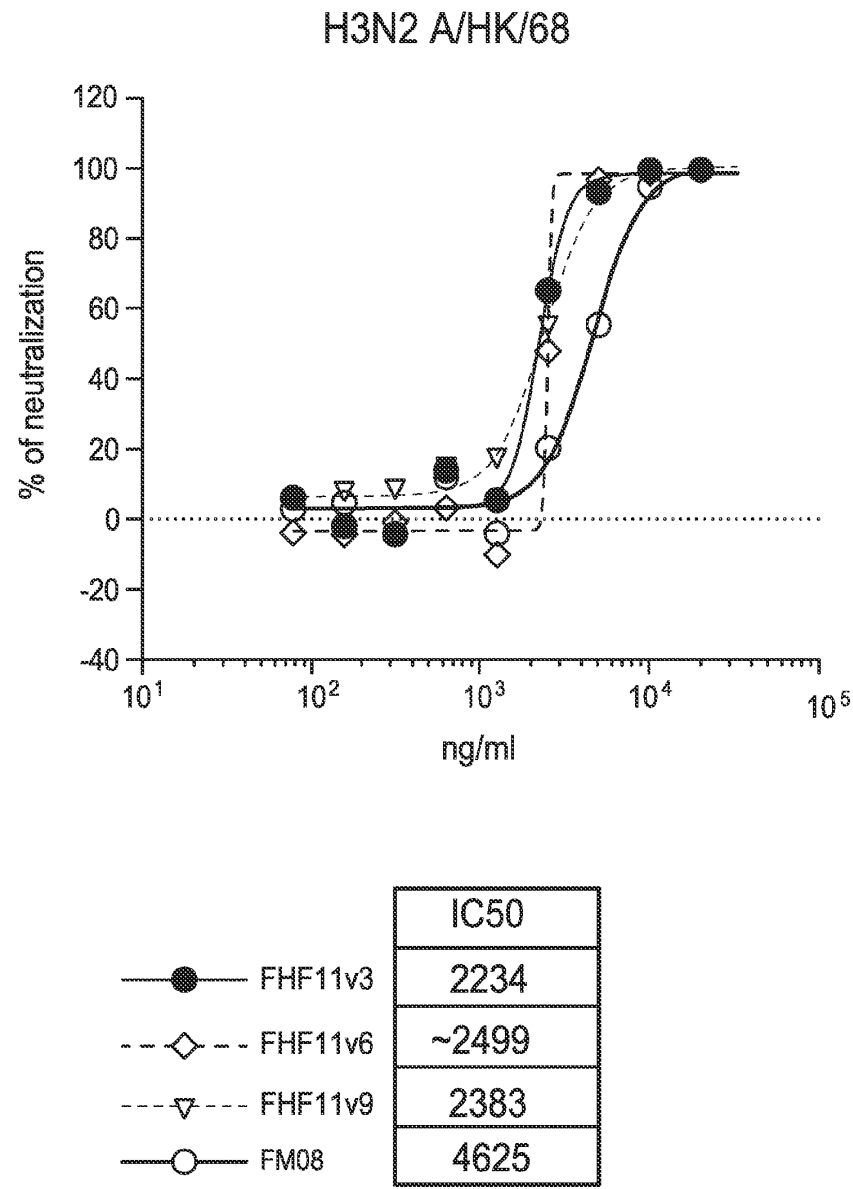


FIG. 16F

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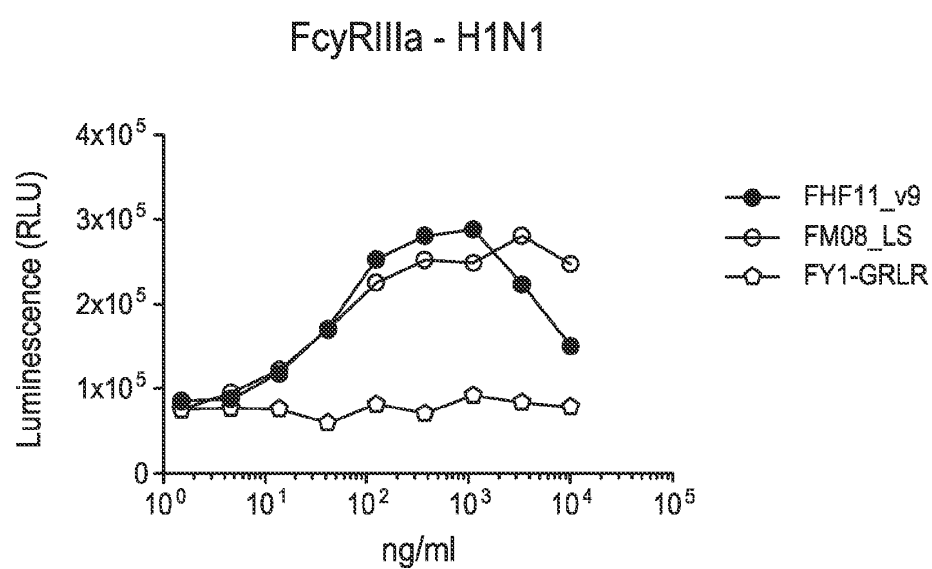


FIG. 17A

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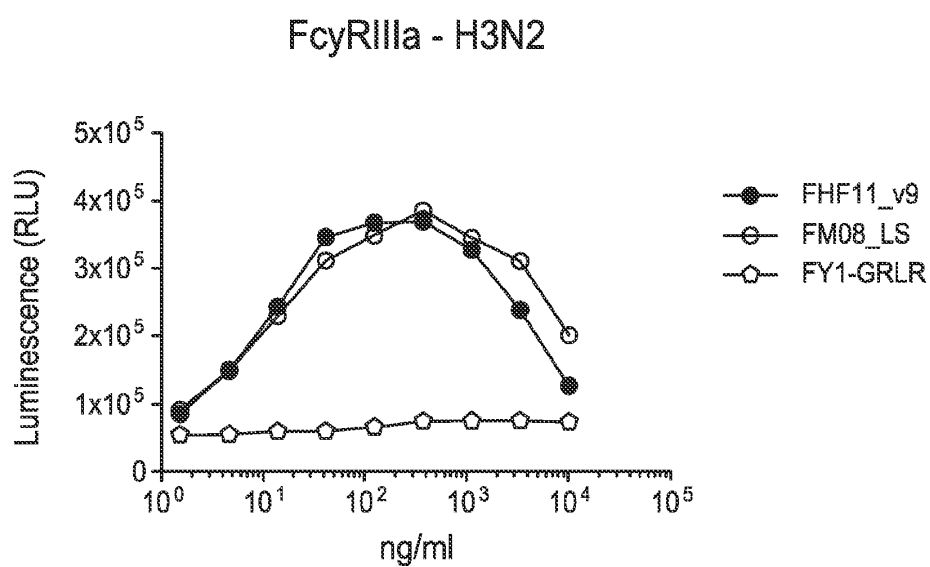


FIG. 17B

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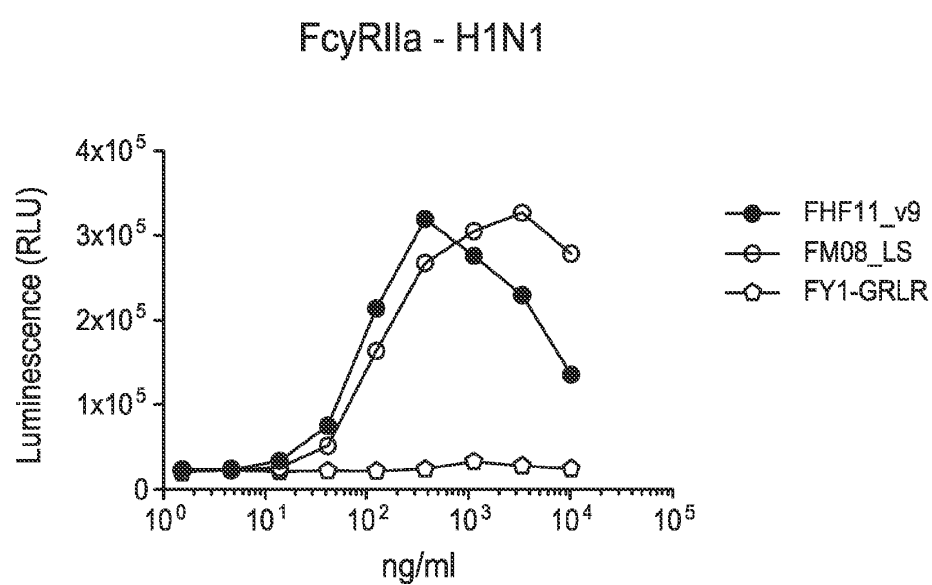


FIG. 18A

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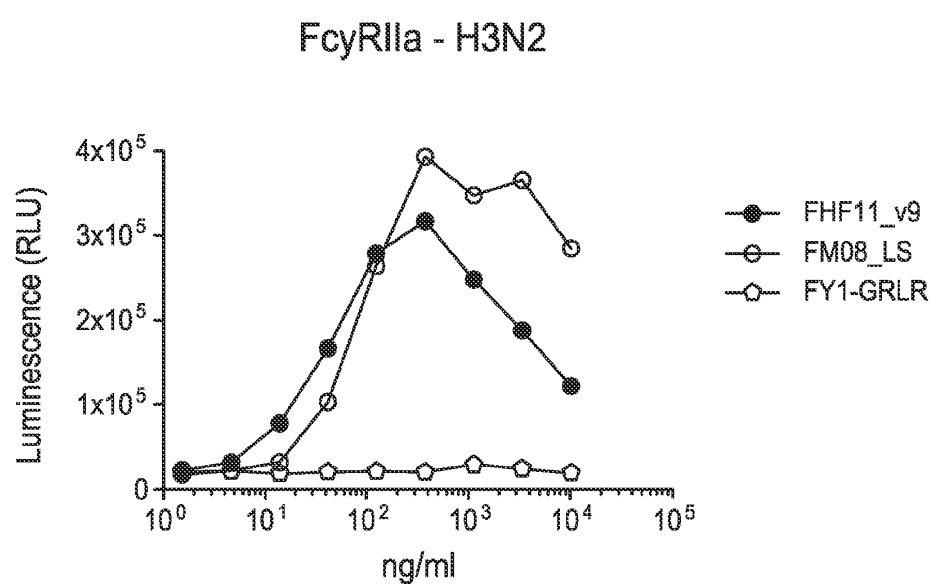


FIG. 18B

GROUP	MOUSE_ID	Dose (µg)	Rsq_adj justified	No_points _lambda_z	lambda_z (1/day)	HL_lambda_z (day)	AUClast (day*µg/ml)	Cavg (µg/ml)	Clss (ml/day)	Vz (ml)
FHF11v9-LS										
		125	0.22	4	0.07	9.48	1060.17	146.11	0.86	11.7
		130.5	0.76	4	0.11	6.58	1341.53	157.25	0.83	7.88
		156	0.23	4	0.05	13.46	1258.65	111.87	1.39	27.09
		121	0.74	4	0.09	8.07	1384.12	143.67	0.84	9.8
		126.5	0.7	5	0.06	10.74	1064	150.47	0.84	13.03
Mean										
		131.8	0.531	4.2	0.076	9.668	1221.694	141.874	0.953	13.901
SD										
		13.949	0.281	0.447	0.021	2.631	152.536	17.551	0.247	7.625
FM08_LS										
		126.5	0.9	5	0.07	9.6	1160.63	140.48	0.9	12.47
		130	0.88	4	0.11	6.39	1483.98	143.53	0.91	8.35
		145	0.88	5	0.15	4.74	1156.89	174.59	0.83	5.68
		120	0.82	4	0.1	6.97	1556.84	172.02	0.7	7.01
		138	0.87	4	0.09	7.42	1752.64	180.64	0.76	8.18
Mean										
		131.9	0.858	4.4	0.104	7.024	1422.195	162.252	0.82	8.339
SD										
		9.788	0.028	0.548	0.027	1.762	259.784	18.778	0.09	2.546

FIG. 19

group	Dose (μ g)	Rsq	Points fit	Lambda_z (1/day)	HALF-LIFE (day)	AUClast (day* μ g/ml)	Vz (mL)	CLss (mL/day)
FHF12-LS	53	0.99	5	0.07	9.44	278.78	19.04	1.4
	57.5	0.95	5	0.07	10.34	247.69	27.57	1.85
	54	0.97	5	0.06	11.69	282.63	20.7	1.23
	53.5	0.88	5	0.07	10.38	331.17	18.17	1.21
	53.5	0.99	5	0.05	12.99	225.07	38.87	2.07
	Mean 54.3	0.957	5	0.064	10.968	273.069	24.871	1.552
FM08_LS	SD 1.823	0.043	0	0.008	1.386	40.15	8.652	0.388
	53.5	0.87	4	0.07	10.29	204.54	17.44	1.17
	52.8	0.93	5	0.08	8.58	275.51	12.72	1.03
	54.5	0.87	5	0.09	8	275.84	12.57	1.09
	51.3	0.97	5	0.12	6	173.86	12.02	1.39
	51.3	0.91	5	0.09	7.49	204.07	17.16	1.59
	Mean 52.68	0.91	4.8	0.089	8.072	226.764	14.381	1.253
	SD 1.397	0.043	0.447	0.018	1.567	46.348	2.677	0.231

FIG. 19 (Cont'd)

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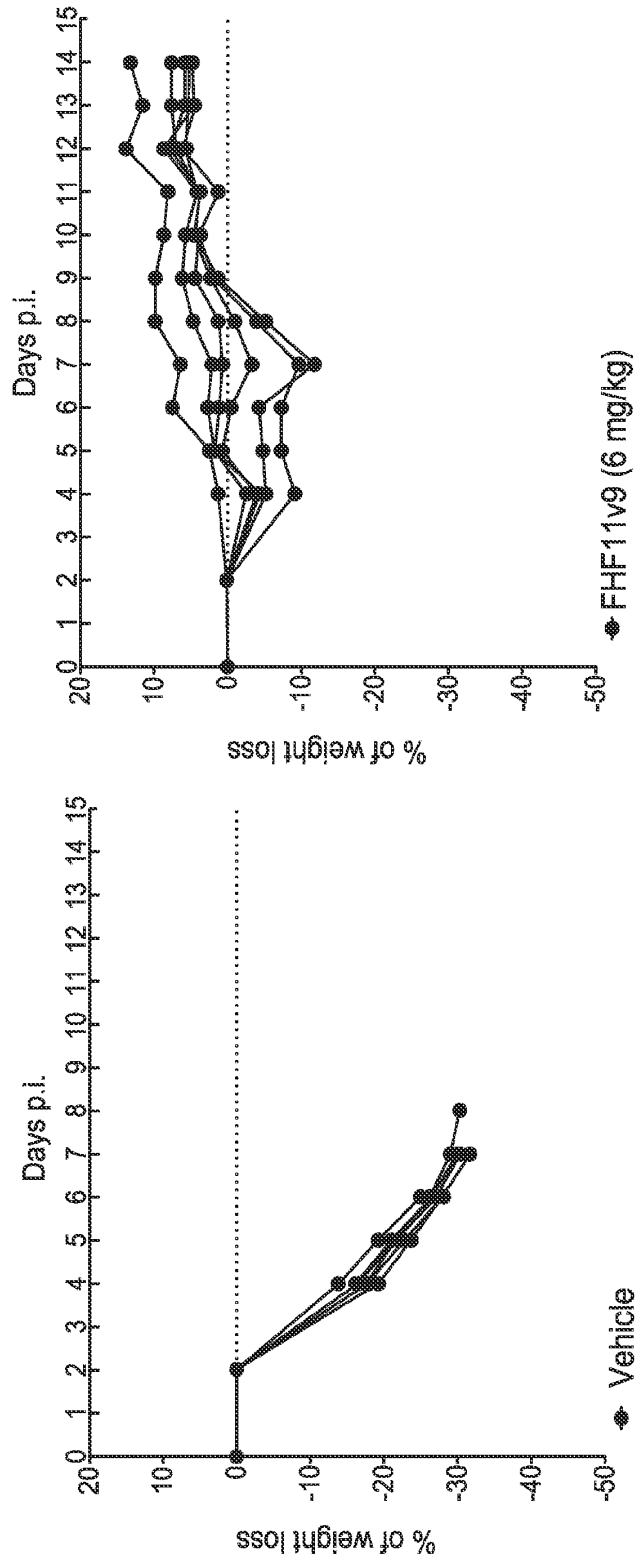


FIG. 20A

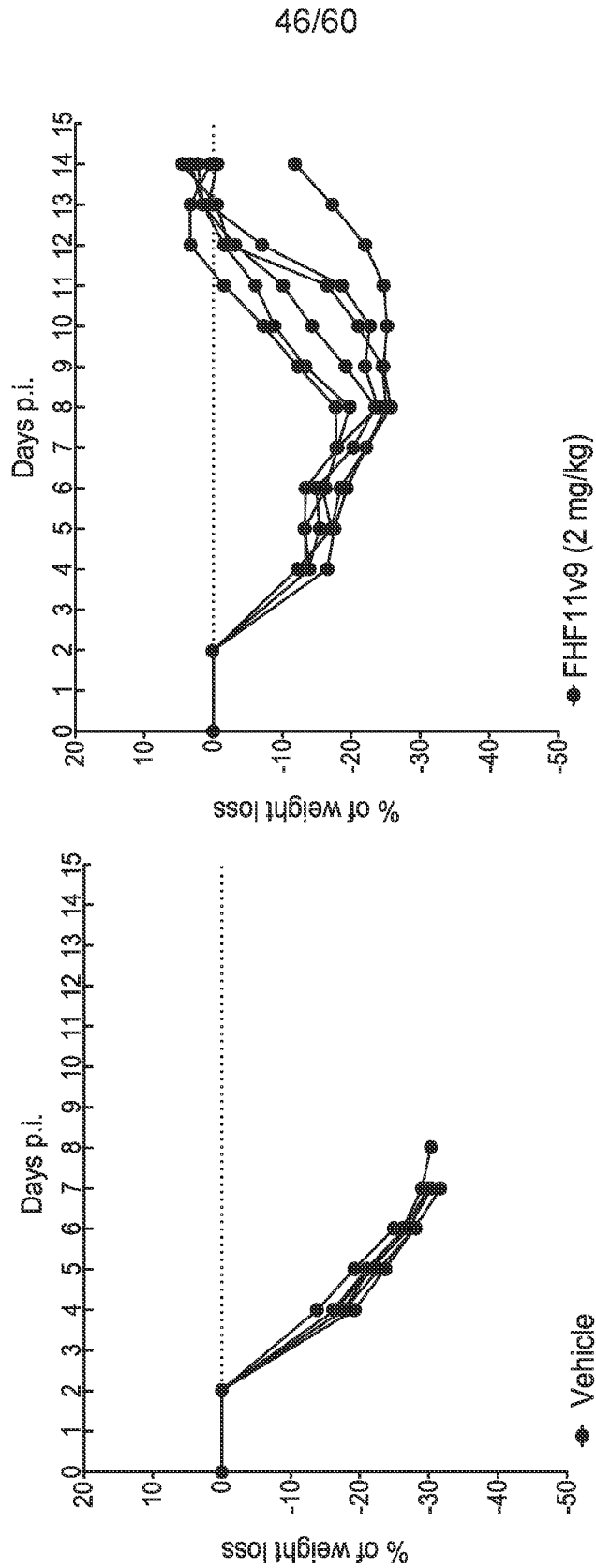


FIG. 20B

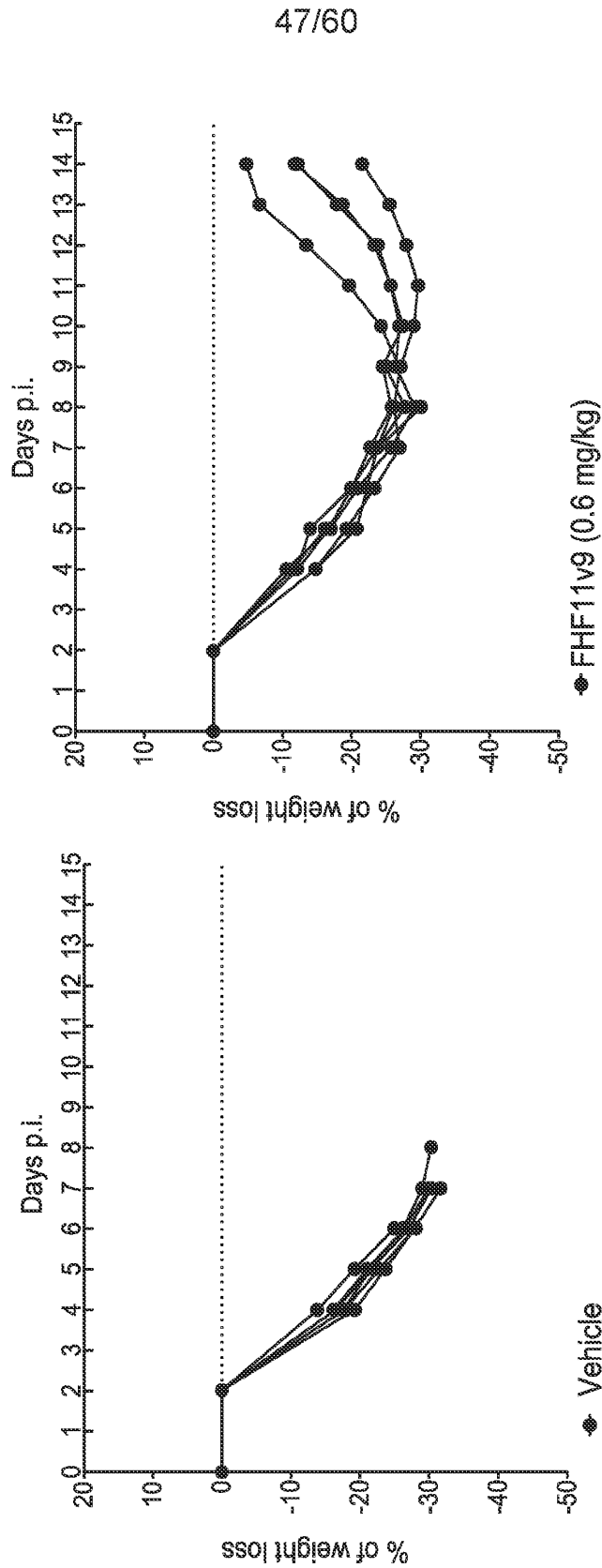


FIG. 20C

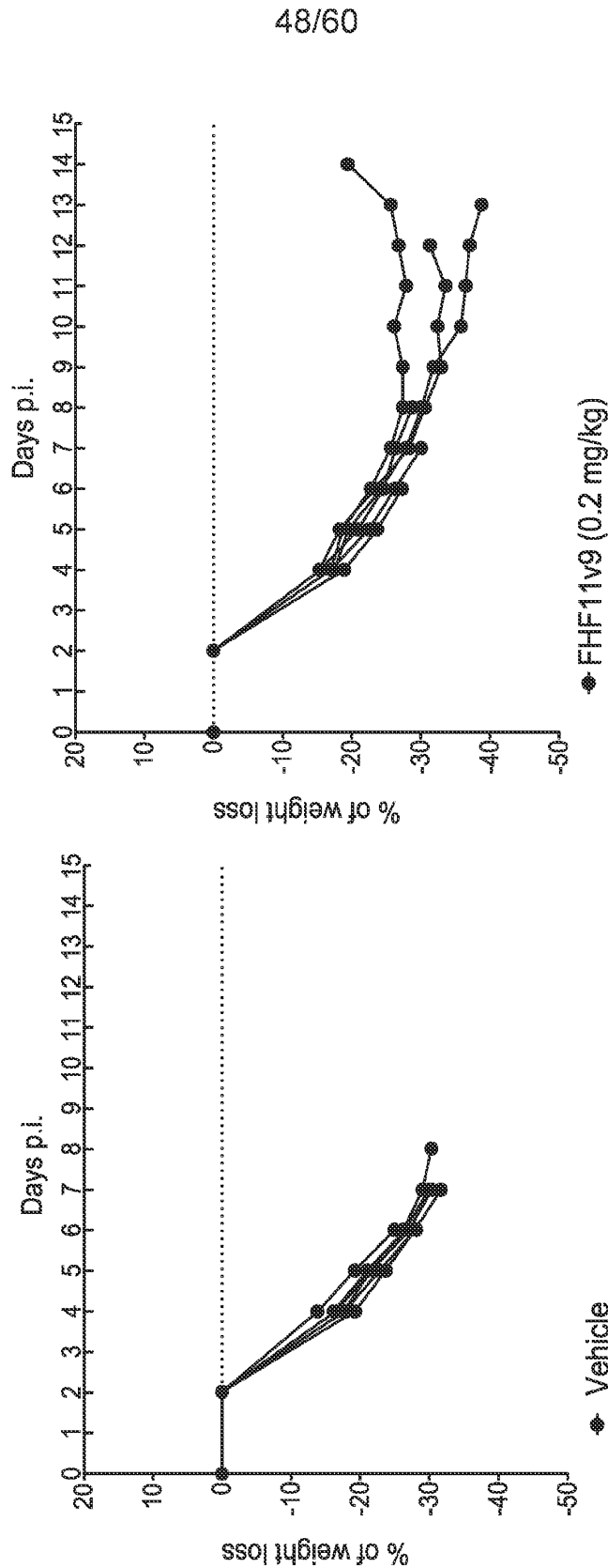


FIG. 20D

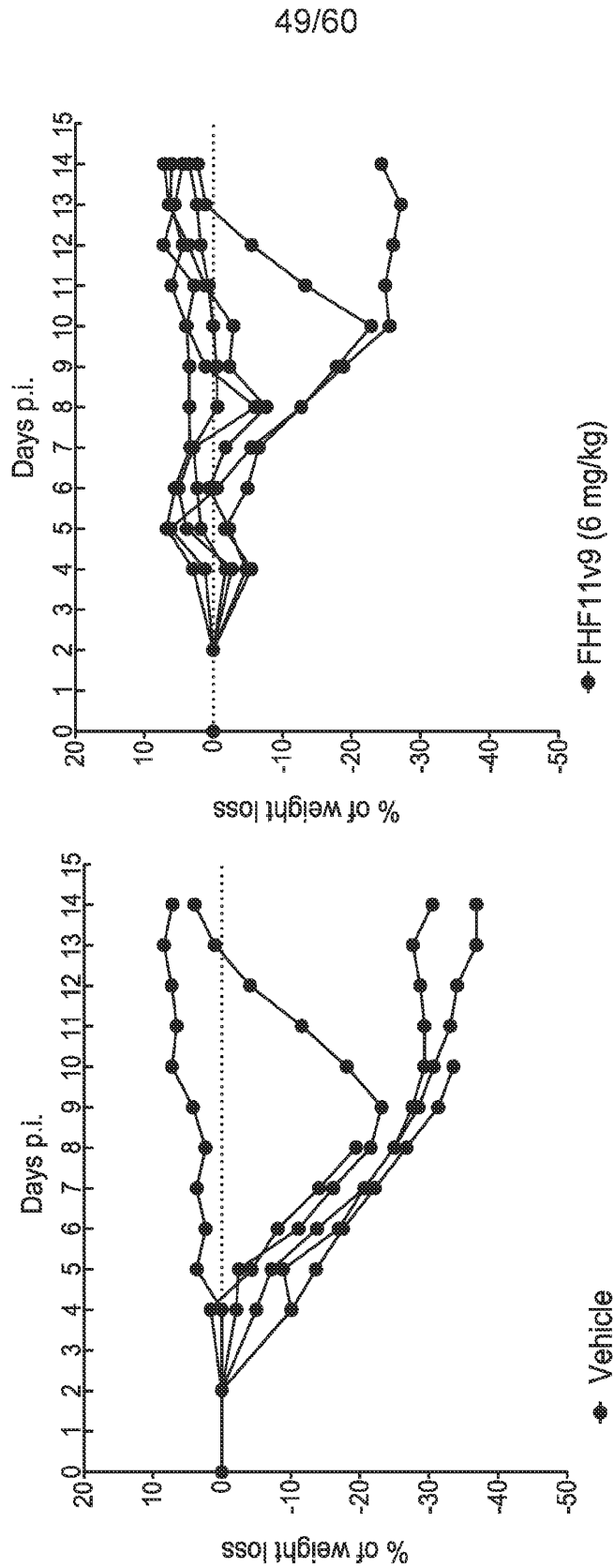


FIG. 21A

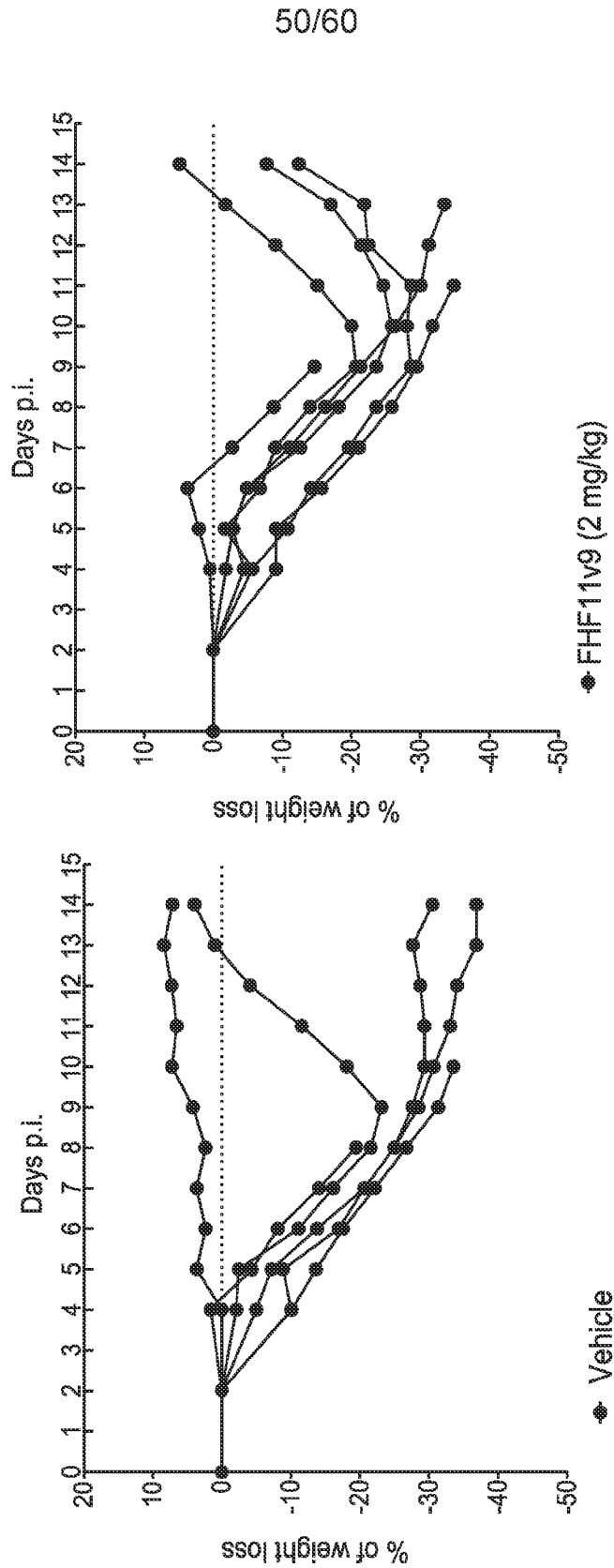


FIG. 21B

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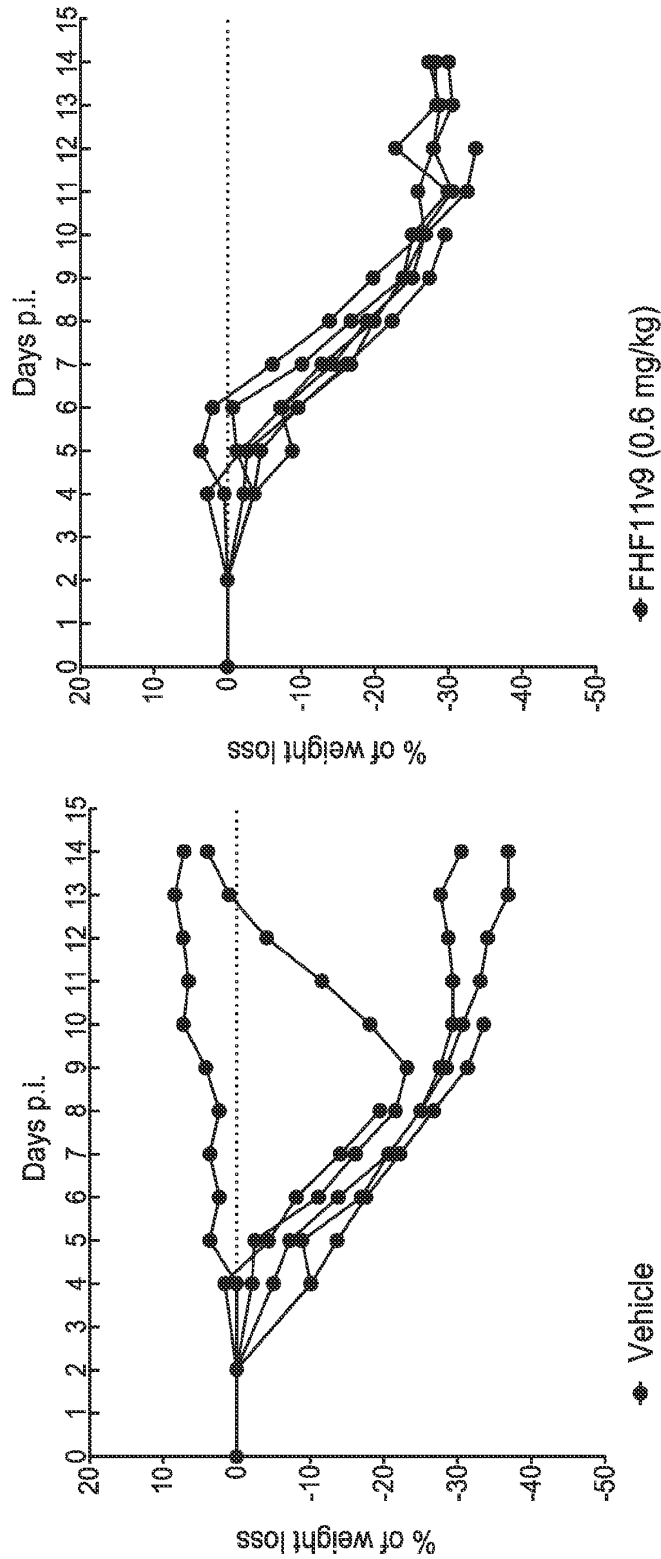


FIG. 21C

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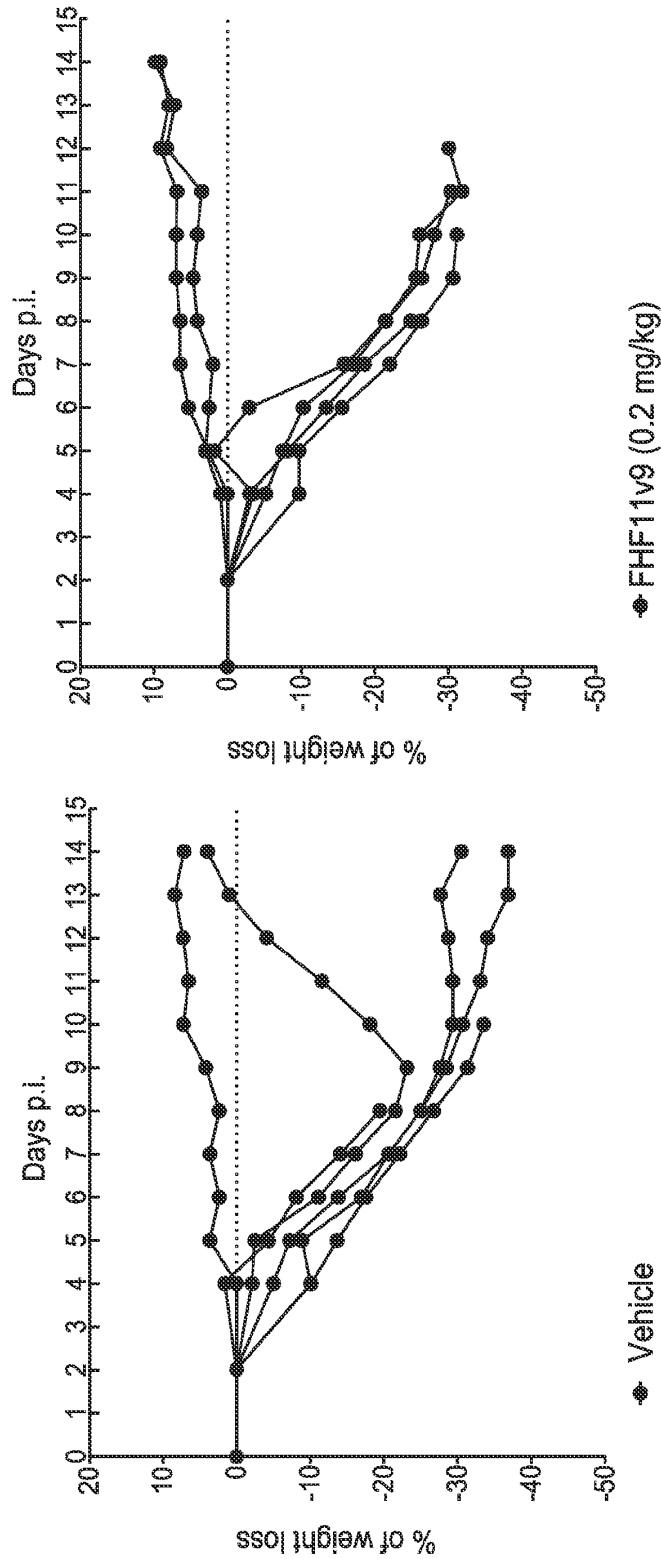


FIG. 21D

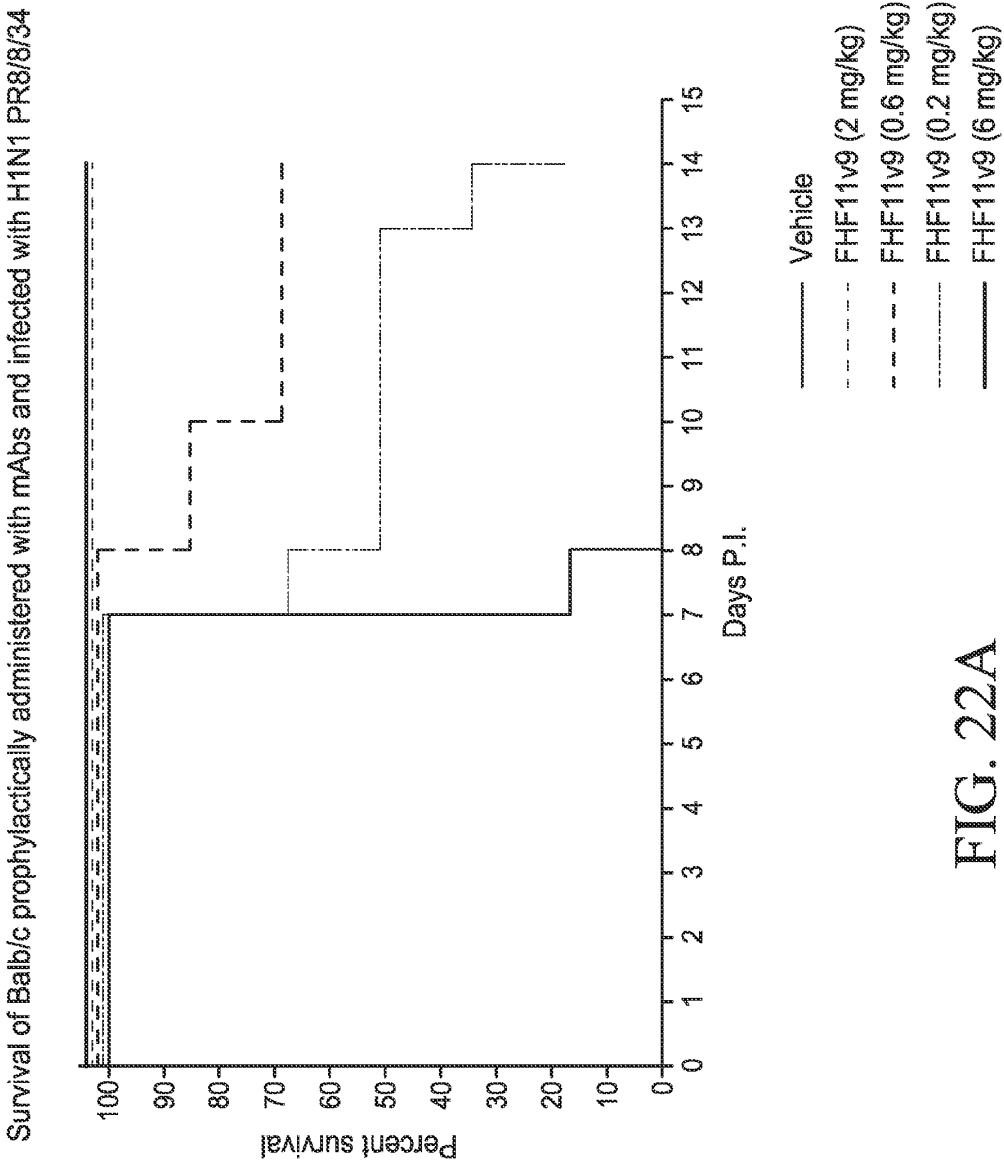


FIG. 22A

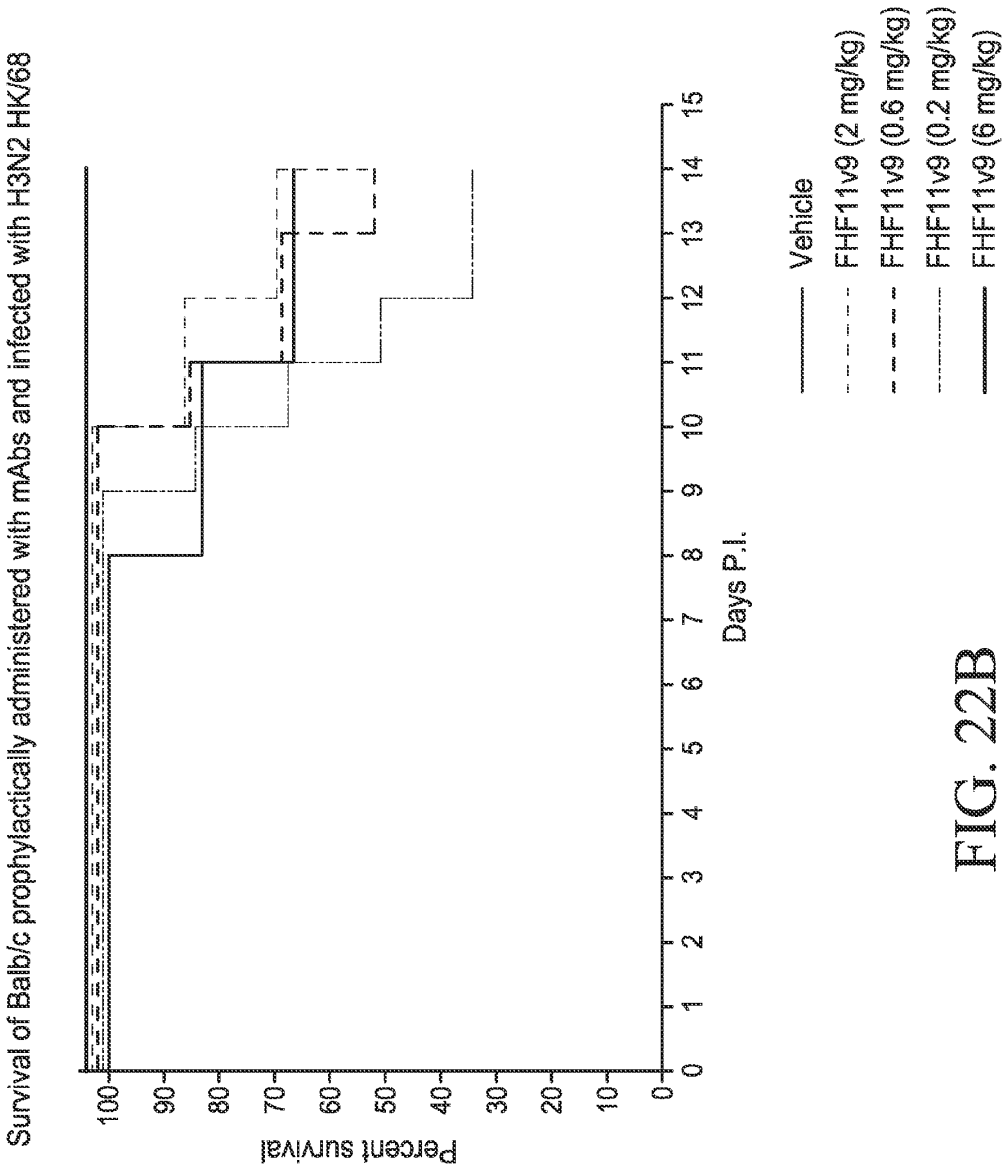
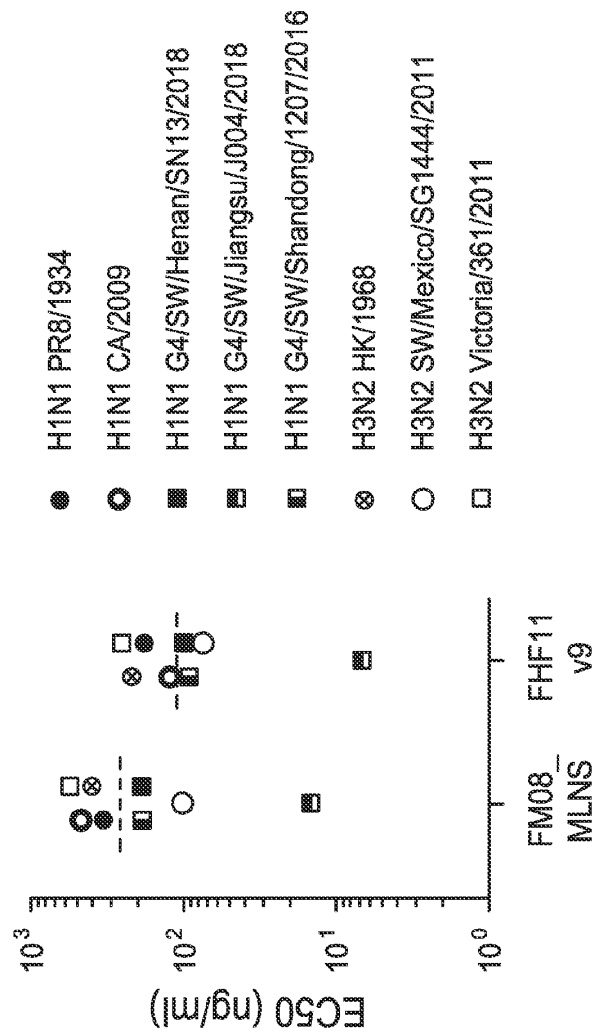


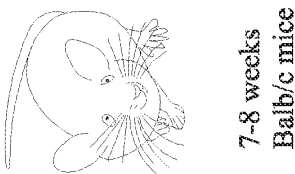
FIG. 22B



Neutralizing activity of FHF11v9 vs FM08_MLNS against H1N1 and H3N2 viruses measured by IAV NP staining

FIG. 23

Group	Mouse Strain	Treatment	Influenza Infection	Endpoints
Control	BALB/c	Vehicle Control	A/Puerto Rico/8/34	Bodyweight, mortality
mAb-08	BALB/c	6mg/kg	A/Puerto Rico/8/34	
mAb-08	BALB/c	2 mg/kg	A/Puerto Rico/8/34	
mAb-08	BALB/c	0.6 mg/kg	A/Puerto Rico/8/34	
mAb-08	BALB/c	0.2 mg/kg	A/Puerto Rico/8/34	
mAb-11	BALB/c	6 mg/kg	A/Puerto Rico/8/34	
mAb-11	BALB/c	2 mg/kg	A/Puerto Rico/8/34	
mAb-11	BALB/c	0.6 mg/kg	A/Puerto Rico/8/34	
mAb-11	BALB/c	0.2 mg/kg	A/Puerto Rico/8/34	
54 mice total				
Control	BALB/c	Vehicle Control	A/Hong Kong/8/68	Bodyweight, mortality
mAb-08	BALB/c	6mg/kg	A/Hong Kong/8/68	
mAb-08	BALB/c	2 mg/kg	A/Hong Kong/8/68	
mAb-08	BALB/c	0.6 mg/kg	A/Hong Kong/8/68	
mAb-08	BALB/c	0.2 mg/kg	A/Hong Kong/8/68	
mAb-11	BALB/c	6 mg/kg	A/Hong Kong/8/68	
mAb-11	BALB/c	2 mg/kg	A/Hong Kong/8/68	
mAb-11	BALB/c	0.6 mg/kg	A/Hong Kong/8/68	
mAb-11	BALB/c	0.2 mg/kg	A/Hong Kong/8/68	



mAb-08 = FM08_MLNS
mAb-11 = FHF11v9-rlgG-LS

FIG. 24A

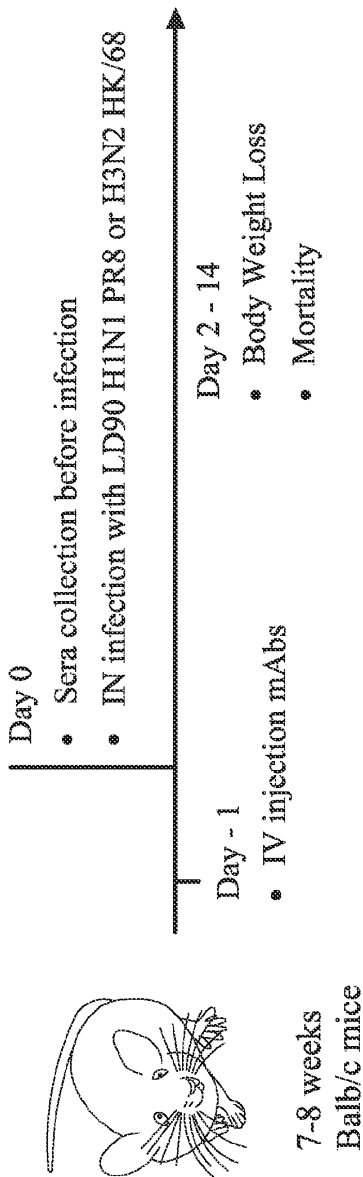
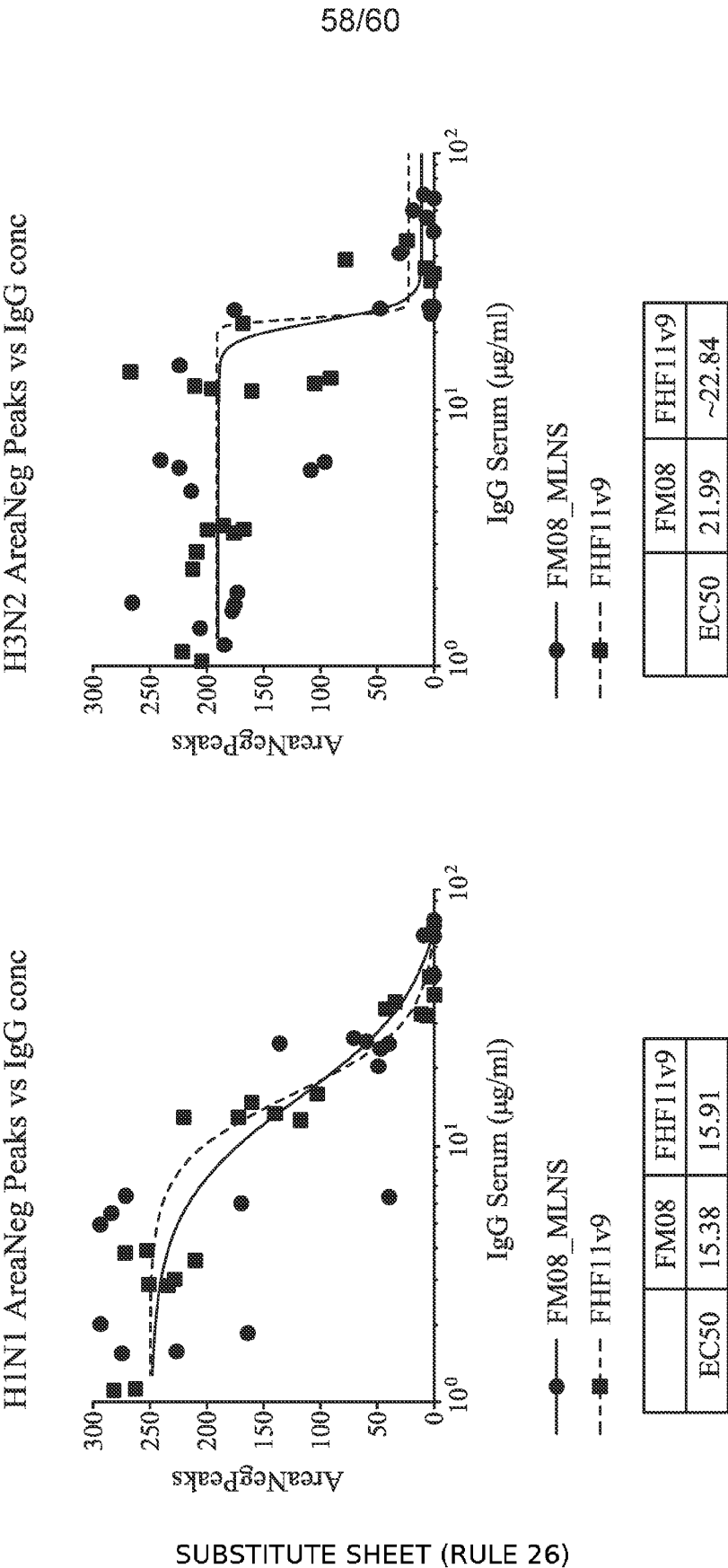


FIG. 24B



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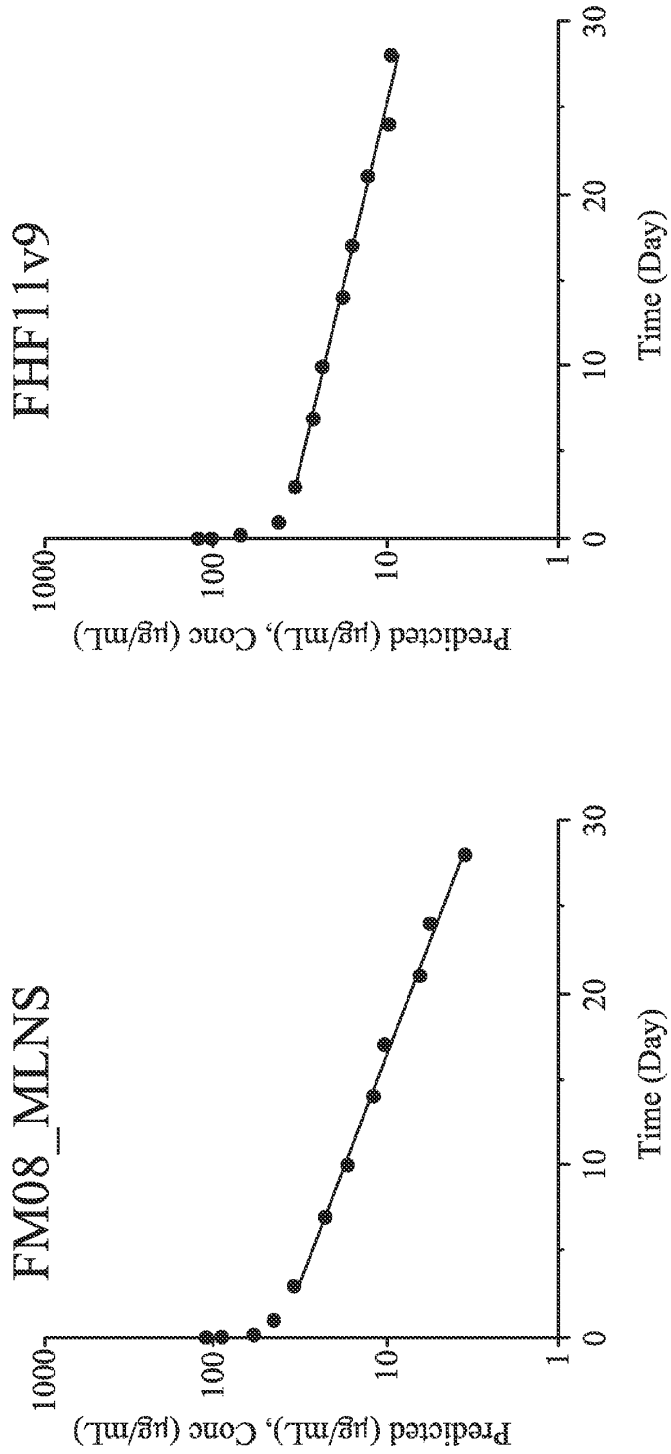


FIG. 26A

Group	ID	Dose (µg)	Rsq	No_points_lambda_z	Lambda-z (1/Day)	HL_Lambda_z (Day)	AUClast (Day*µg/mL)	Cavg (µg/mL)	CLss (mL/Day)	Vz (mL)
FHF11v9		90.00	0.98	8.00	0.10	7.21	261.50	40.29	2.23	23.25
		90.00	0.98	8.00	0.06	10.94	378.35	42.79	2.10	33.20
		95.00	0.99	8.00	0.05	12.76	608.11	66.18	1.44	26.43
		85.00	0.98	8.00	0.06	12.36	560.60	56.69	1.50	26.73
		90.00	0.96	8.00	0.05	14.34	99.53	10.12	8.89	184.00
	Mean	90.000	0.978	8.000	0.064	11.524	381.621	43.215	3.233	58.723
	SD	3.536	0.012	0.000	0.019	2.697	210.562	21.288	3.183	70.127
FM08-MLNS		95.00	0.99	8.00	0.09	7.65	477.10	62.77	1.51	16.71
		95.00	0.99	8.00	0.09	7.97	525.27	63.42	1.50	17.22
		100.00	0.99	8.00	0.09	7.86	471.63	59.79	1.67	18.95
		95.00	1.00	8.00	0.10	6.75	635.33	78.74	1.21	11.76
	Mean	96.250	0.994	8.000	0.092	7.558	527.333	66.180	1.473	16.160
	SD	2.500	0.003	0.000	0.007	0.552	75.926	8.521	0.194	3.090

• N=6 mice/mAb

I.V. dose = 5
mg/Kg

FIG. 26B