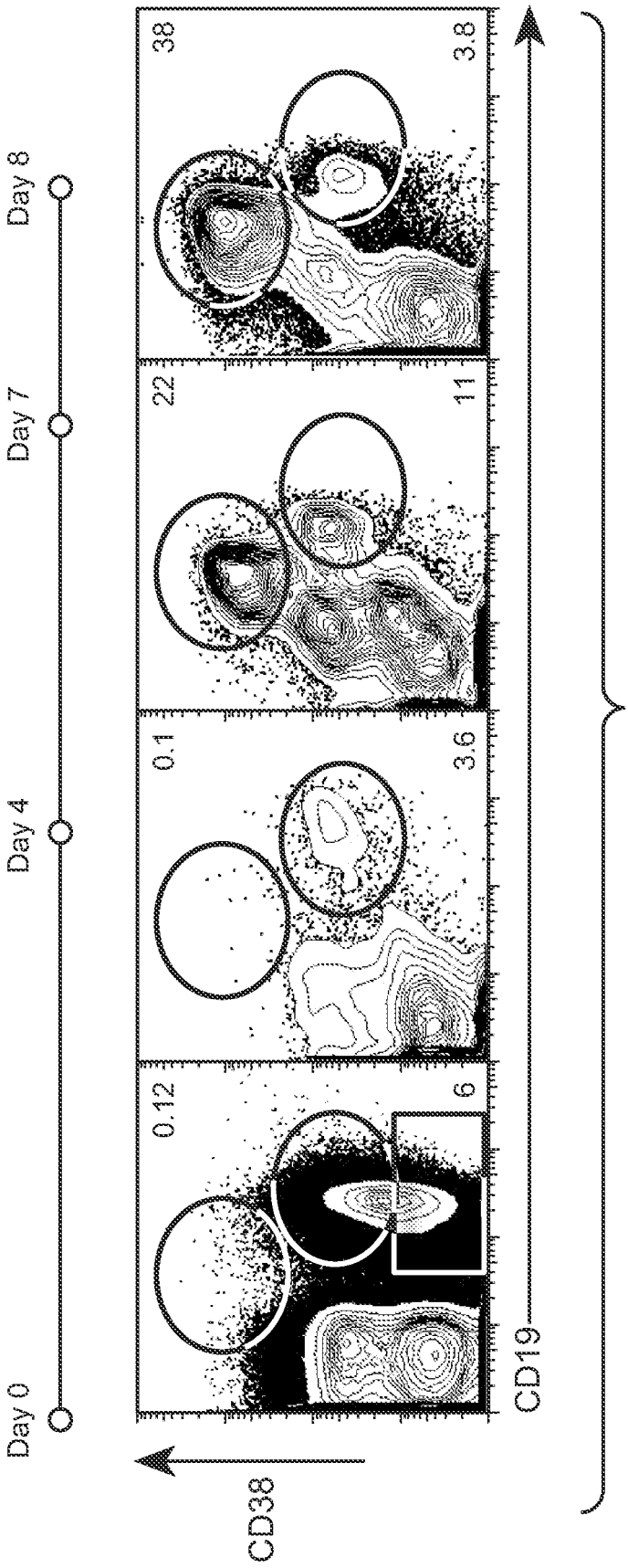


FIG. 1

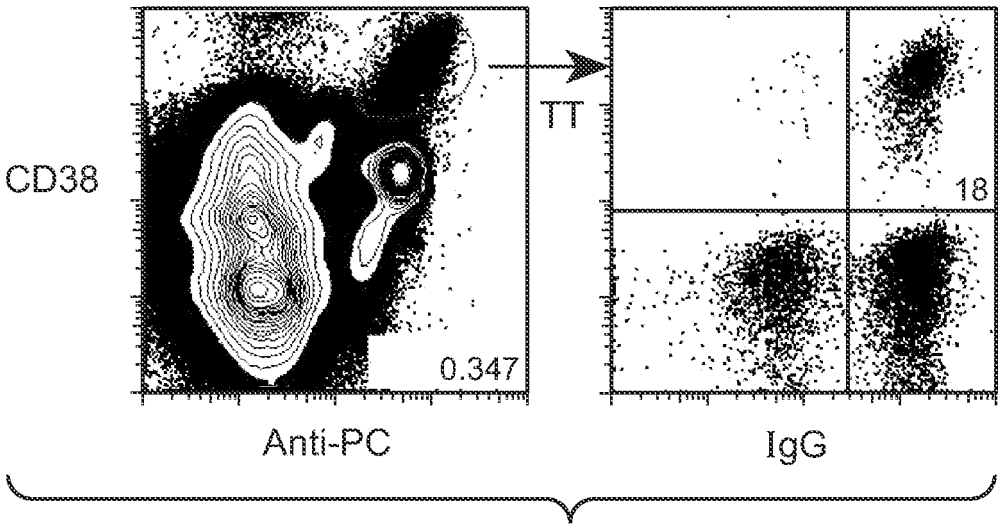


FIG. 2A

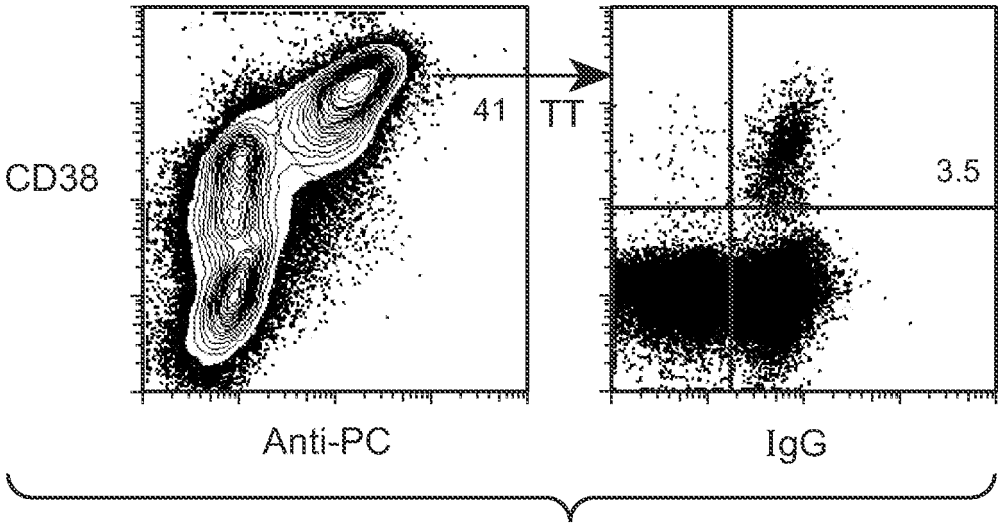


FIG. 2B

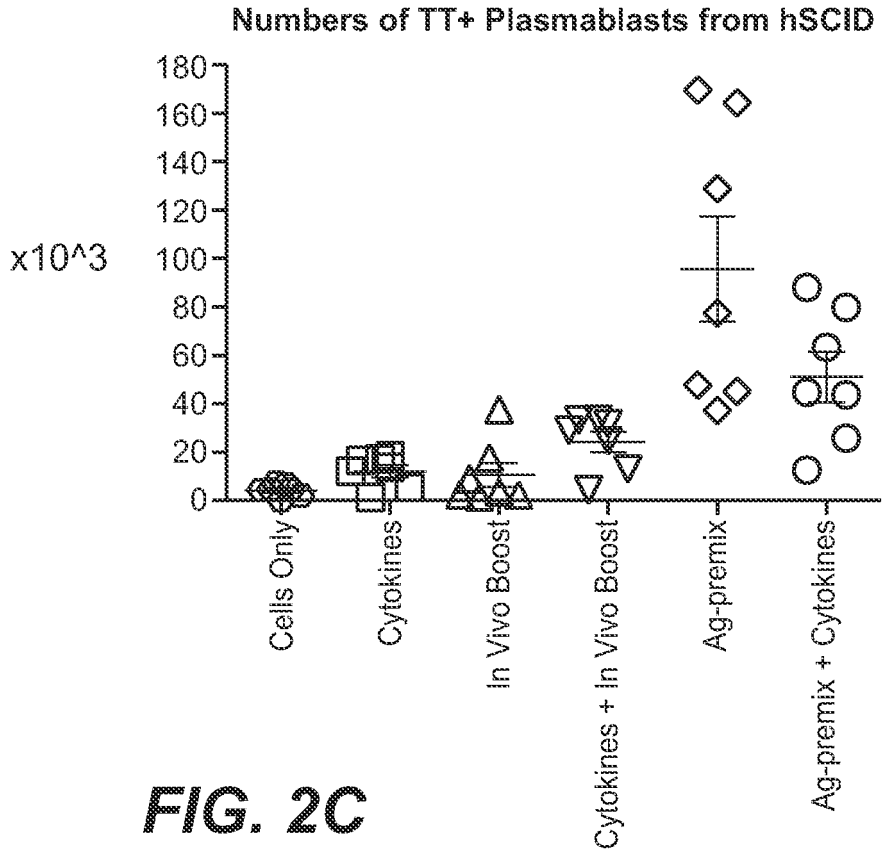

Numbers of TT+ Plasmablasts from hSCID
x10^3
180
160
140
120
100
80
60
40
20
0
Cells Only
Cytokines
In Vivo Boost
Cytokines + In Vivo Boost
Ag-premix
Ag-premix + Cytokines

FIG. 2C

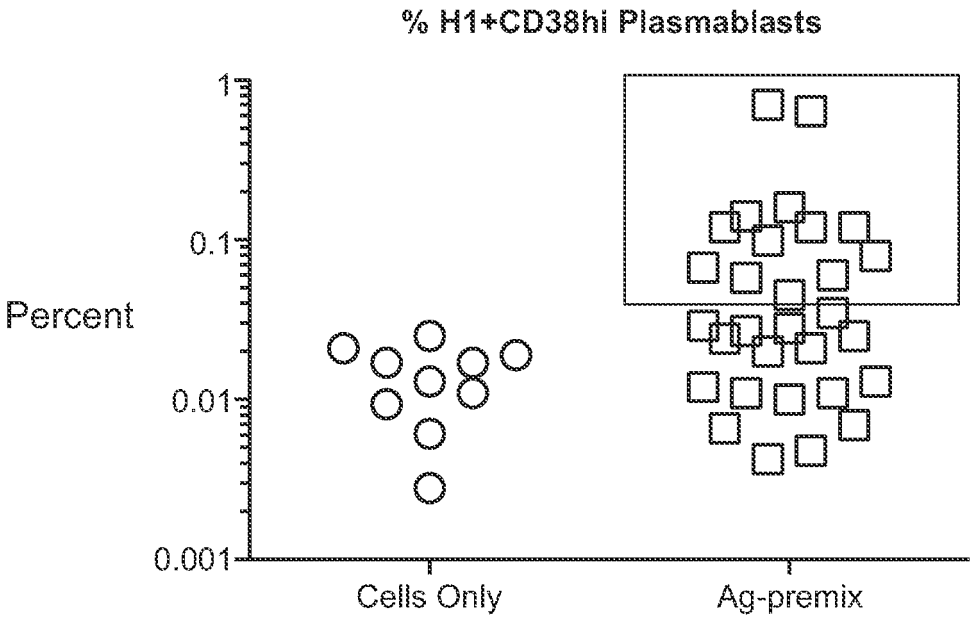

% H1+CD38hi Plasmablasts
Percent
1
0.1
0.01
0.001
Cells Only
Ag-premix

FIG. 4

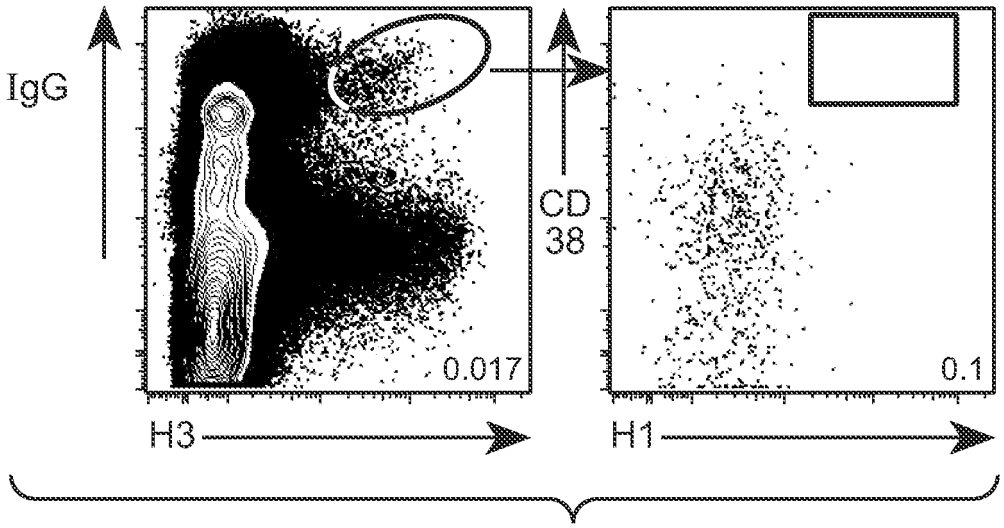

IgG
CD 38
0.017
0.1
H3
H1

FIG. 3A

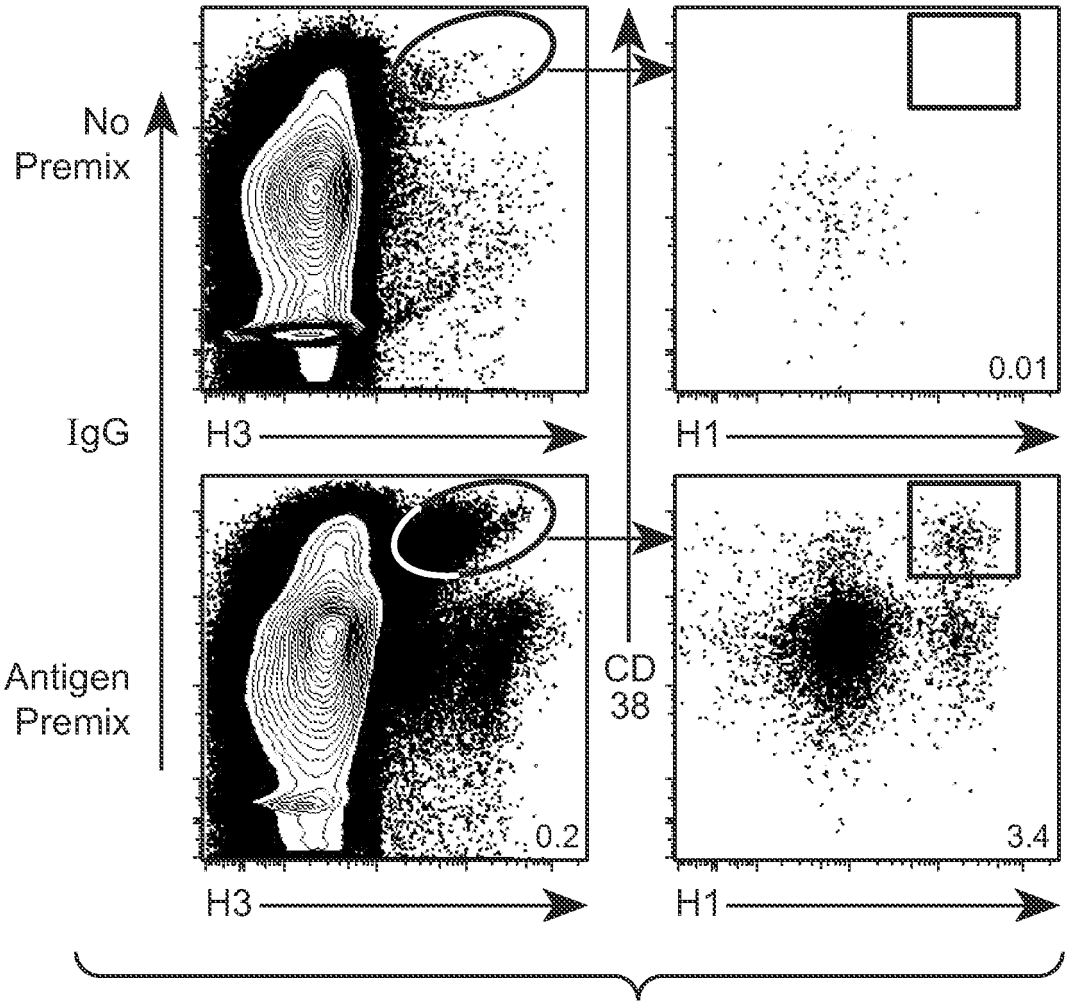

No Premix
IgG
Antigen Premix
CD 38
0.01
0.2
3.4
H3
H1
H3
H1

FIG. 3B

		39.18		39.29		81.39		36.89	
Influenza Strain	HA Subtype	IC50 (nM)	95% CI(nM)	IC50 (nM)	95% CI(nM)	IC50 (nM)	95% CI(nM)	IC50 (nM)	95% CI(nM)
A/CA/7/2009	H1	1.1	0.75 - 1.6	2.5	2.0 - 3.1	2.1	1.1 - 3.8	NA	NA
A/Brisbane/59/2007	H1	2.3	1.8 - 3.0	1.9	1.2 - 2.9	0.65	0.46 - 0.94	NA	NA
A/Solomon/3/2006	H1	8.0	3.9 - 16.6	25.1	20.1 - 31.4	14.6	12.3 - 17.4	NA	NA
A/New Caledonia/20/1999	H1	3.1	1.3 - 7.4	9.2	5.7 - 15.0	6.1	4.7 - 7.9	NA	NA
A/PR/8/1934	H1	1.2	0.81 - 1.9	2.0	1.3 - 3.3	1.9	1.2 - 3.2	NA	NA
A/Japan/305/1957	H2	2.4	1.4 - 4.1	6.0	4.4 - 8.1	3.7	2.4 - 5.6	NA	NA
A/Victoria/361/2011	H3	NA	NA	3.4	2.4 - 4.8	3.6	2.4 - 5.3	9.7	8.0 - 11.9
A/Perth/16/2009	H3	NA	NA	3.0	2.4 - 3.8	1.6	1.2 - 2.0	1.1	0.86 - 1.5
A/Brisbane/10/2007	H3	NA	NA	2.3	2.0 - 2.7	1.9	1.7 - 2.2	1.9	1.5 - 2.4
A/Wisconsin/67/2005	H3	NA	NA	1.3	0.88 - 1.8	0.81	0.64 - 1.0	1.6	0.81 - 3.3
A/Victoria/3/1975	H3	NA	NA	2.5	1.9 - 3.4	2.8	2.2 - 3.7	2.2	0.94 - 5.0
A/Port Chalmers/1/1973	H3	NA	NA	2.2	1.6 - 3.1	1.5	1.1 - 1.9	1.9	0.75 - 4.6
A/HK/8/1968	H3	NA	NA	45.1	25.7 - 79.2	26.3	14.5 - 47.8	34.7	19.8 - 60.7
A/Aichi/2/1968	H3	NA	NA	35.0	21.1 - 58.0	7.3	3.7 - 14.1	13.9	8.2 - 23.4

FIG. 5

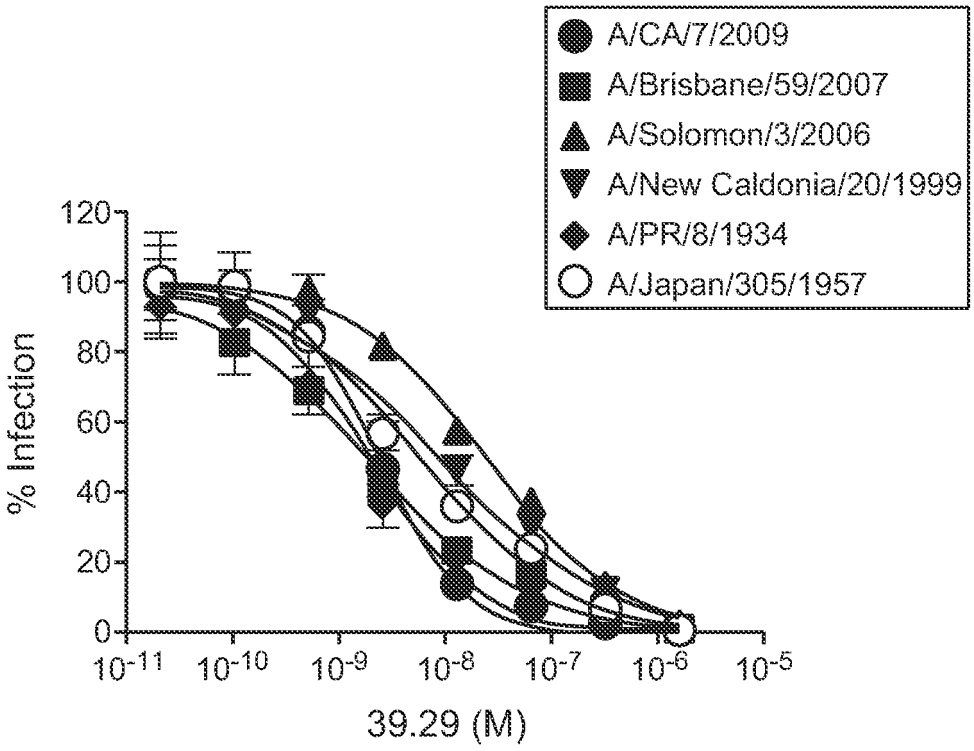

A/CA/7/2009
A/Brisbane/59/2007
A/Solomon/3/2006
A/New Caldonia/20/1999
A/PR/8/1934
A/Japan/305/1957
% Infection
120
100
80
60
40
20
0
10-11
10-10
10-9
10-8
10-7
10-6
10-5
39.29 (M)

FIG. 6A

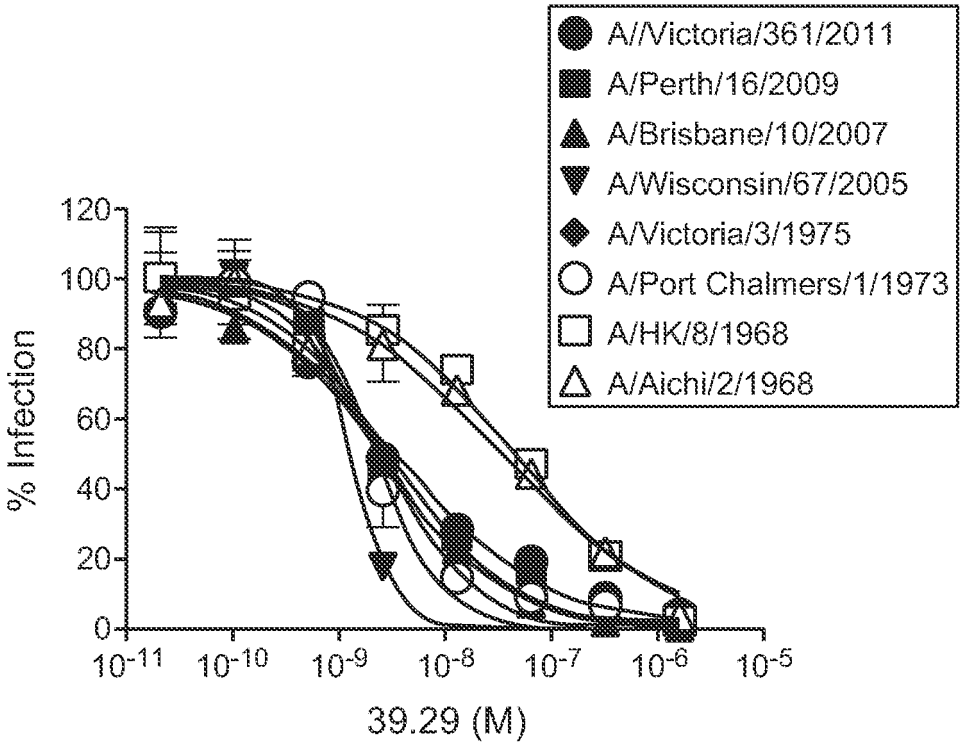

A//Victoria/361/2011
A/Perth/16/2009
A/Brisbane/10/2007
A/Wisconsin/67/2005
A/Victoria/3/1975
A/Port Chalmers/1/1973
A/HK/8/1968
A/Aichi/2/1968
% Infection
120
100
80
60
40
20
0
10-11
10-10
10-9
10-8
10-7
10-6
10-5
39.29 (M)

FIG. 6B

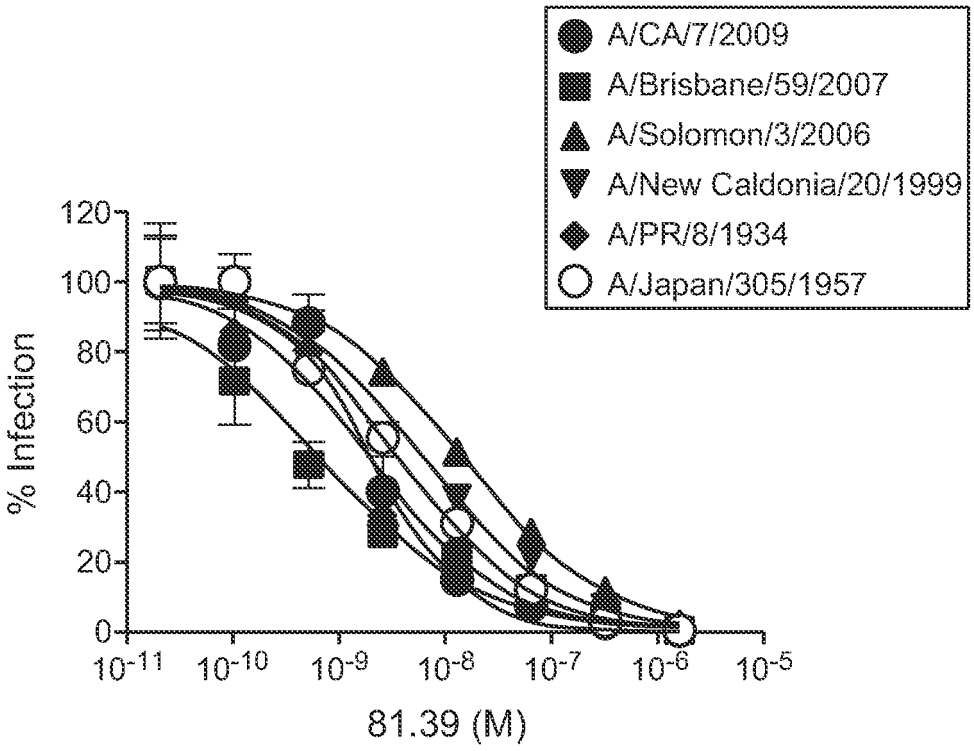

A/CA/7/2009
A/Brisbane/59/2007
A/Solomon/3/2006
A/New Caldonia/20/1999
A/PR/8/1934
A/Japan/305/1957
% Infection
120
100
80
60
40
20
0
10-11
10-10
10-9
10-8
10-7
10-6
10-5
81.39 (M)

FIG. 7A

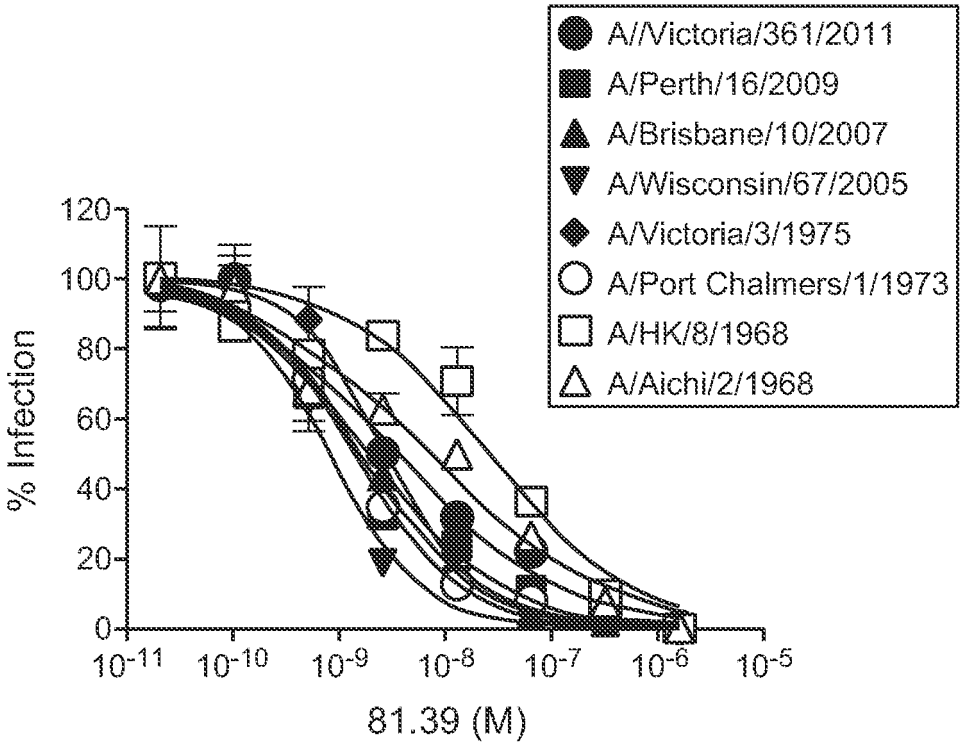

A//Victoria/361/2011
A/Perth/16/2009
A/Brisbane/10/2007
A/Wisconsin/67/2005
A/Victoria/3/1975
A/Port Chalmers/1/1973
A/HK/8/1968
A/Aichi/2/1968
% Infection
120
100
80
60
40
20
0
10-11
10-10
10-9
10-8
10-7
10-6
10-5
81.39 (M)

FIG. 7B

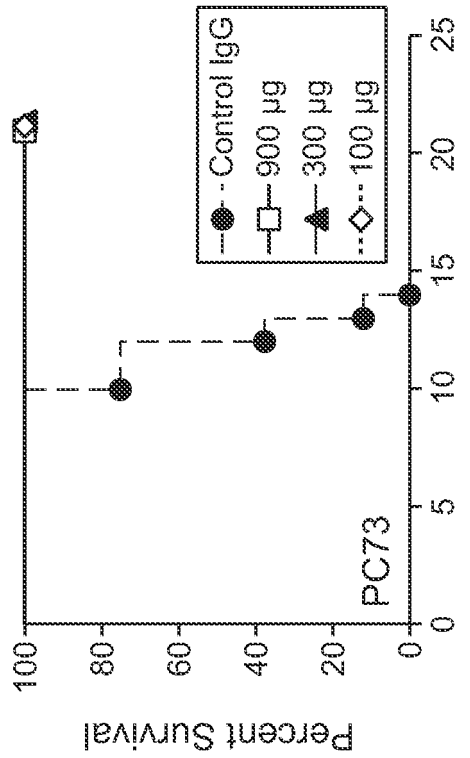


FIG. 8B

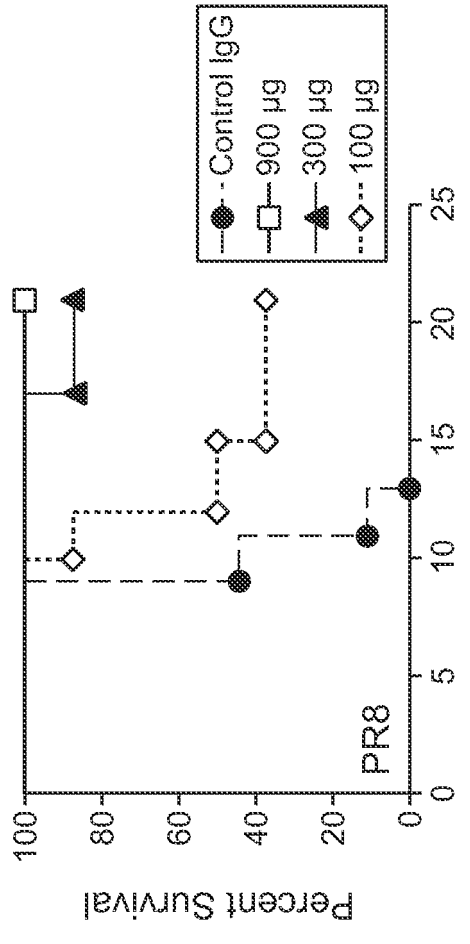


FIG. 8A

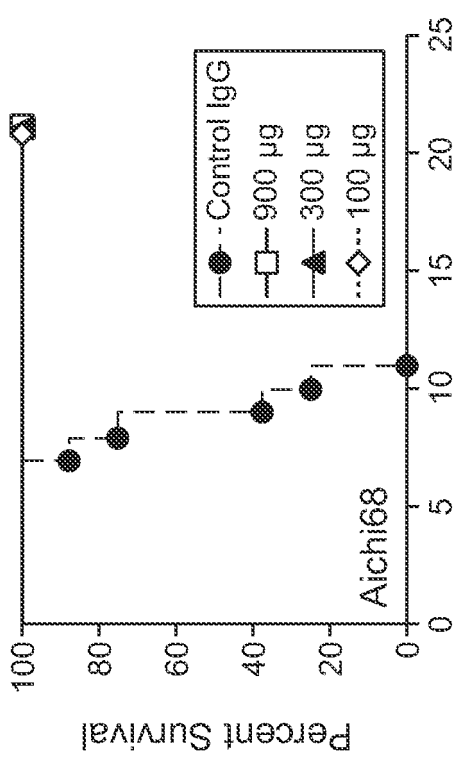


FIG. 8D

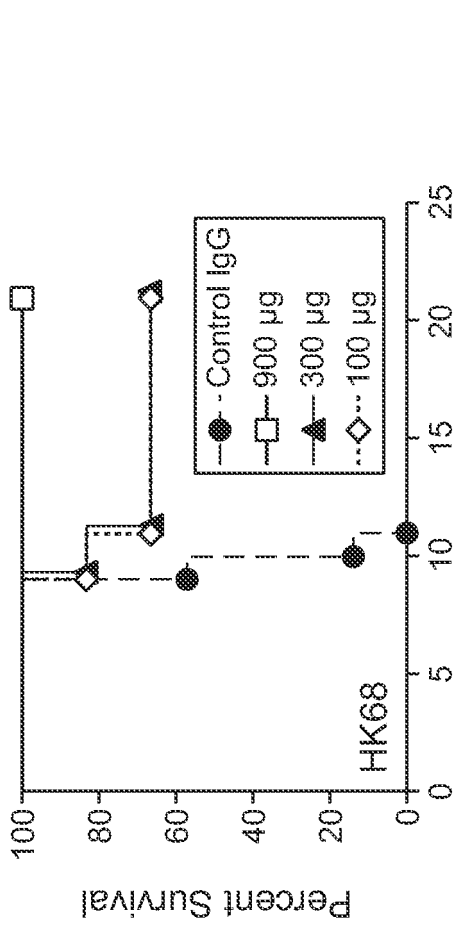


FIG. 8C