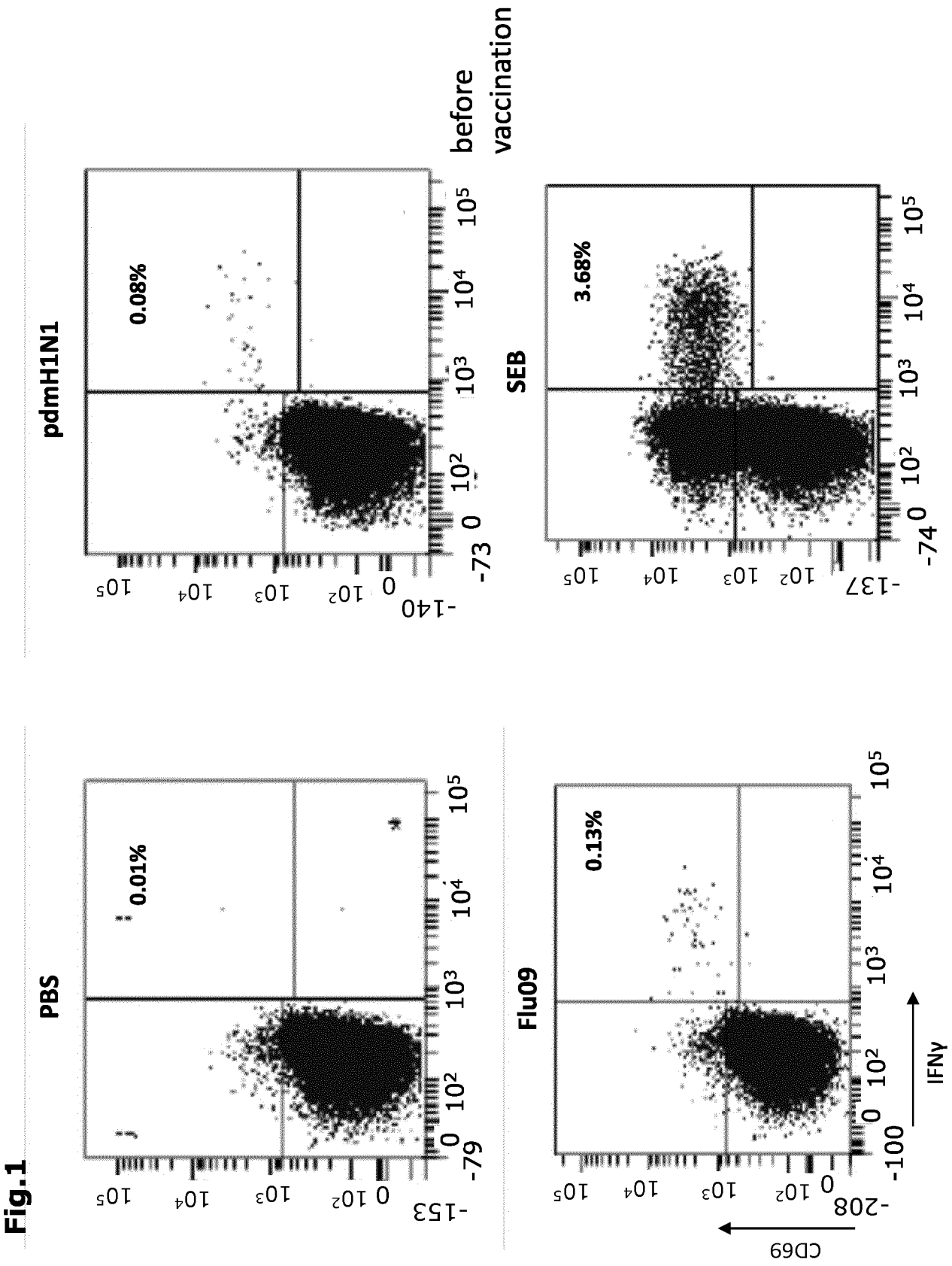
Fig.1


before vaccination
PBS
pdmH1N1
SEB
Flu09
0.01%
0.08%
3.68%
0.13%
CD69
IFNγ

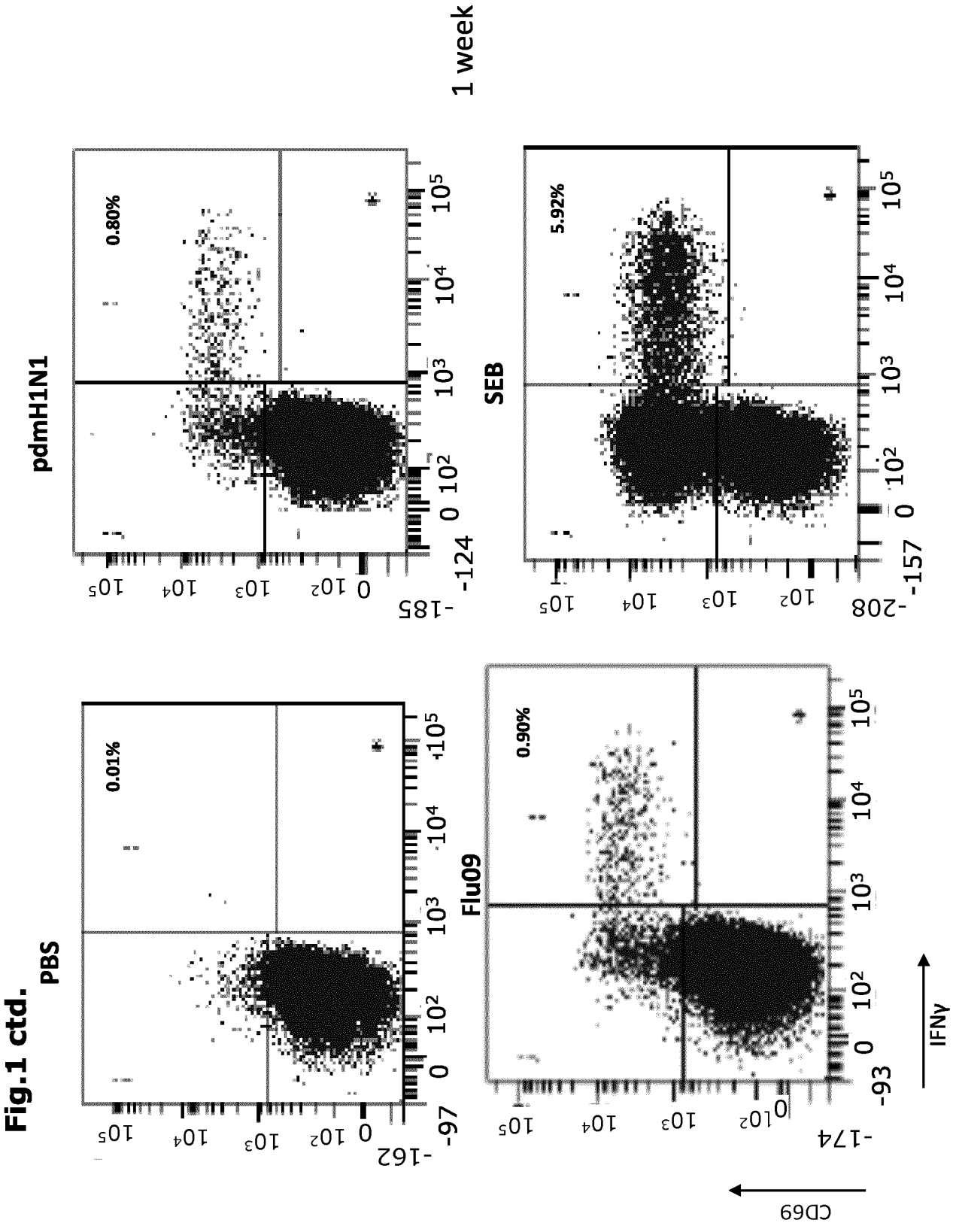
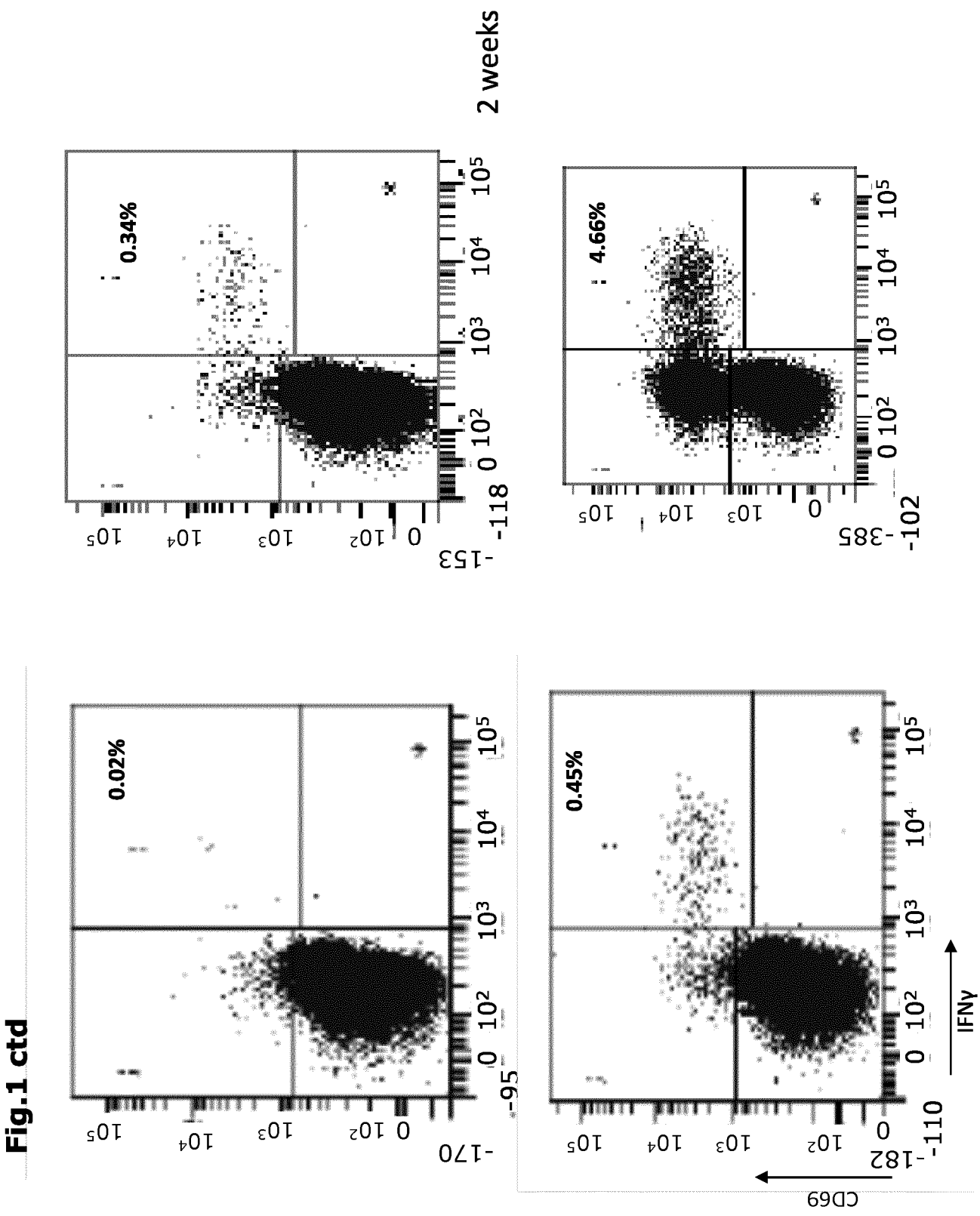

Fig.1 ctd.
1 week
PBS
pdmH1N1
SEB
Flu09
0.01%
0.80%
5.92%
0.90%
-162
-97
-185
-124
-208
-157
-174
-93
CD69
IFNγ

Fig.1 ctd



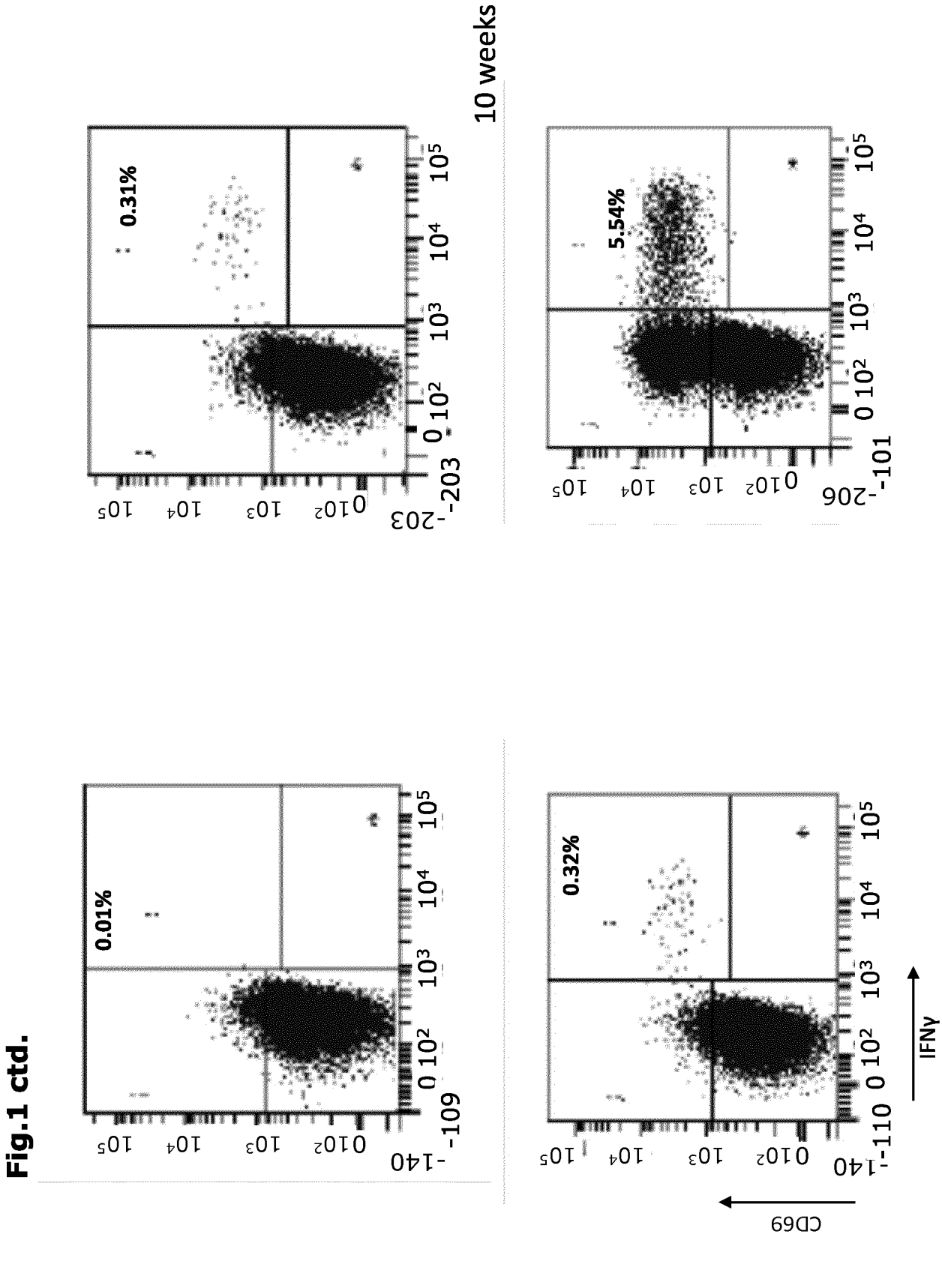


Fig.1 ctd.

Fig.2A

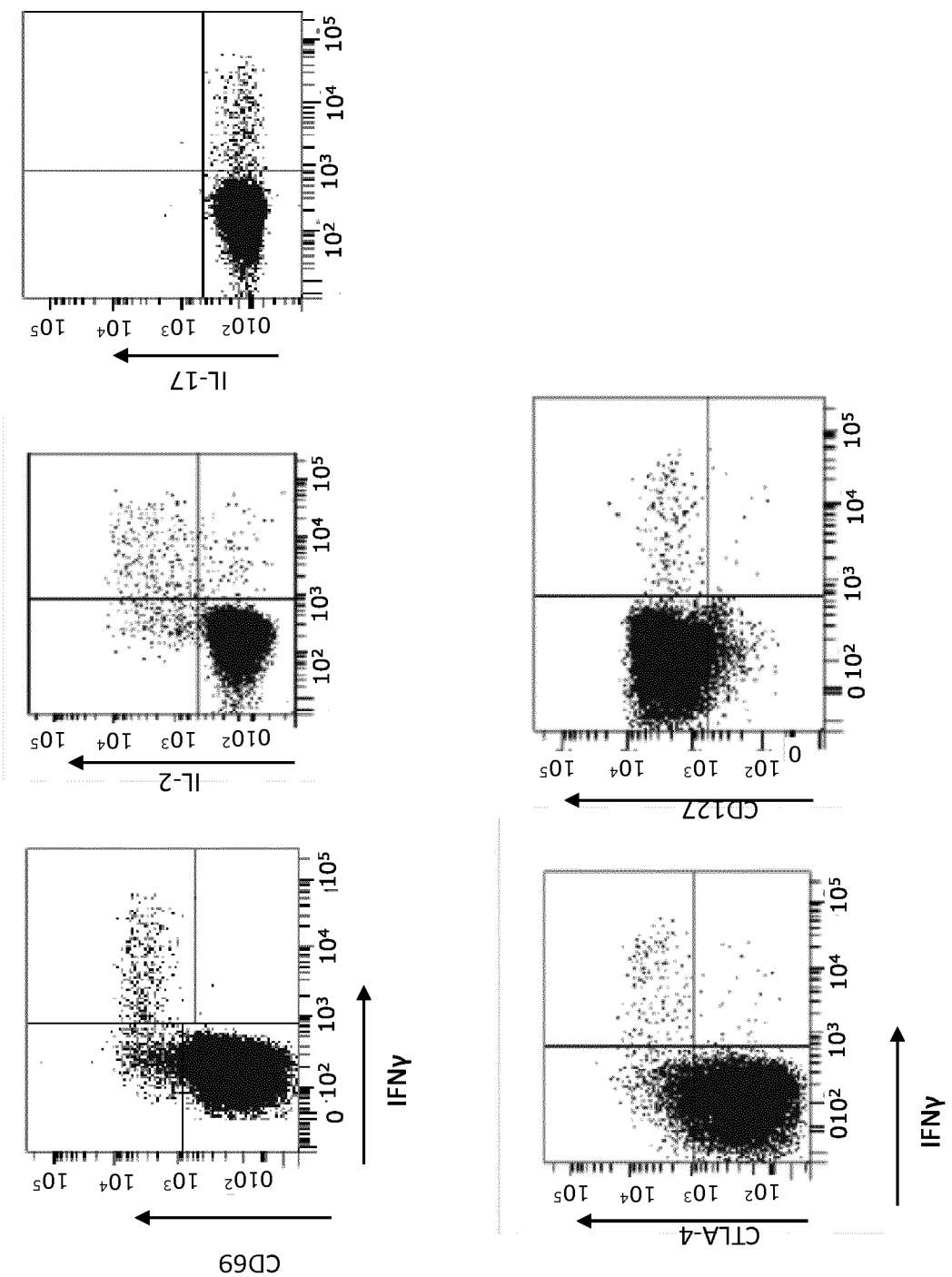


Fig.2C

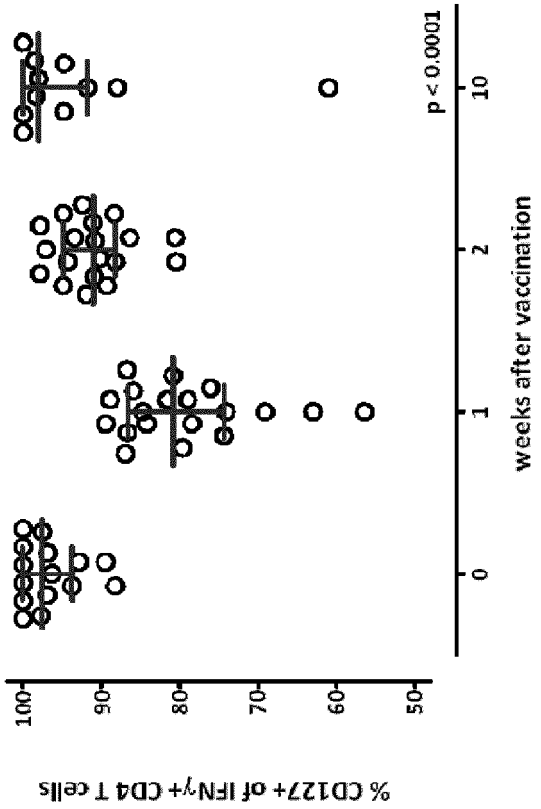

% CD127+ of IFNγ+ CD4 T cells
100
90
80
70
60
50
0
1
2
10
weeks after vaccination
p < 0.0001

Fig.2B

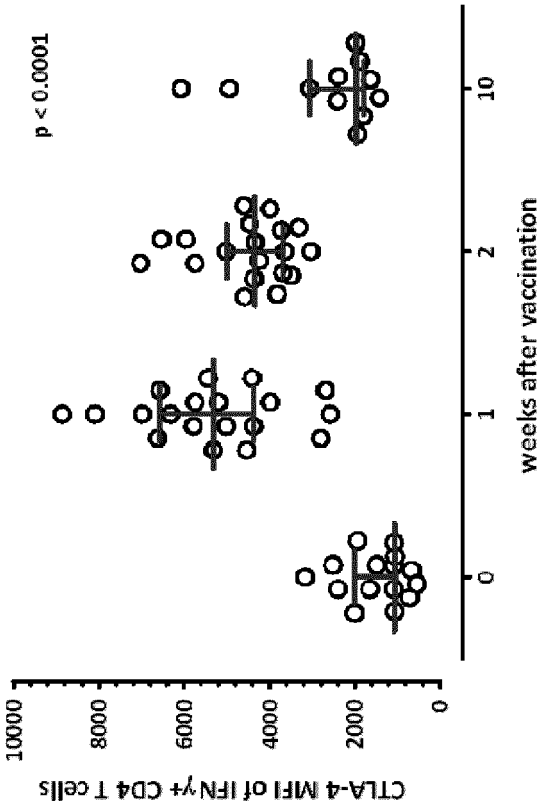

CTLA-4 MFI of IFNγ+ CD4 T cells
10000
8000
6000
4000
2000
0
0
1
2
10
weeks after vaccination
p < 0.0001

Fig.3

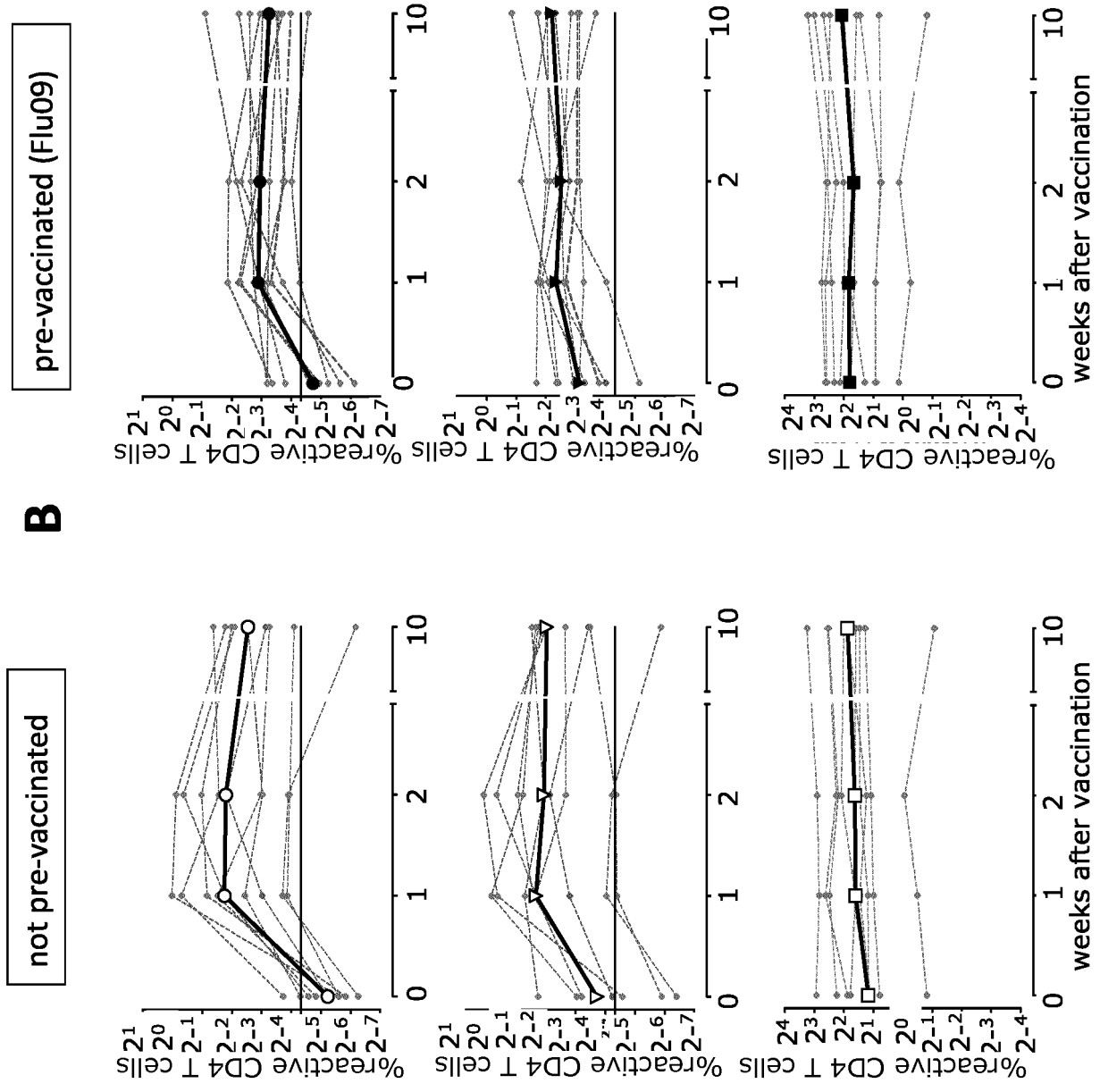

A
B
not pre-vaccinated
pre-vaccinated (Flu09)
pdmH1N1
Flu09
SEB
%reactive CD4 T cells
weeks after vaccination

Fig.3C

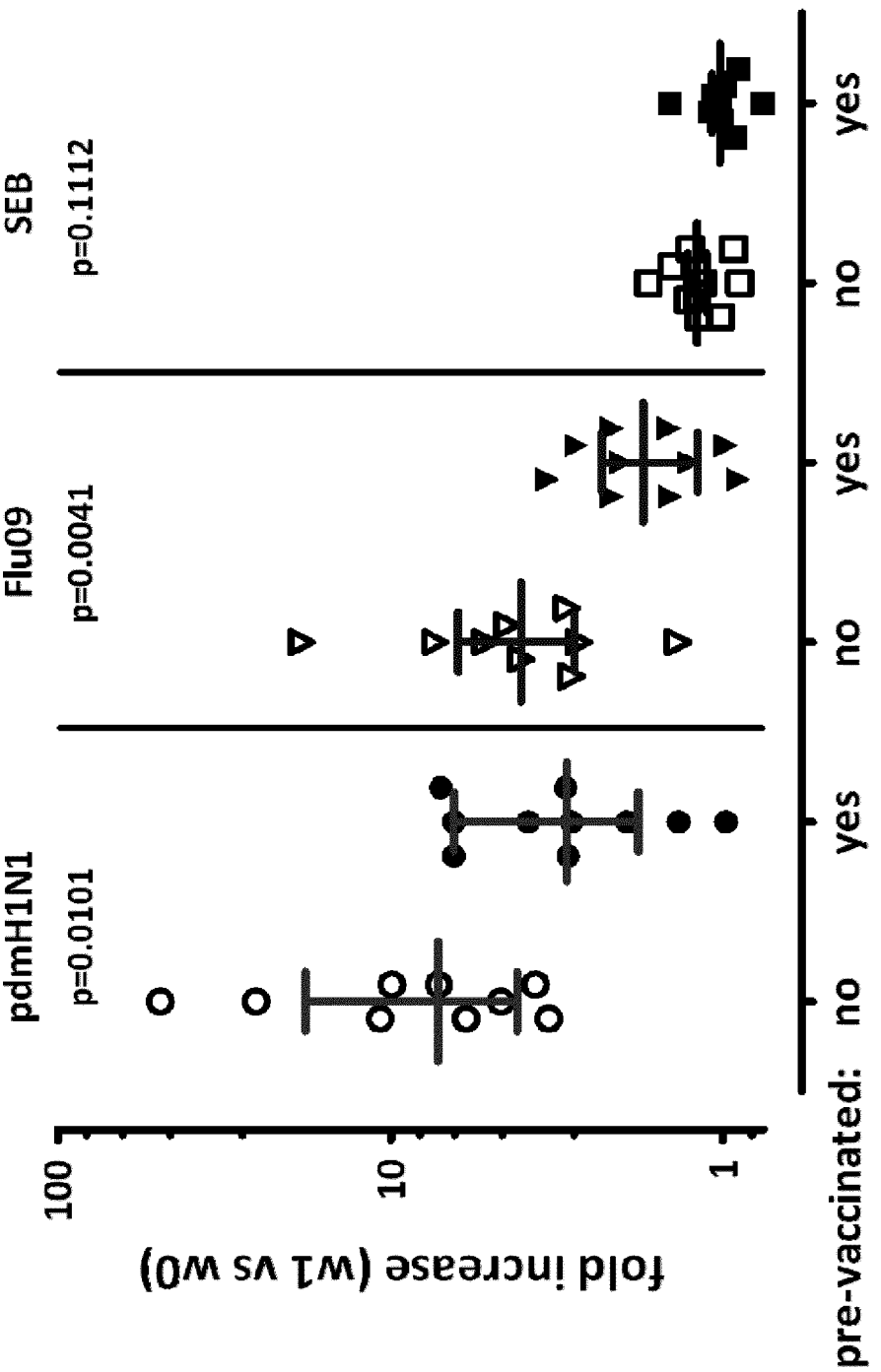

fold increase (w1 vs w0)
100
10
1
pdmH1N1
p=0.0101
Flu09
p=0.0041
SEB
p=0.1112
pre-vaccinated:
no
yes
no
yes
no
yes

Fig.4

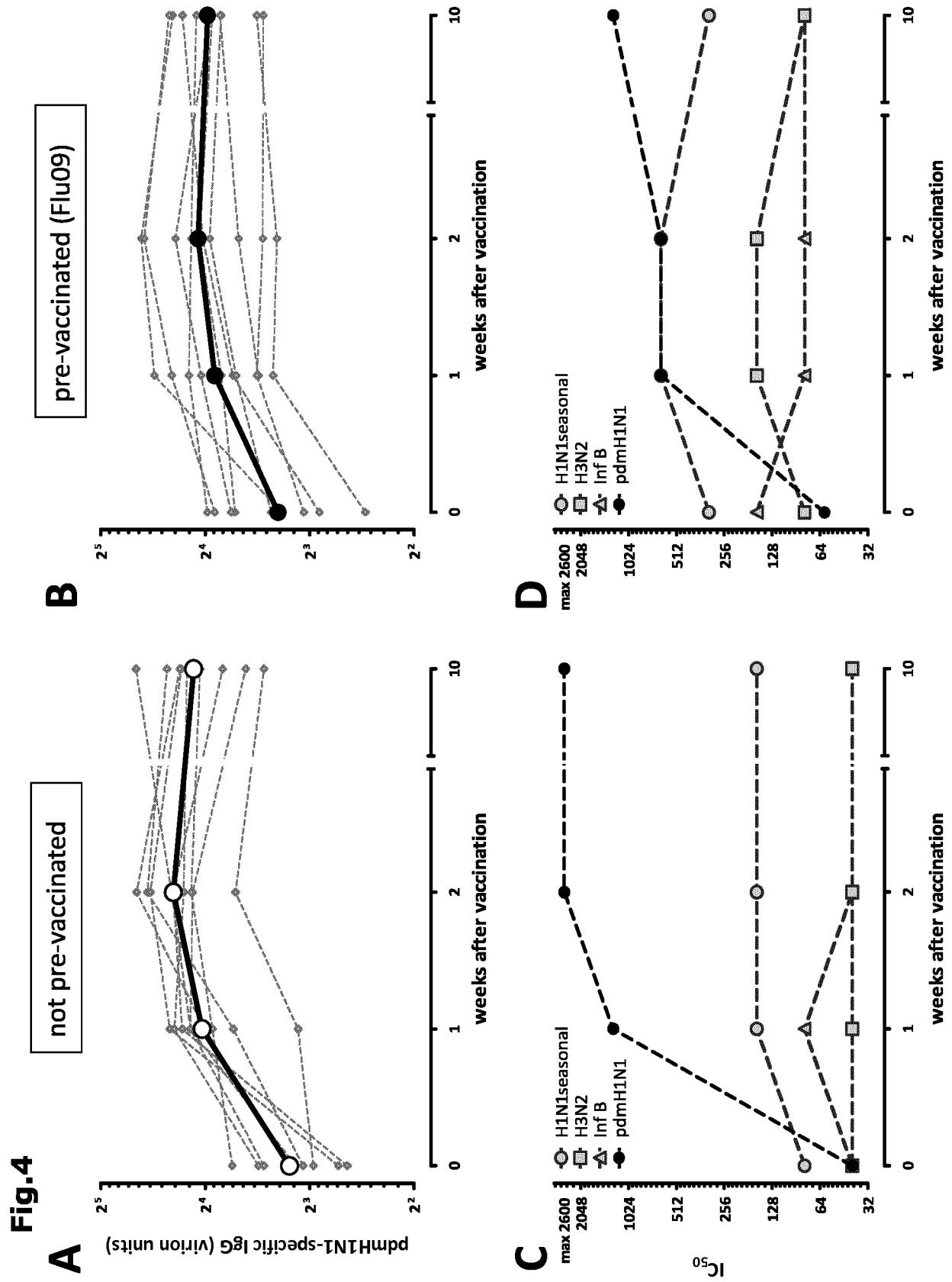

A
not pre-vaccinated
pdmH1N1-specific IgG (virion units)
weeks after vaccination
B
pre-vaccinated (Flu09)
weeks after vaccination
C
H1N1seasonal
H3N2
Inf B
pdmH1N1
IC50
weeks after vaccination
D
H1N1seasonal
H3N2
Inf B
pdmH1N1
weeks after vaccination

Fig.5A

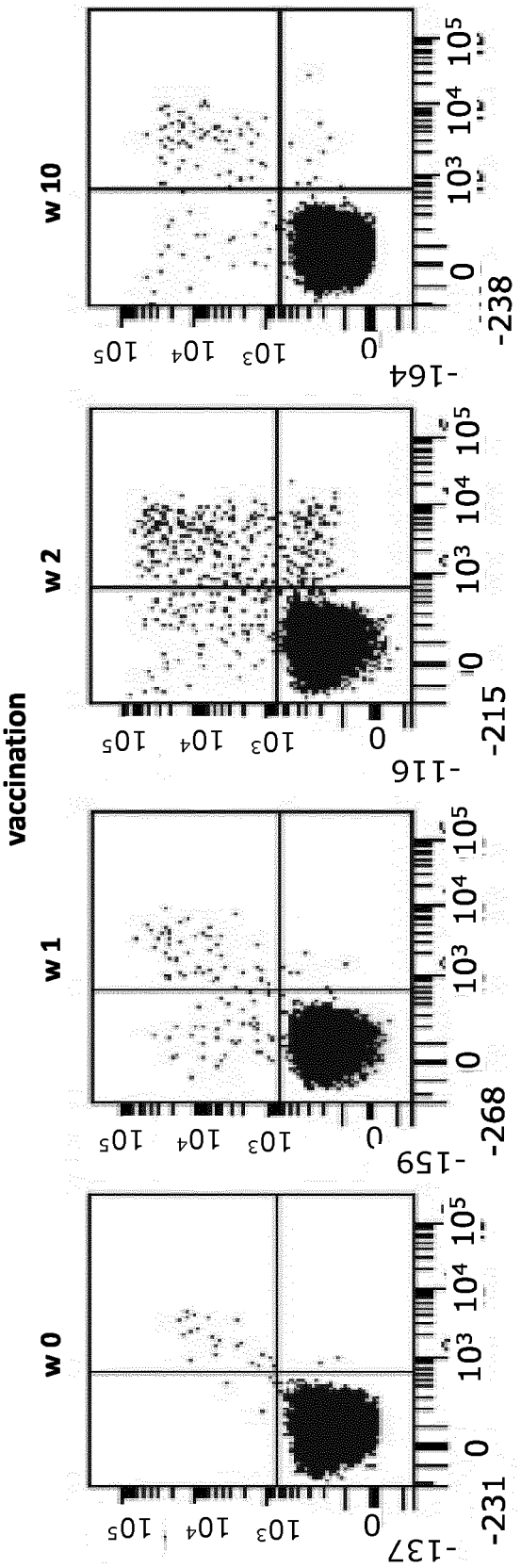
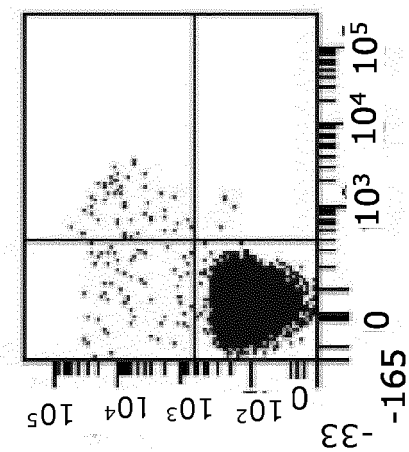
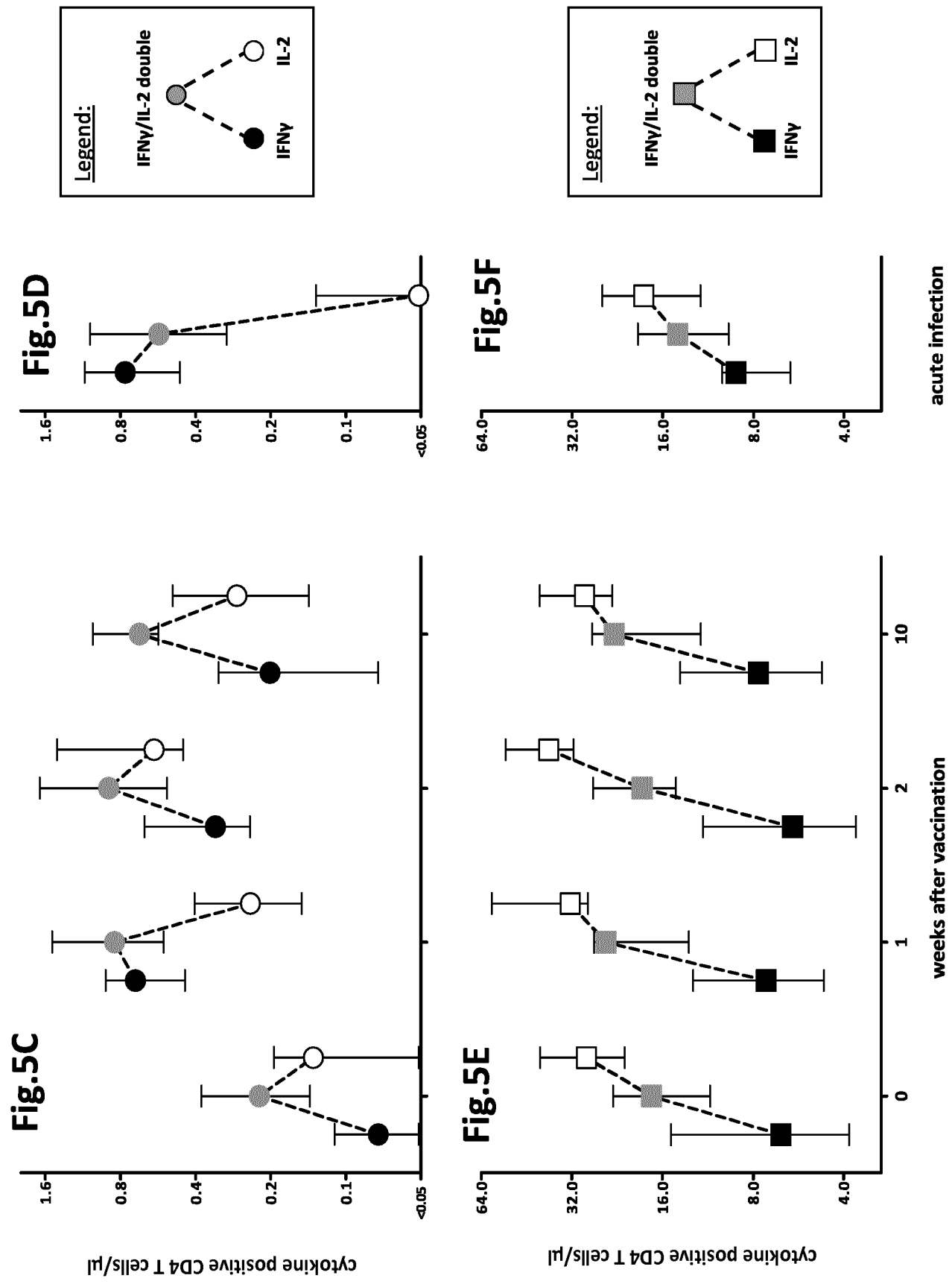

vaccination
w 0
w 1
w 2
w 10
-231
-268
-215
-238
-137
-159
-116
-164
0
10^3
10^4
10^5
10^2

Fig.5B


acute infection
-165
-33
0
10^2
10^3
10^4
10^5


Fig.5C
Fig.5D
Fig.5E
Fig.5F
Legend:
IFNγ/IL-2 double
IL-2
IFNγ
cytokine positive CD4 T cells/µl
weeks after vaccination
acute infection
1.6
0.8
0.4
0.2
0.1
<0.05
64.0
32.0
16.0
8.0
4.0
0
1
2
10