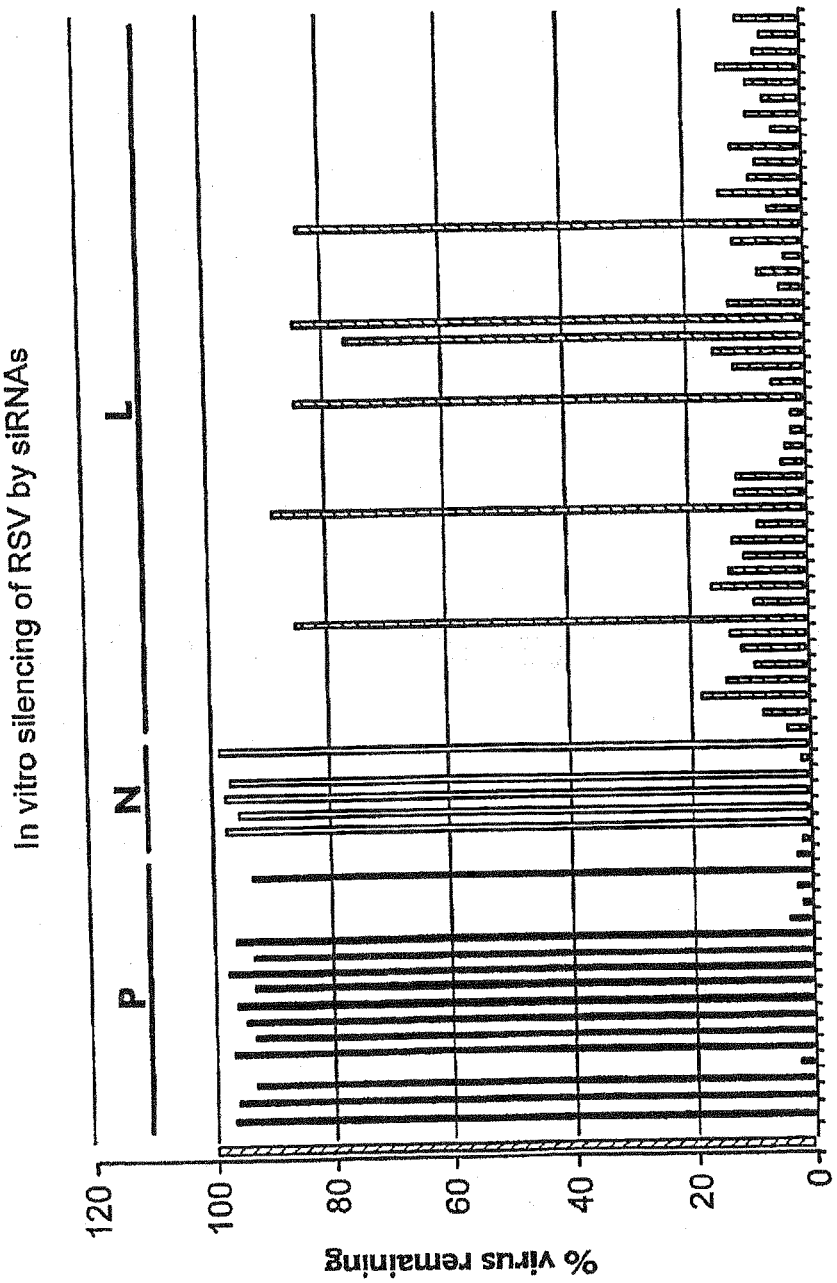

In vitro silencing of RSV by siRNAs
P
N
L
% virus remaining
120
100
80
60
40
20
0
siRNAs (5nM)

FIG. 1

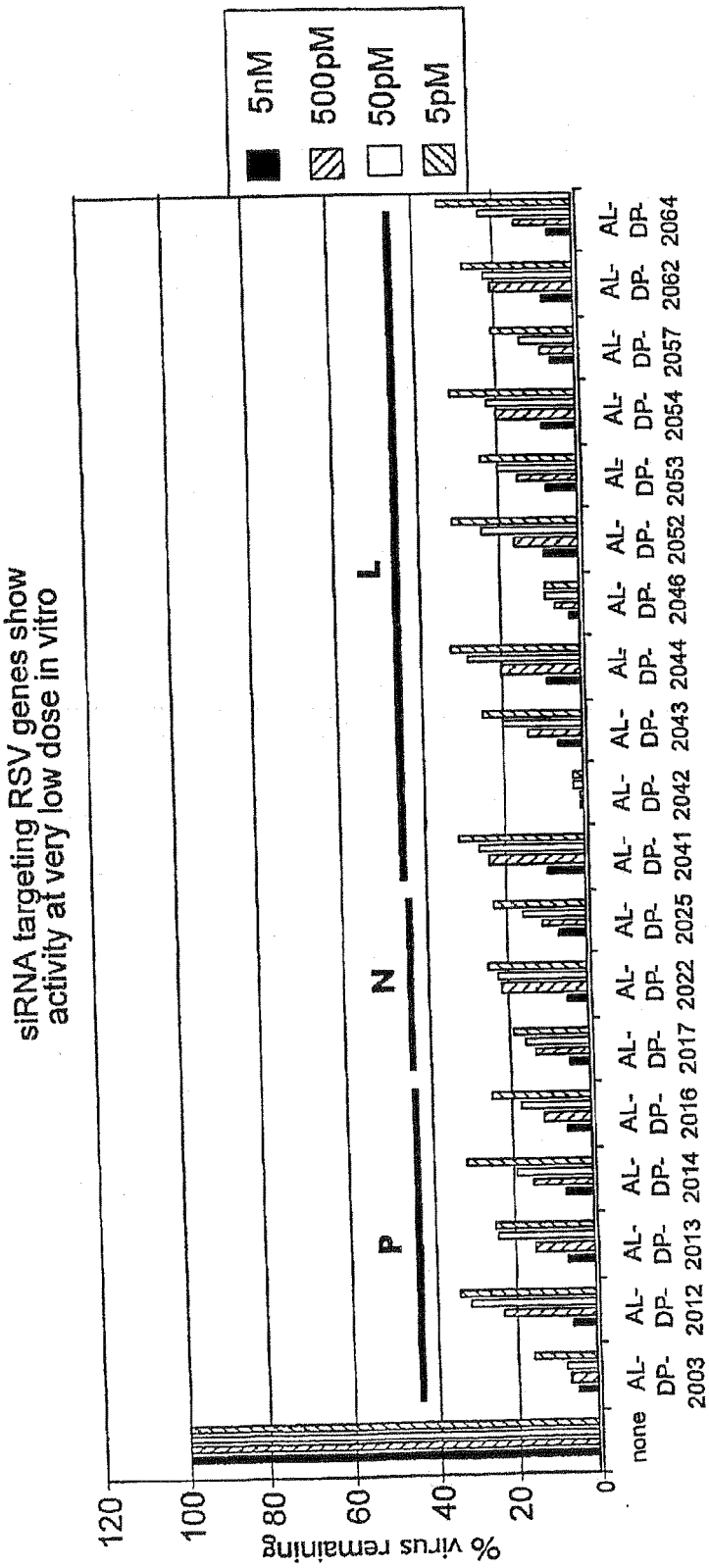

siRNA targeting RSV genes show activity at very low dose in vitro
5nM
500pM
50pM
5pM
% virus remaining
120
100
80
60
40
20
0
P
N
L
none
AL-DP-2003
AL-DP-2012
AL-DP-2013
AL-DP-2014
AL-DP-2016
AL-DP-2017
AL-DP-2022
AL-DP-2025
AL-DP-2041
AL-DP-2042
AL-DP-2043
AL-DP-2044
AL-DP-2046
AL-DP-2052
AL-DP-2053
AL-DP-2054
AL-DP-2057
AL-DP-2062
AL-DP-2064
siRNAs

FIG. 2

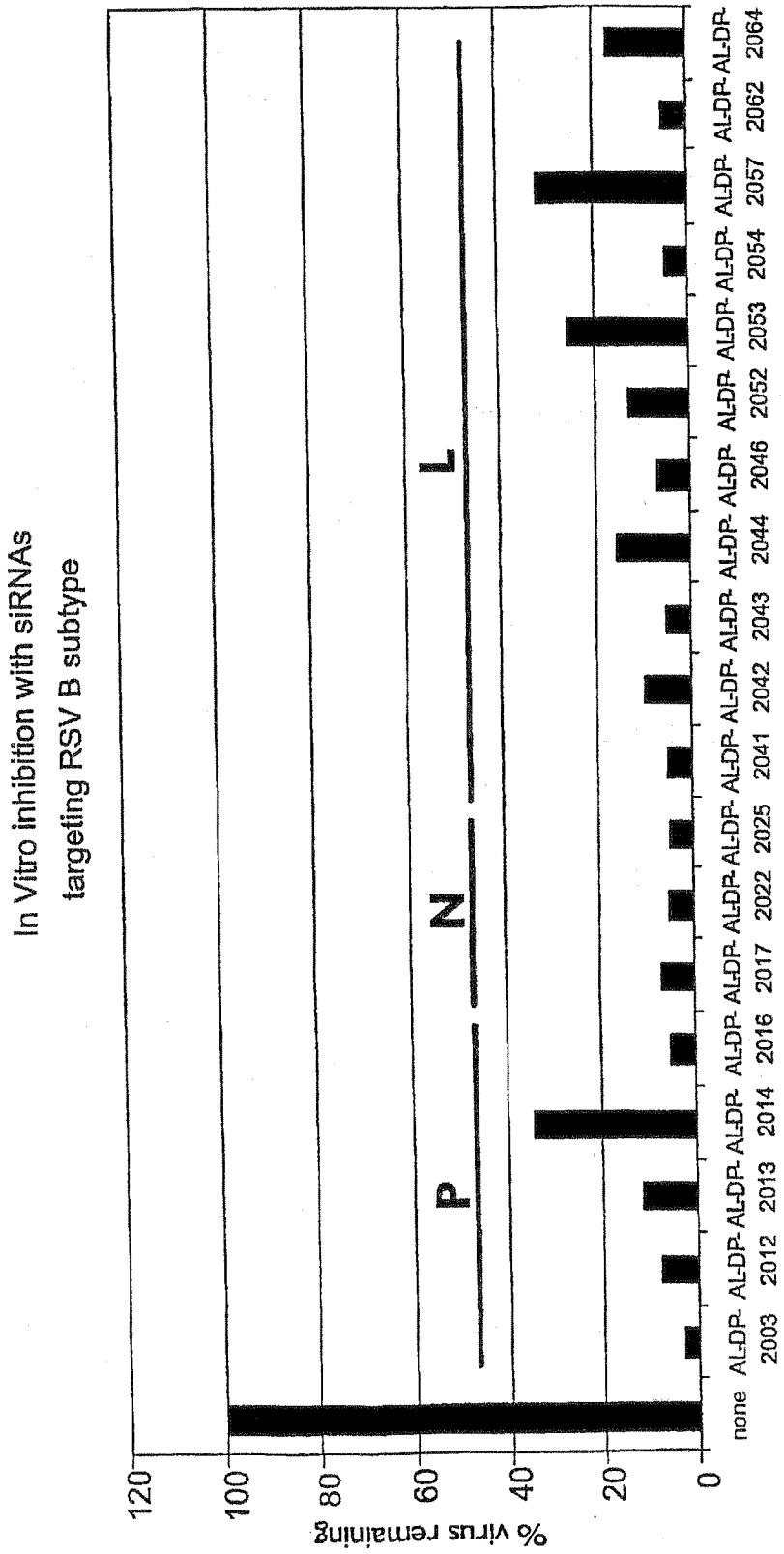

In Vitro inhibition with siRNAs
targeting RSV B subtype
% virus remaining
120
100
80
60
40
20
0
P
N
L
none
ALDP-2003
ALDP-2012
ALDP-2013
ALDP-2014
ALDP-2016
ALDP-2017
ALDP-2022
ALDP-2025
ALDP-2041
ALDP-2042
ALDP-2043
ALDP-2044
ALDP-2046
ALDP-2052
ALDP-2053
ALDP-2054
ALDP-2057
ALDP-2062
ALDP-2064
siRNA (5nM)

FIG. 3

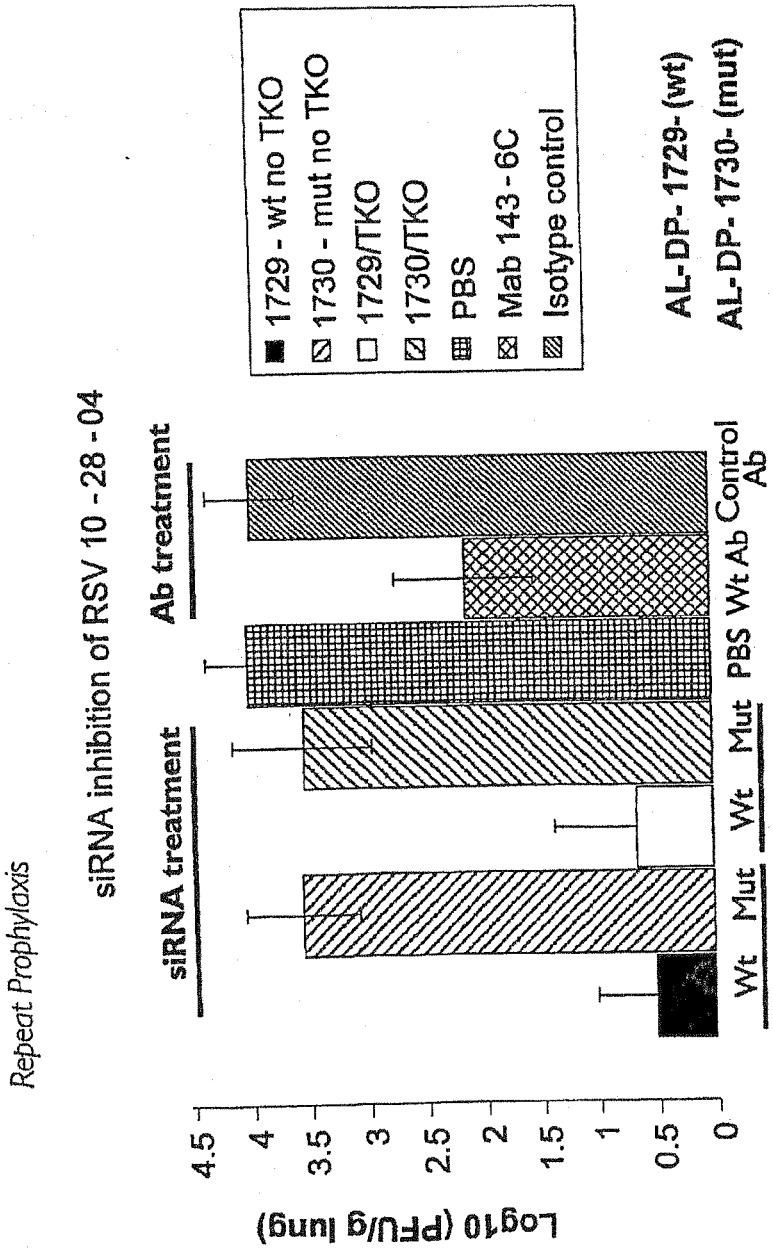

Repeat Prophylaxis
siRNA inhibition of RSV 10 - 28 - 04
Log10 (PFU/g lung)
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
siRNA treatment
Ab treatment
Wt
Mut
Wt
Mut
TKO
PBS
Wt Ab
Control Ab
1729 - wt no TKO
1730 - mut no TKO
1729/TKO
1730/TKO
PBS
Mab 143 - 6C
Isotype control
AL-DP- 1729- (wt)
AL-DP- 1730- (mut)

FIG. 4

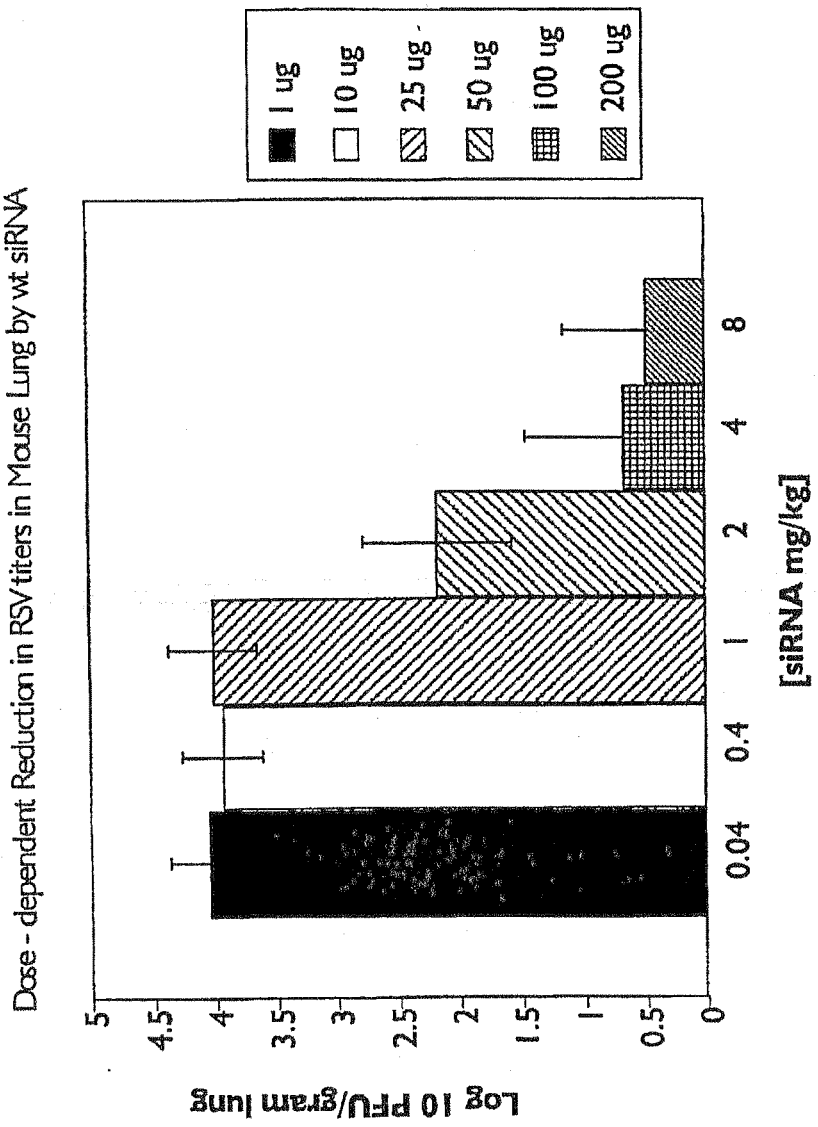

Dose - dependent Reduction in RSV titers in Mouse Lung by wt siRNA
1 ug
10 ug
25 ug
50 ug
100 ug
200 ug
Log 10 PFU/gram lung
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
0.04
0.4
1
2
4
8
[siRNA mg/kg]

FIG. 5

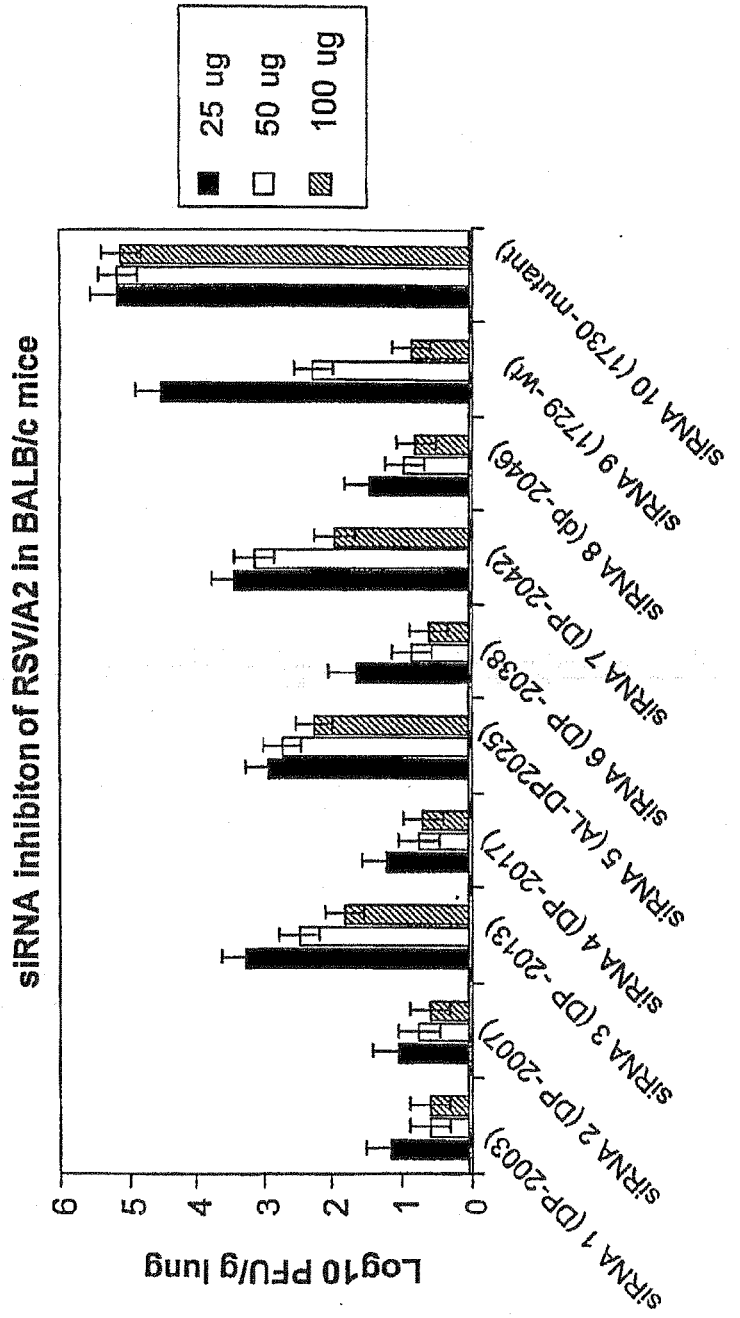

siRNA inhibiton of RSV/A2 in BALB/c mice
Log10 PFU/g lung
0
1
2
3
4
5
6
25 ug
50 ug
100 ug
siRNA 1 (DP-2003)
siRNA 2 (DP-2007)
siRNA 3 (DP-2013)
siRNA 4 (DP-2017)
siRNA 5 (AL-DP2025)
siRNA 6 (DP-2038)
siRNA 7 (DP-2042)
siRNA 8 (dp-2046)
siRNA 9 (1729-wt)
siRNA 10 (1730-mutant)

FIG. 6

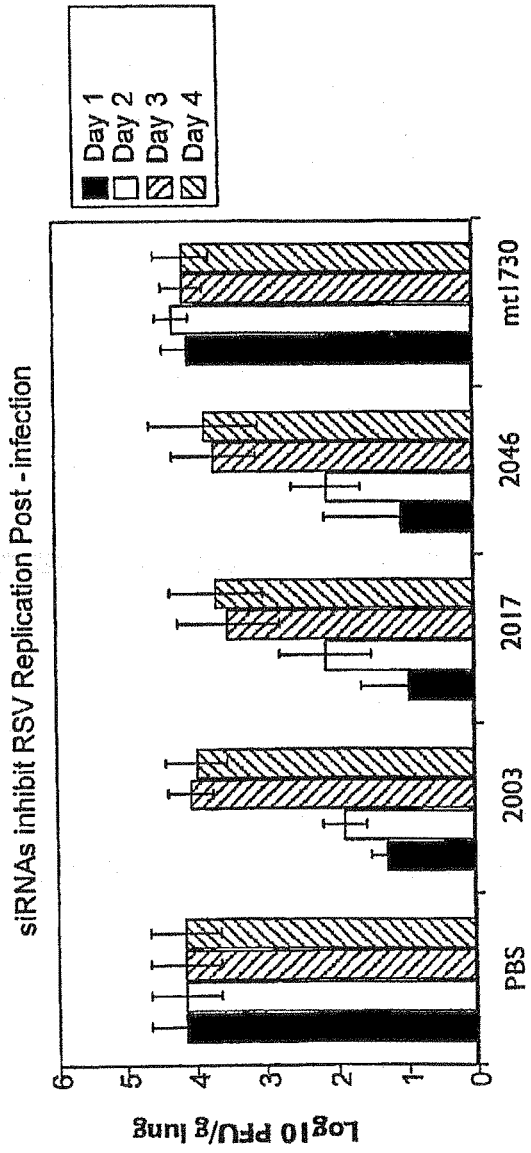

siRNAs inhibit RSV Replication Post - infection
Log10 PFU/g lung
Day 1
Day 2
Day 3
Day 4
PBS
2003
2017
2046
mt1730
0
1
2
3
4
5
6

FIG. 7

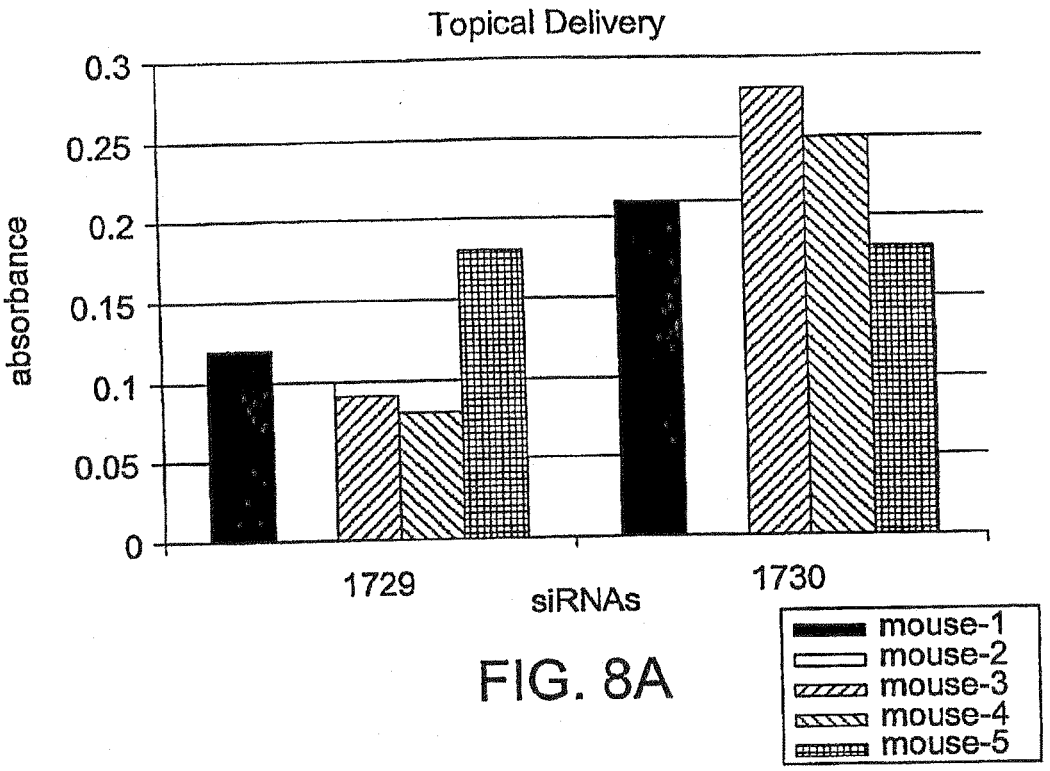

Topical Delivery
absorbance
0.3
0.25
0.2
0.15
0.1
0.05
0
1729
siRNAs
1730
mouse-1
mouse-2
mouse-3
mouse-4
mouse-5

FIG. 8A

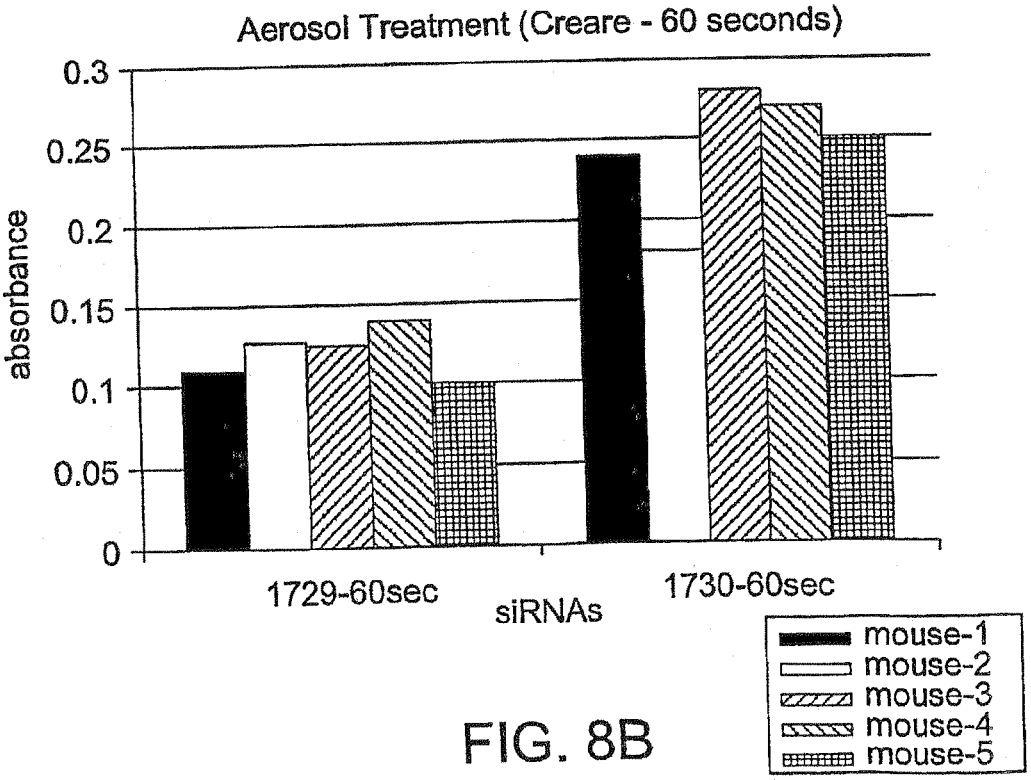

Aerosol Treatment (Creare - 60 seconds)
absorbance
0.3
0.25
0.2
0.15
0.1
0.05
0
1729-60sec
siRNAs
1730-60sec
mouse-1
mouse-2
mouse-3
mouse-4
mouse-5

FIG. 8B

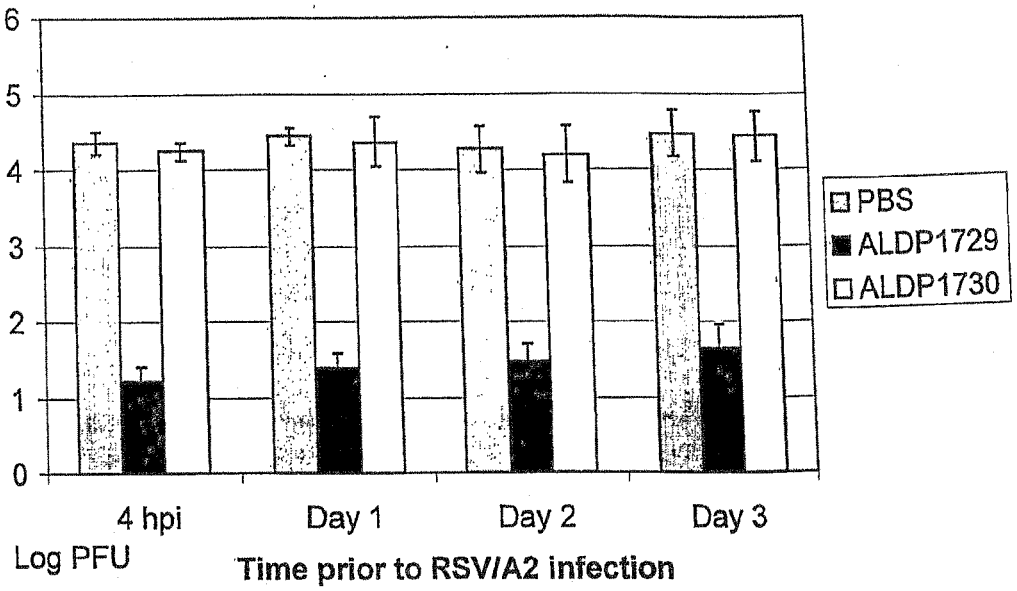

6
5
4
3
2
1
0
4 hpi
Day 1
Day 2
Day 3
Log PFU
Time prior to RSV/A2 infection
PBS
ALDP1729
ALDP1730

FIG. 9