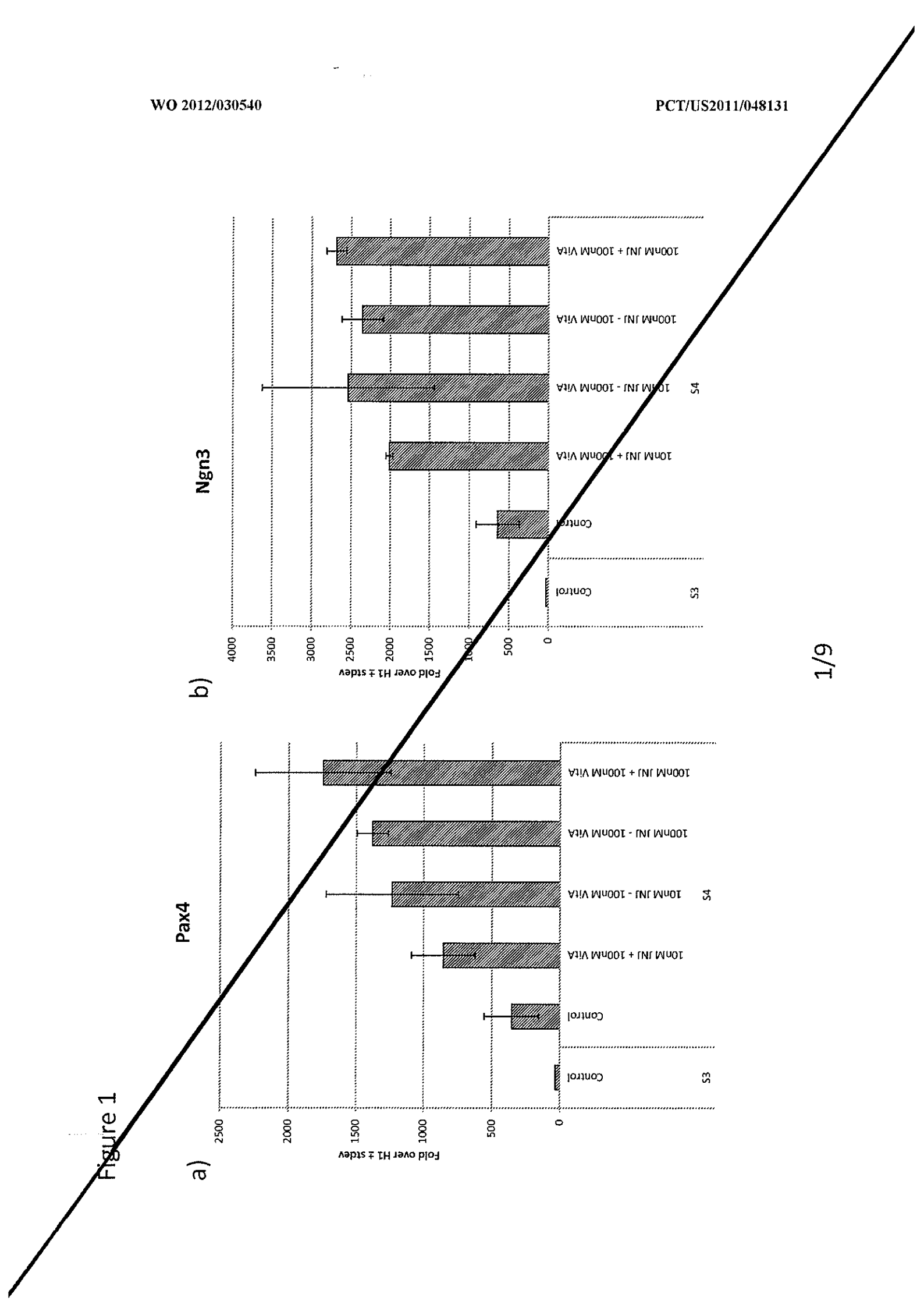
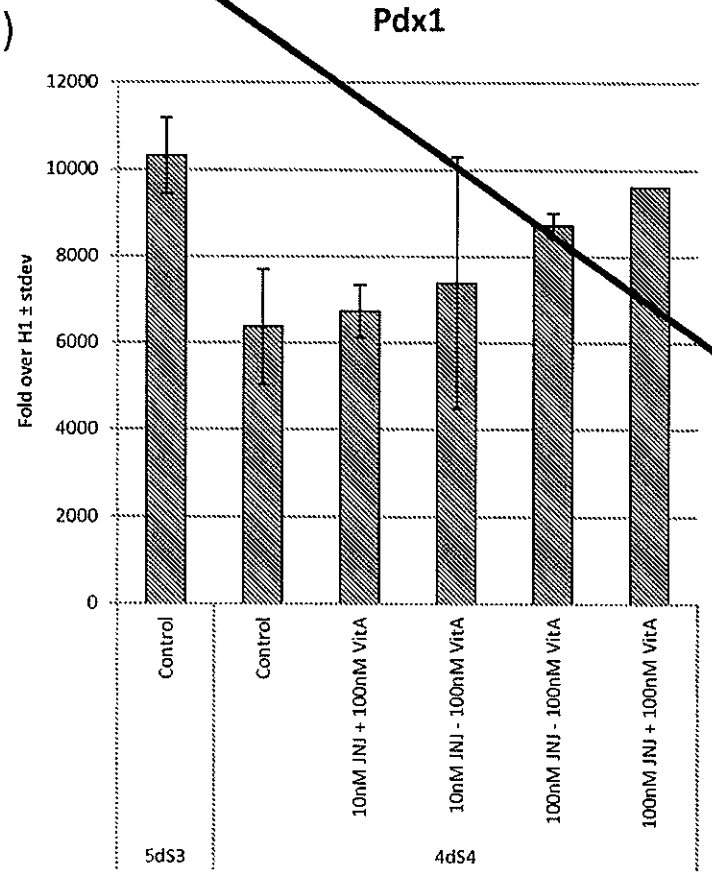
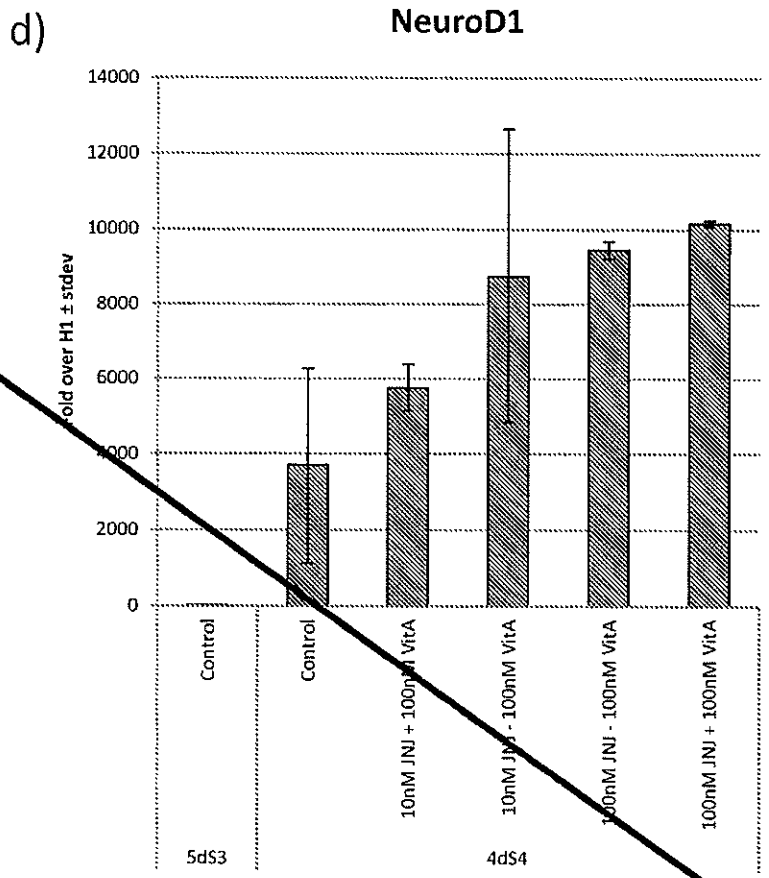

a)
Pax4
Fold over H1 ± stdev
2500
2000
1500
1000
500
0
S3
Control
Control
S4
10nM JNJ - 100nM ViTA
10nM JNJ + 100nM ViTA
100nM JNJ - 100nM ViTA
100nM JNJ + 100nM ViTA
b)
Ngn3
Fold over H1 ± stdev
4000
3500
3000
2500
2000
1500
1000
500
0
S3
Control
Control
S4
10nM JNJ - 100nM ViTA
10nM JNJ + 100nM ViTA
100nM JNJ - 100nM ViTA
100nM JNJ + 100nM ViTA

Figure 1

Figure 1 Continued





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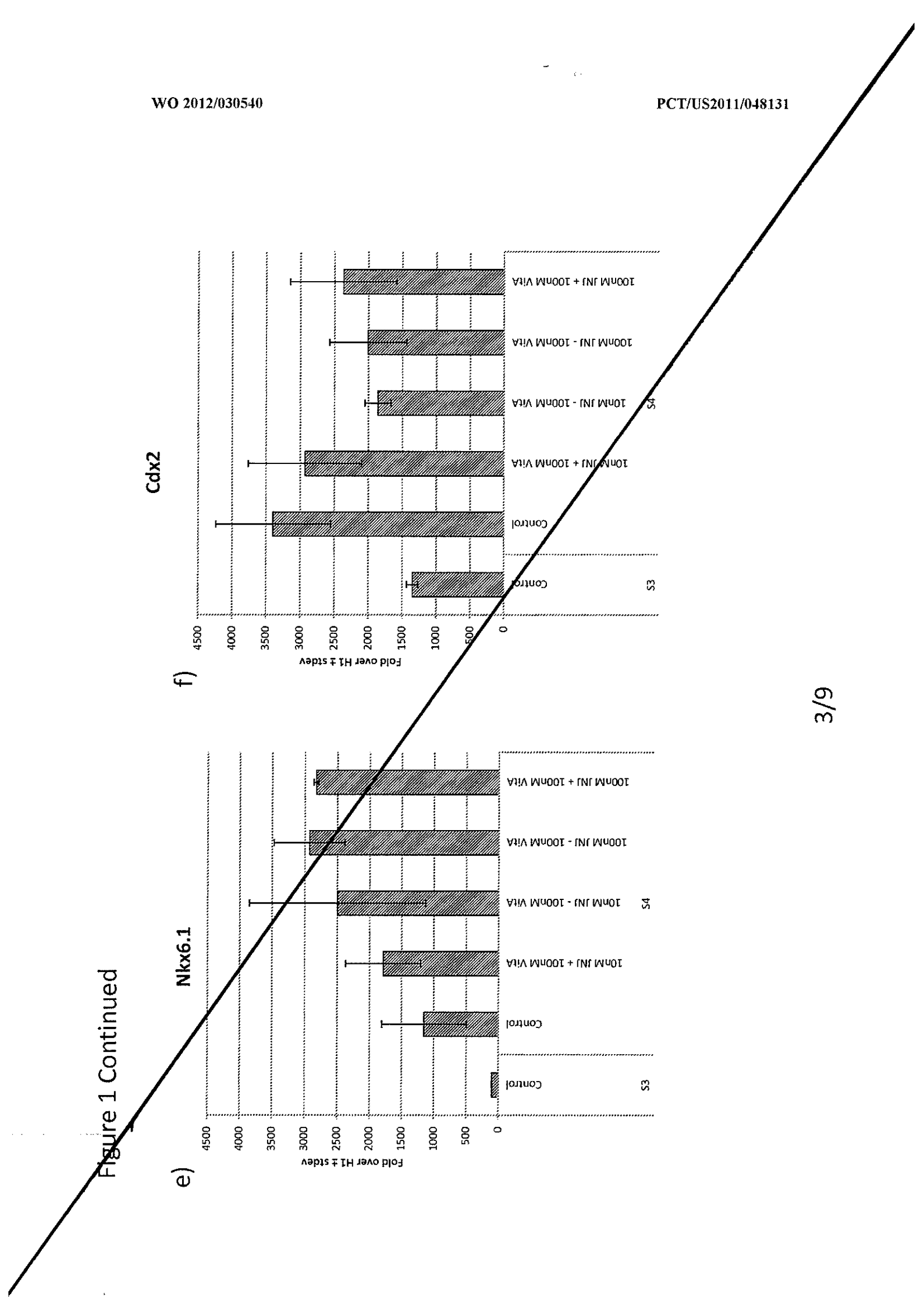
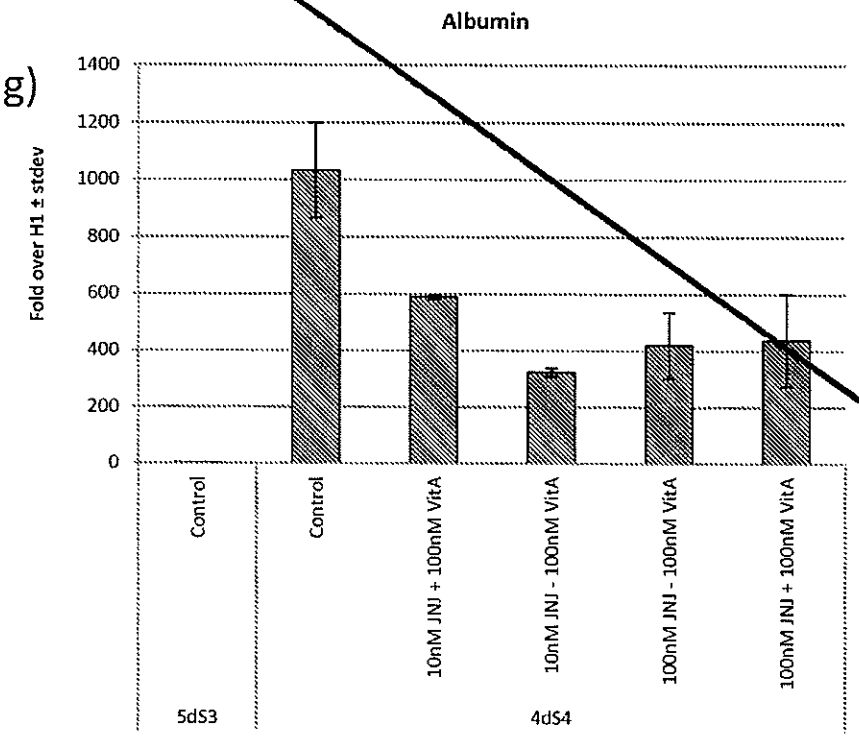
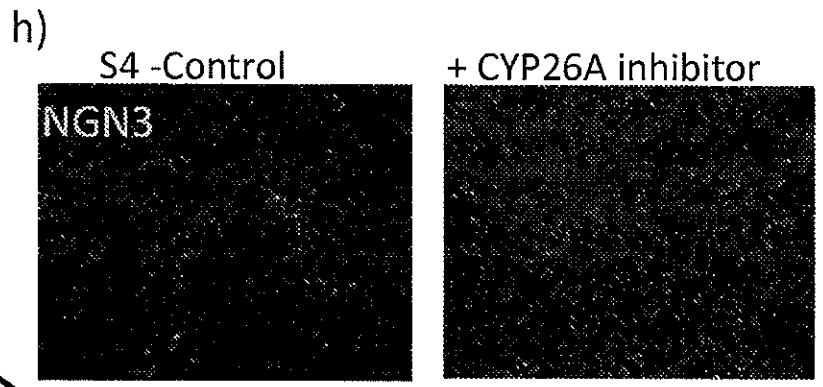
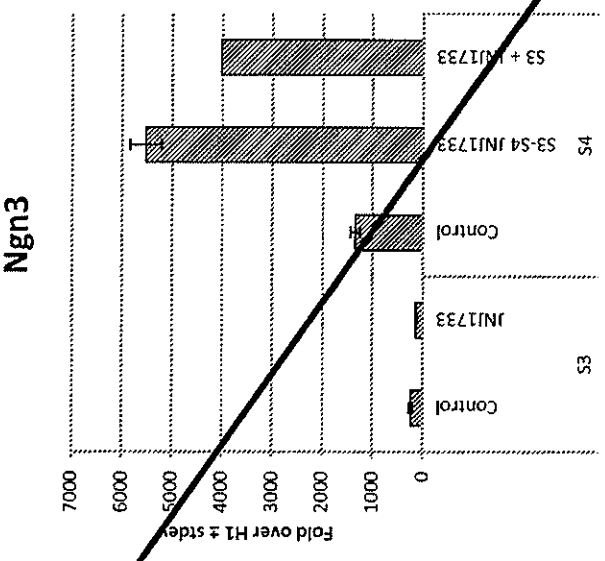


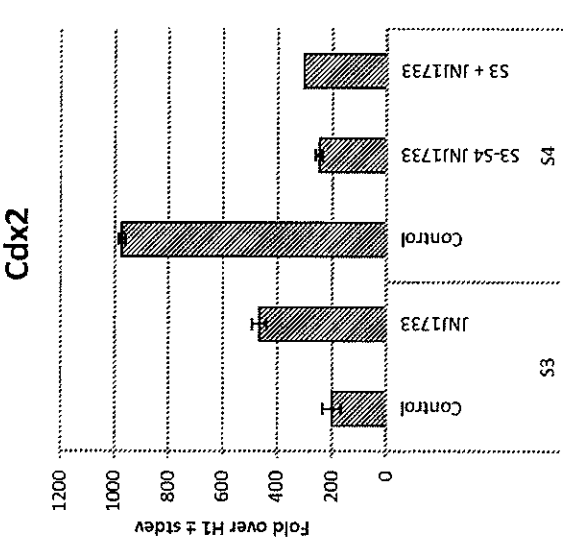
Figure 1 Continued

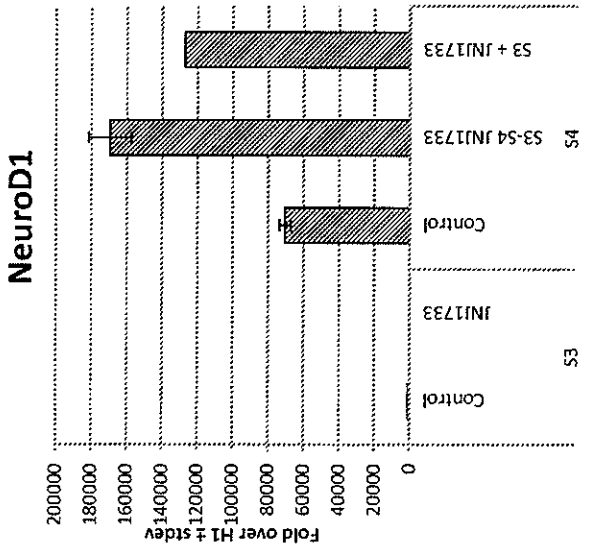
Figure 1 Continued






Ngn3
Fold over H1 ± stdev
7000
6000
5000
4000
3000
2000
1000
0
Control
JNJ1733
S3
Control
S3-S4 JNJ1733
S3 + JNJ1733
S4


Cdx2
Fold over H1 ± stdev
1200
1000
800
600
400
200
0
Control
JNJ1733
S3
Control
S3-S4 JNJ1733
S3 + JNJ1733
S4


NeuroD1
Fold over H1 ± stdev
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
Control
JNJ1733
S3
Control
S3-S4 JNJ1733
S3 + JNJ1733
S4

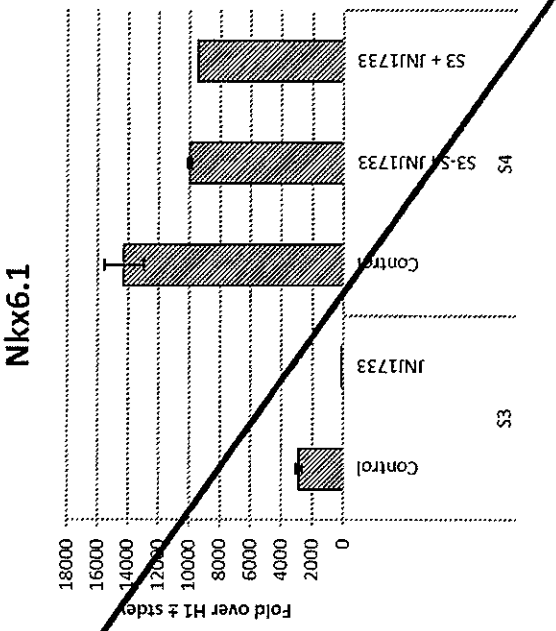
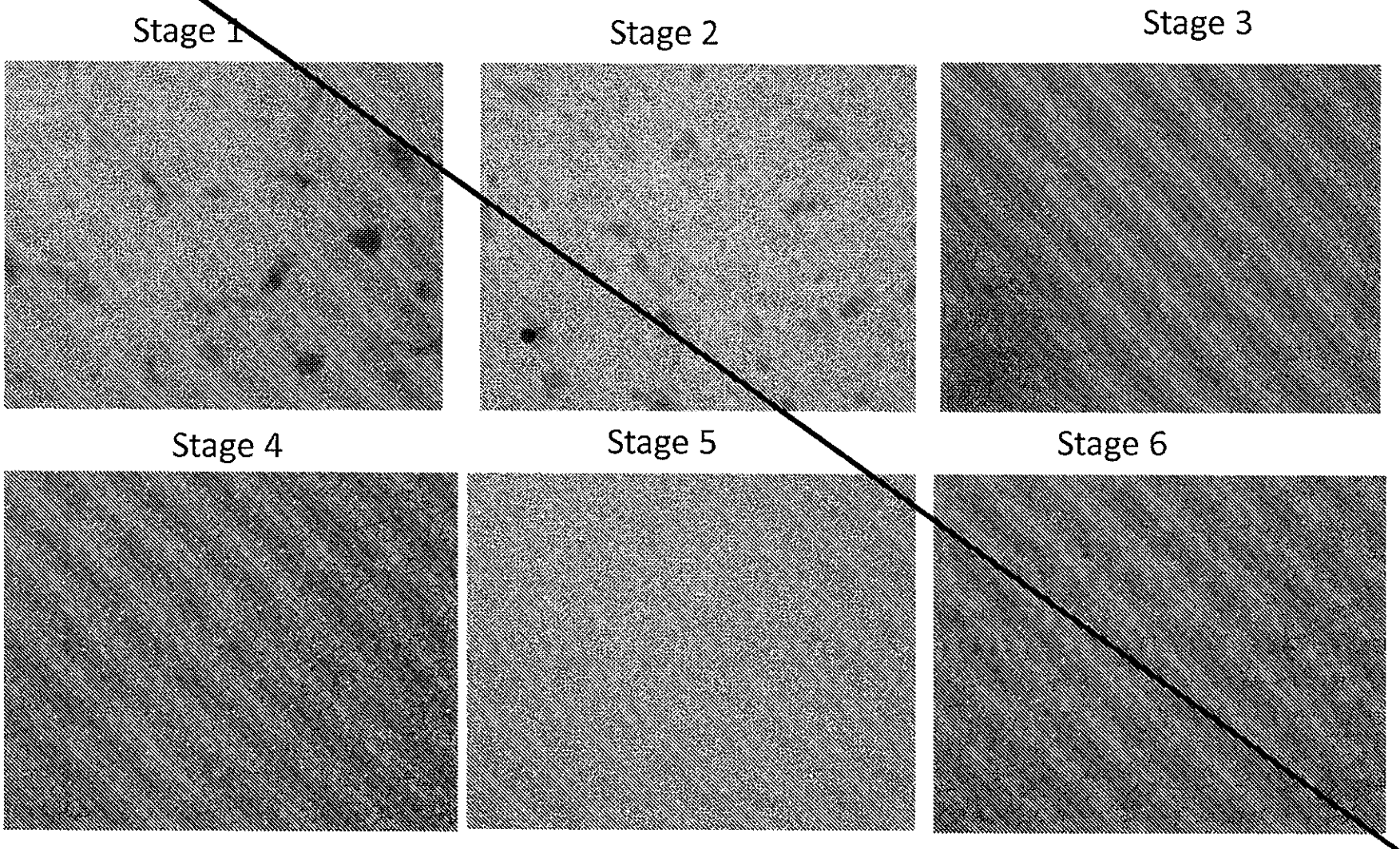

Nkx6.1
Fold over H1 ± stdev
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
Control
JNJ1733
S3
Control
S3-S4 JNJ1733
S3 + JNJ1733
S4

Figure 2

Figure 2 Continued

Figure 3



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Figure 4

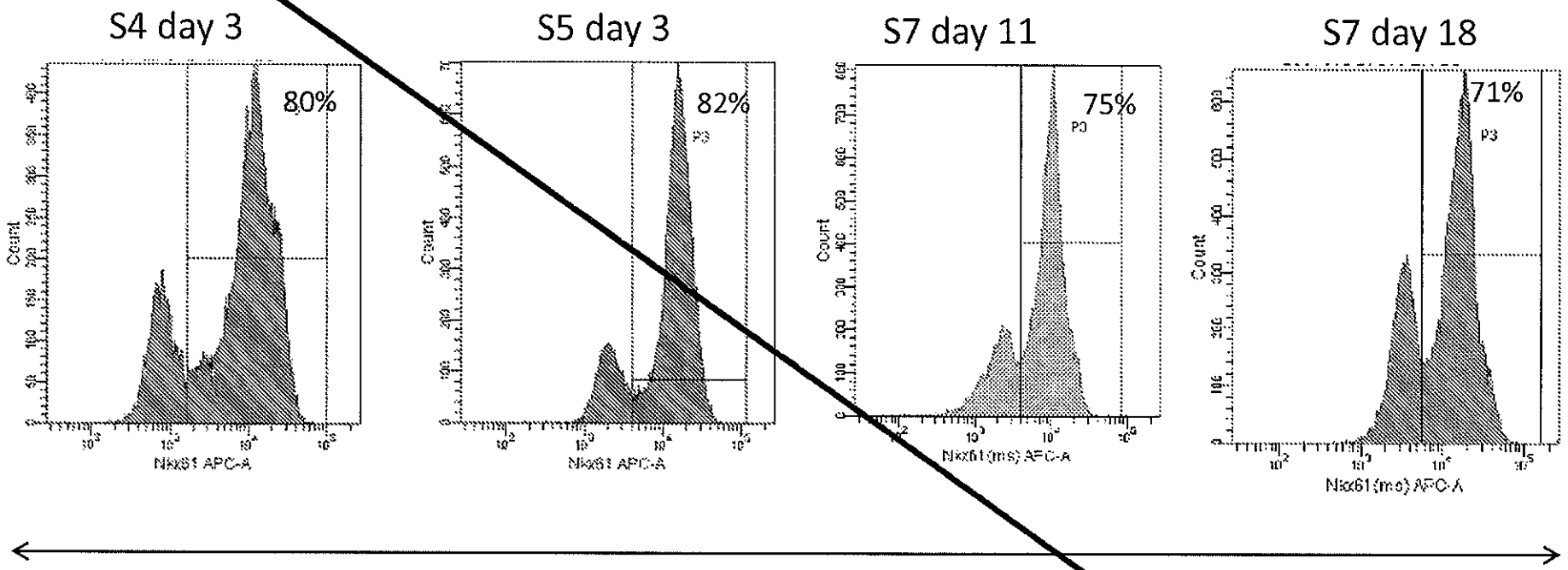
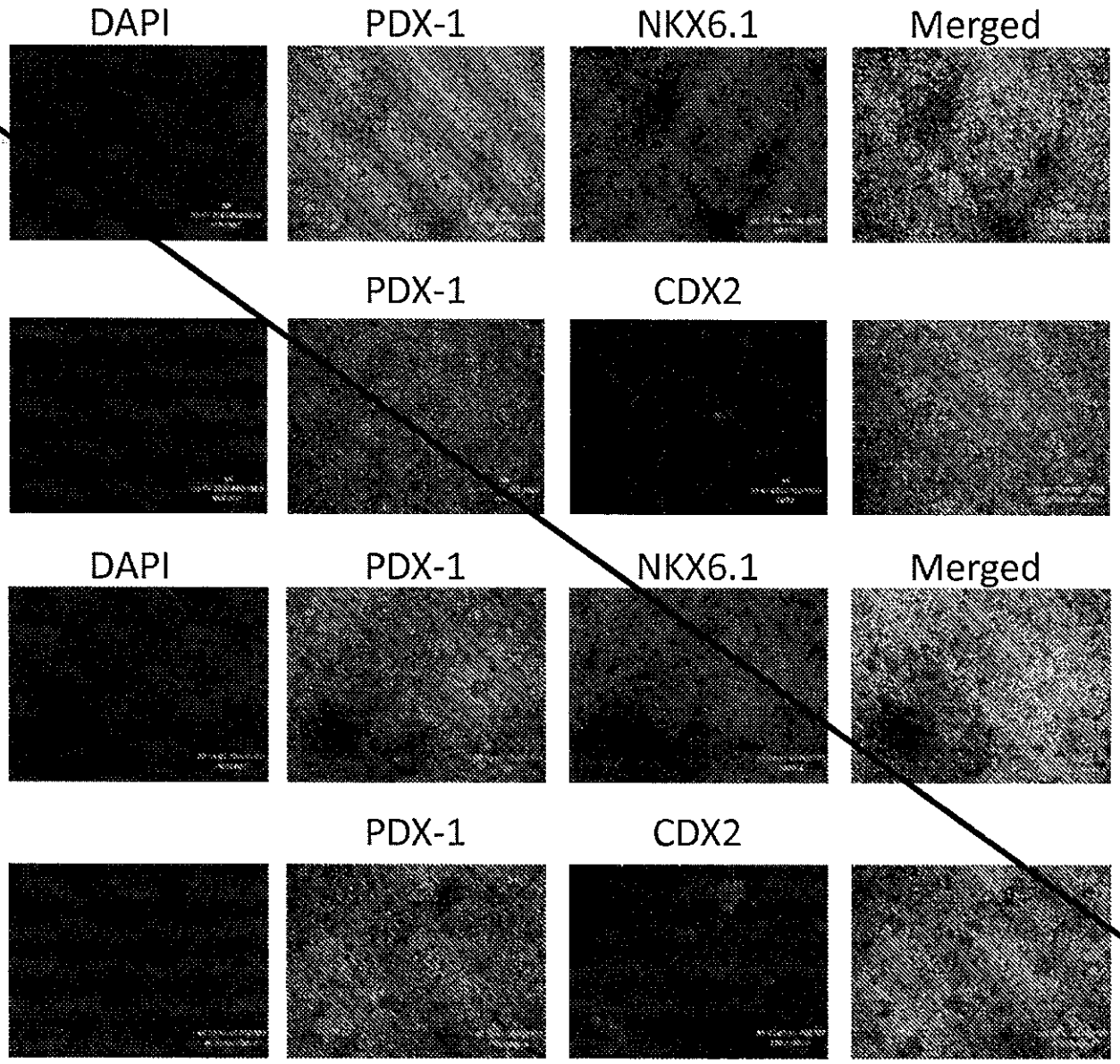

S4 day 3
80%
S5 day 3
82%
S7 day 11
75%
S7 day 18
71%
Count
Nkx61 APC-A
%NKX6.1 expression

Figure 5



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PCT/US2011/048131

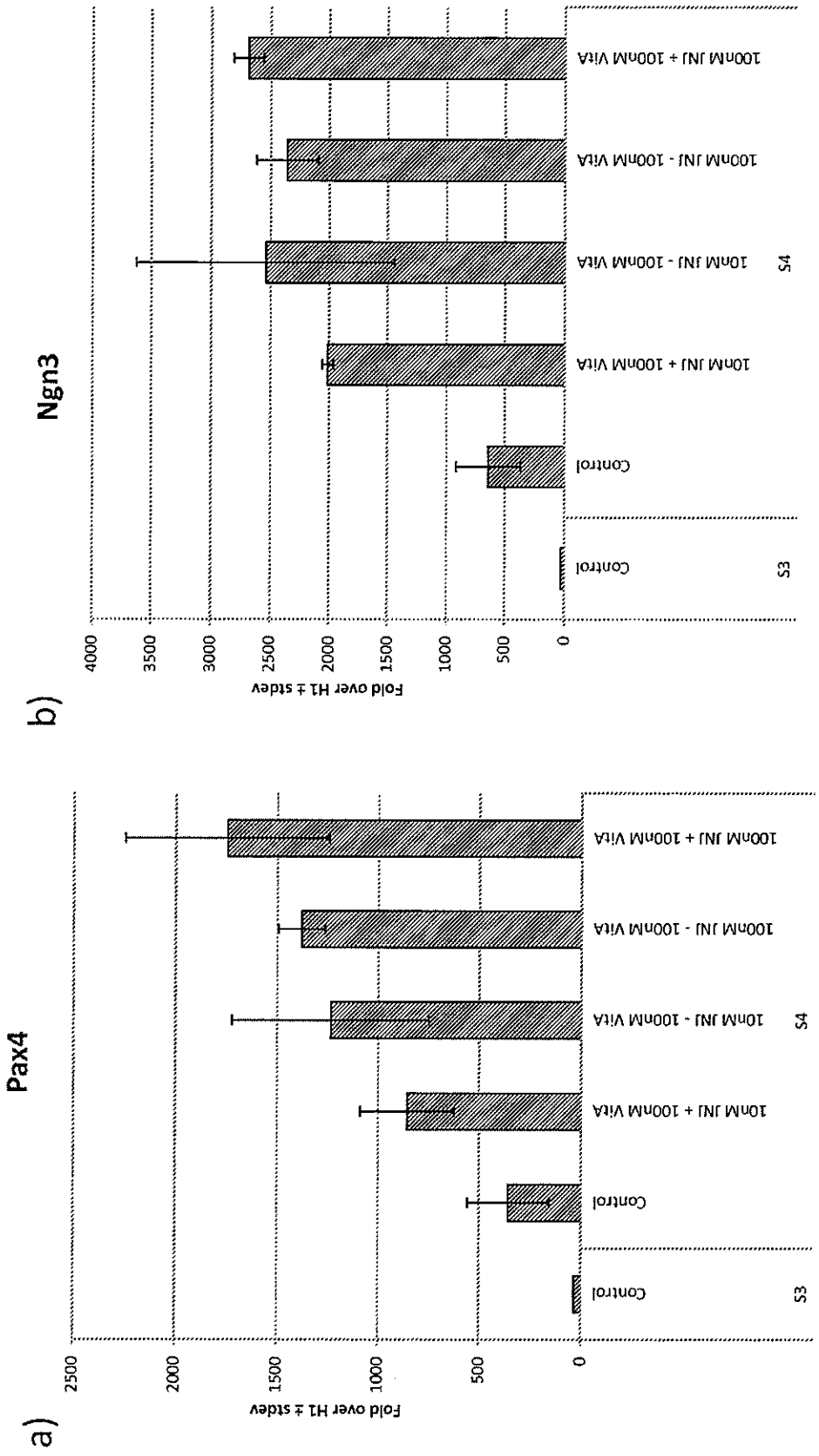
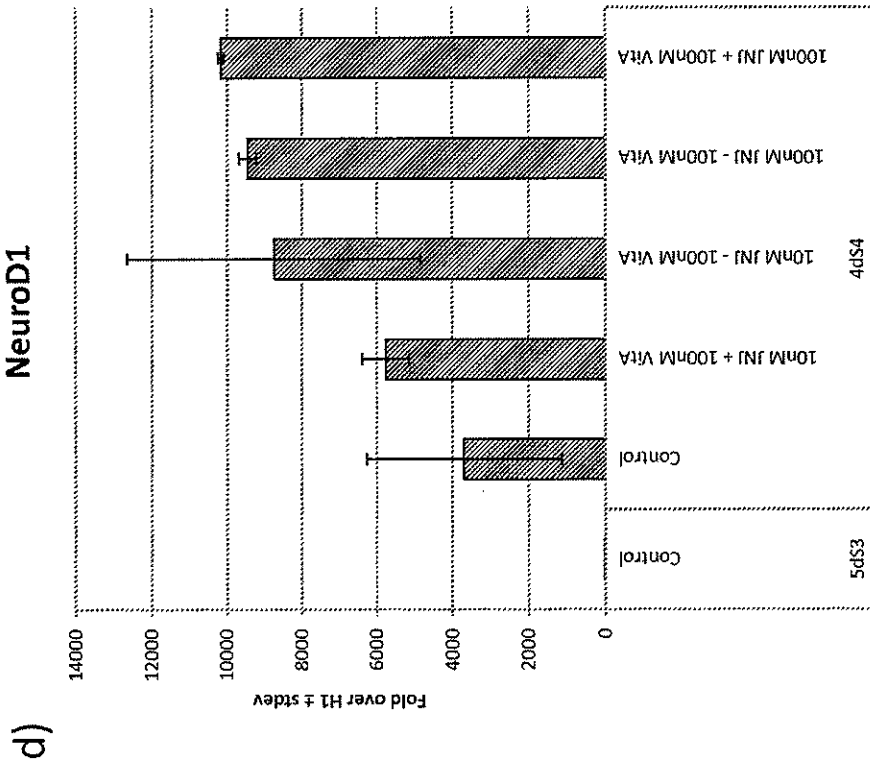

a)
Pax4
Fold over H1 ± stdev
2500
2000
1500
1000
500
0
S3
Control
S4
Control
10nM JNJ + 100nM VitA
10nM JNJ - 100nM VitA
100nM JNJ - 100nM VitA
100nM JNJ + 100nM VitA
b)
Ngn3
Fold over H1 ± stdev
4000
3500
3000
2500
2000
1500
1000
500
0
S3
Control
S4
Control
10nM JNJ + 100nM VitA
10nM JNJ - 100nM VitA
100nM JNJ - 100nM VitA
100nM JNJ + 100nM VitA

Figure 1

Figure 1 Continued



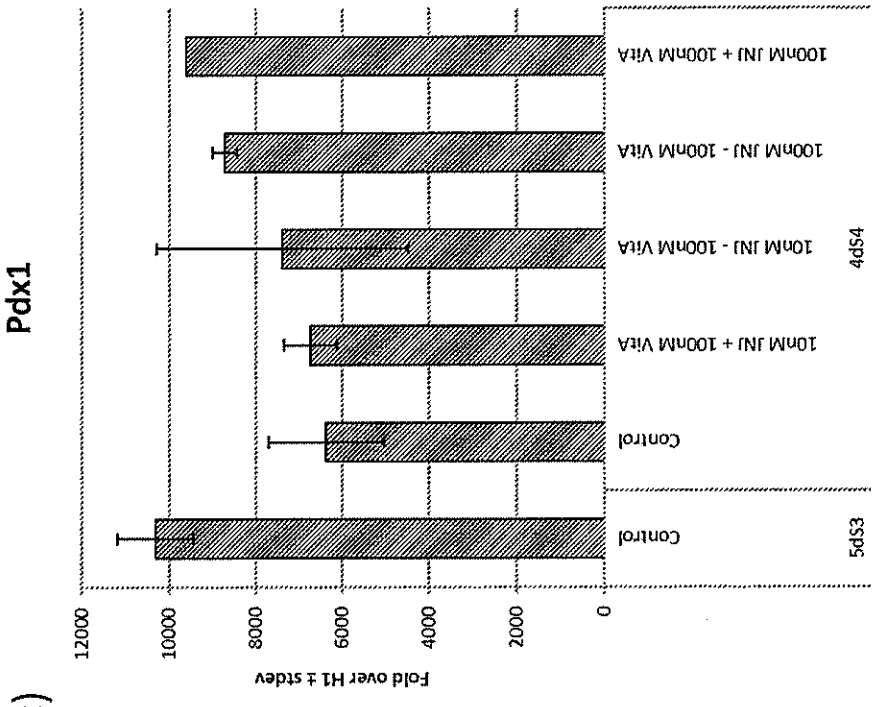
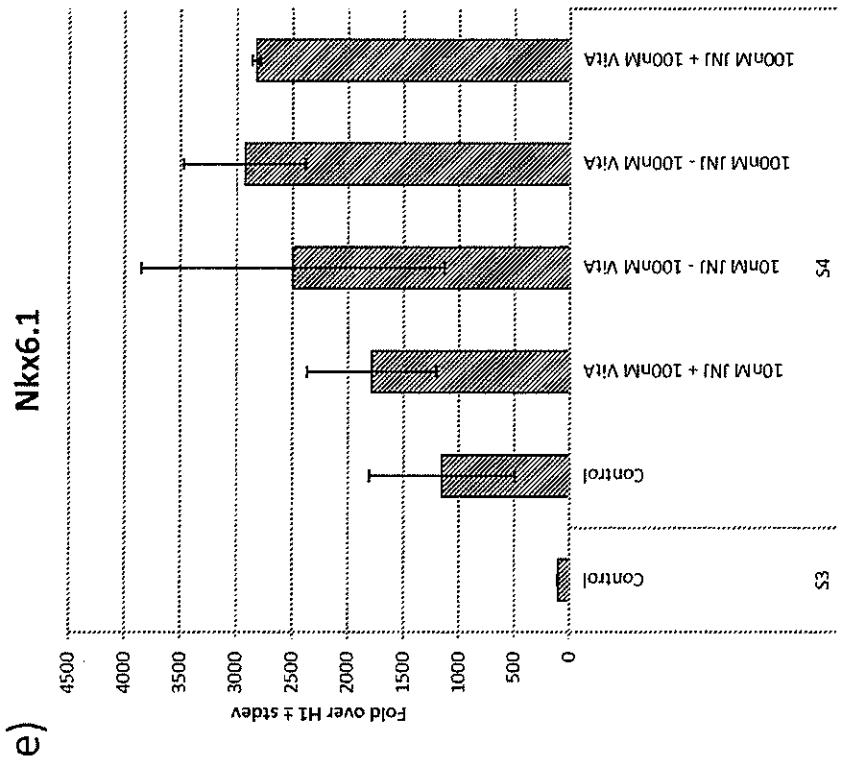


Figure 1 Continued



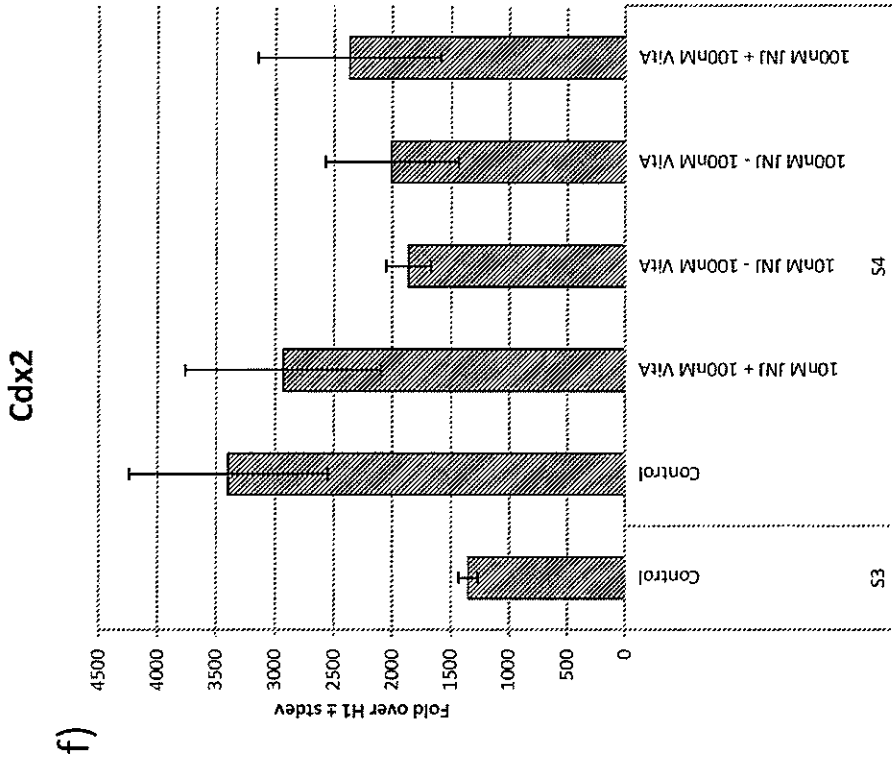
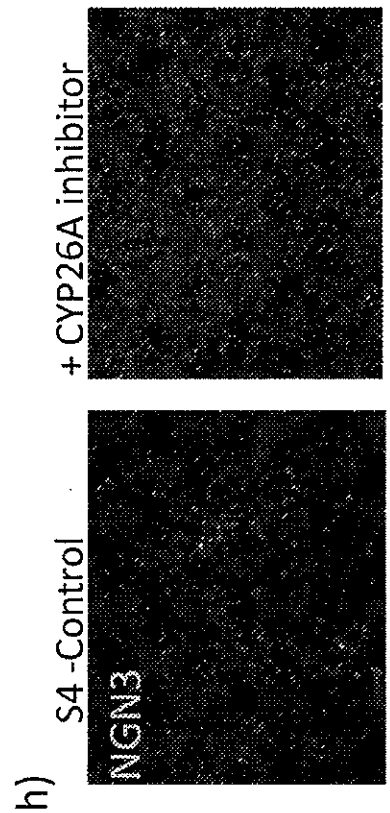
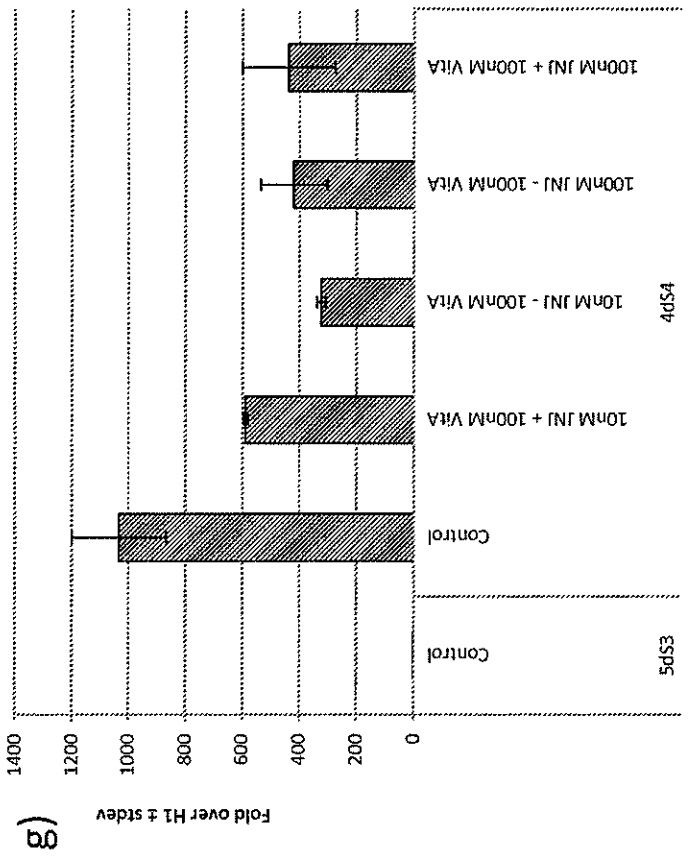


Figure 1 Continued





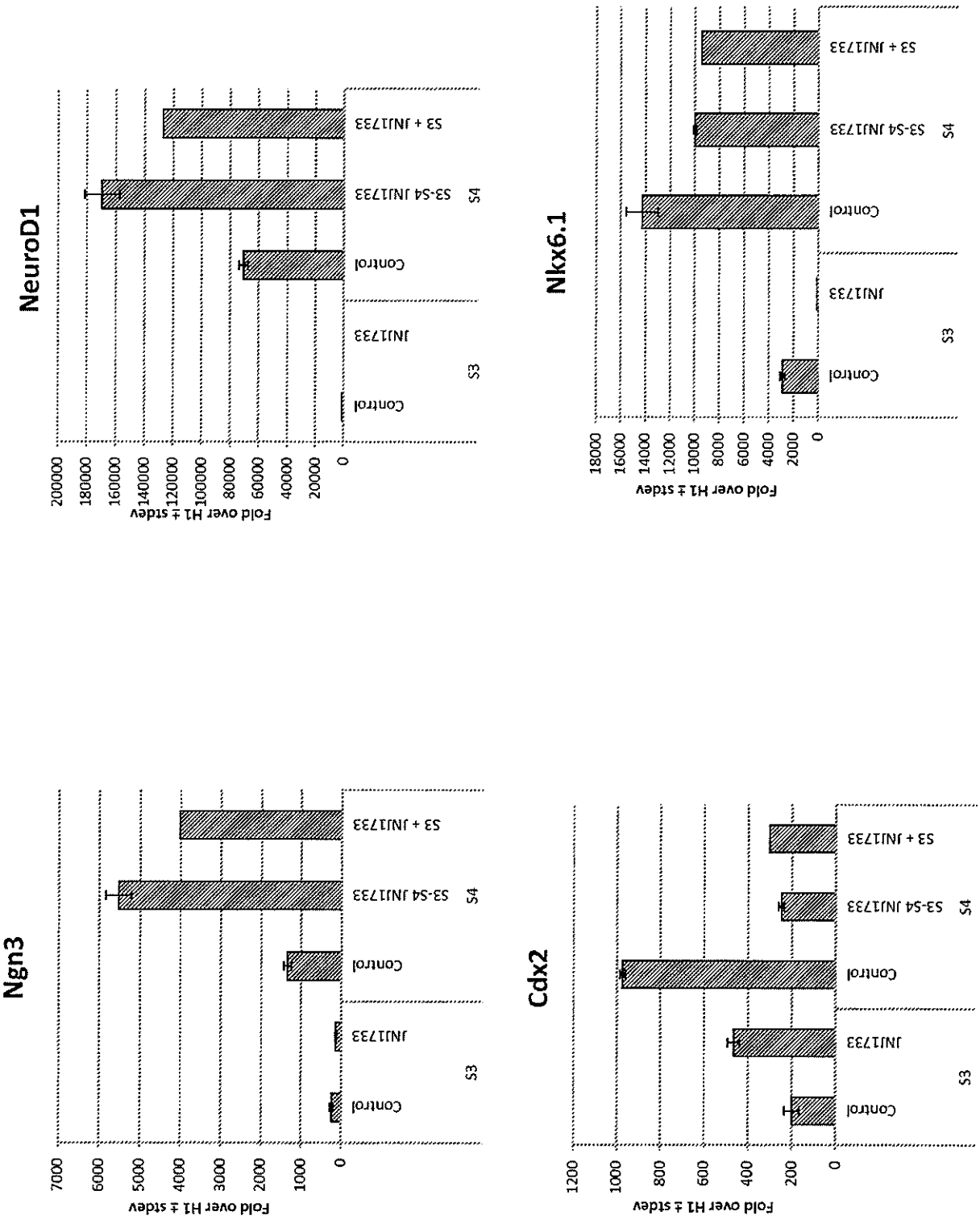
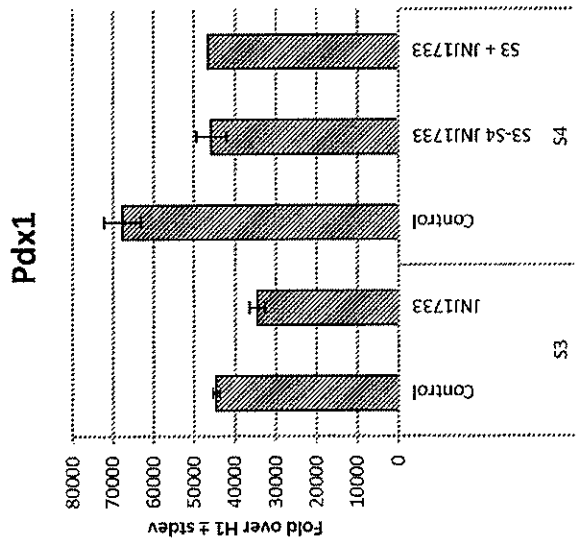

NeuroD1
Nkx6.1
Ngn3
Cdx2
Fold over H1 ± stdev
Control
JNJ1733
S3
S3-S4 JNJ1733
S4
S3 + JNJ1733

Figure 2

Figure 2 Continued



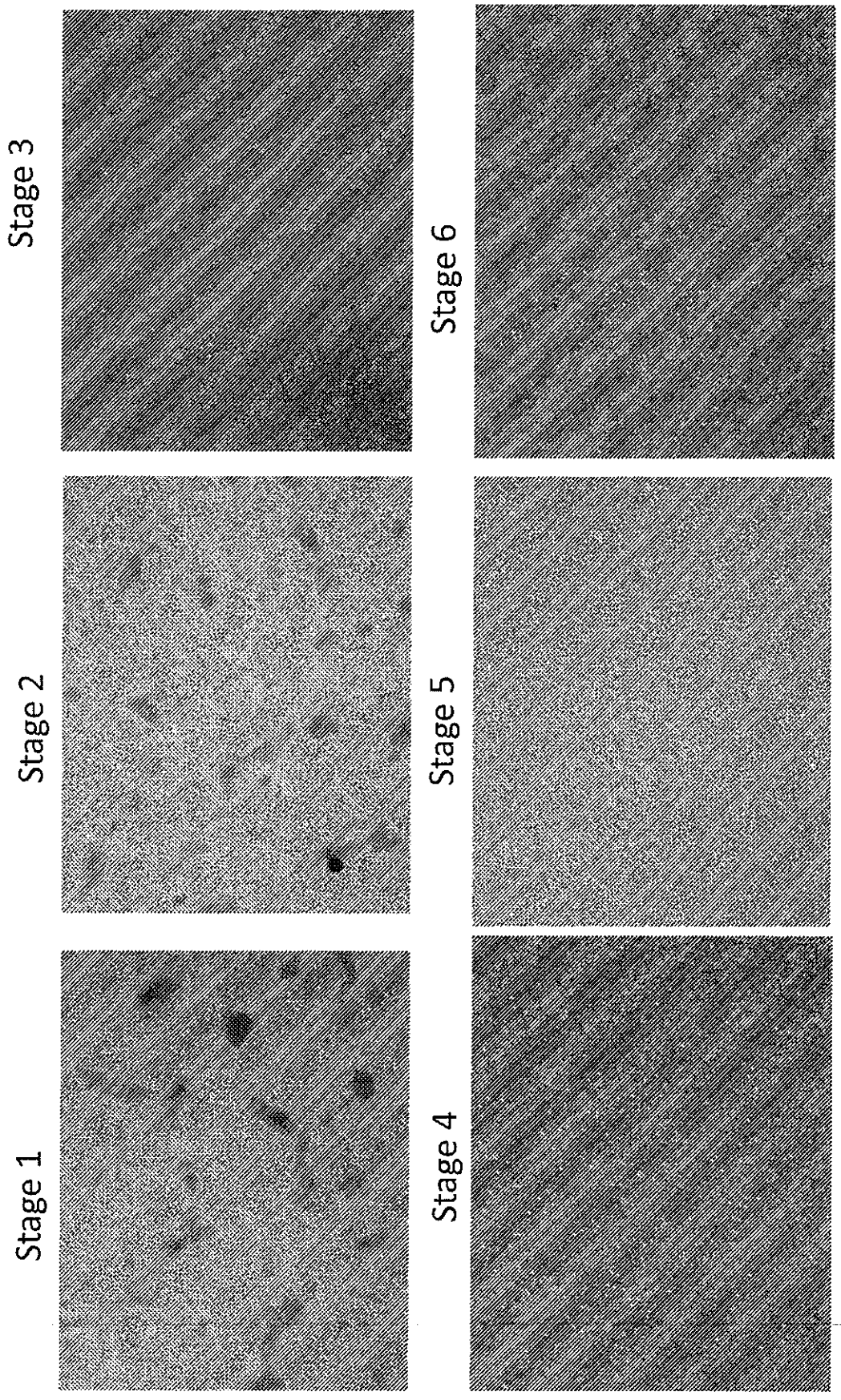


Figure 3

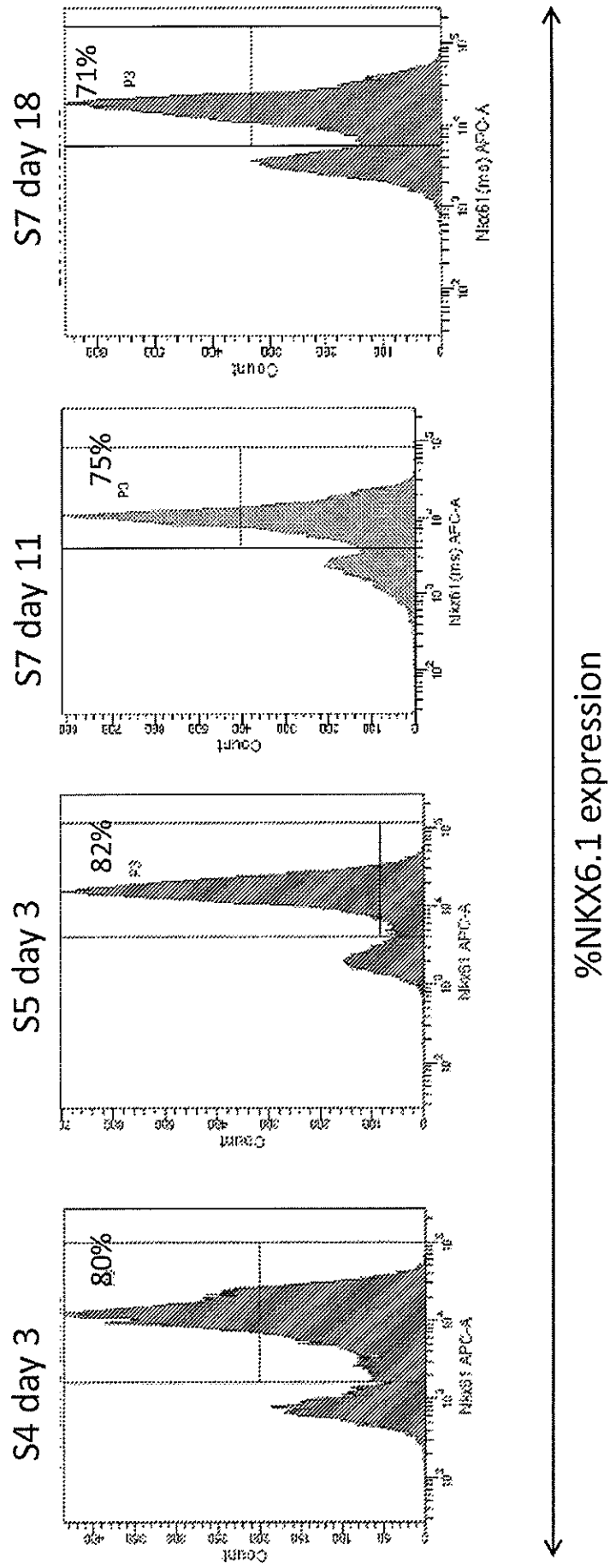


Figure 4

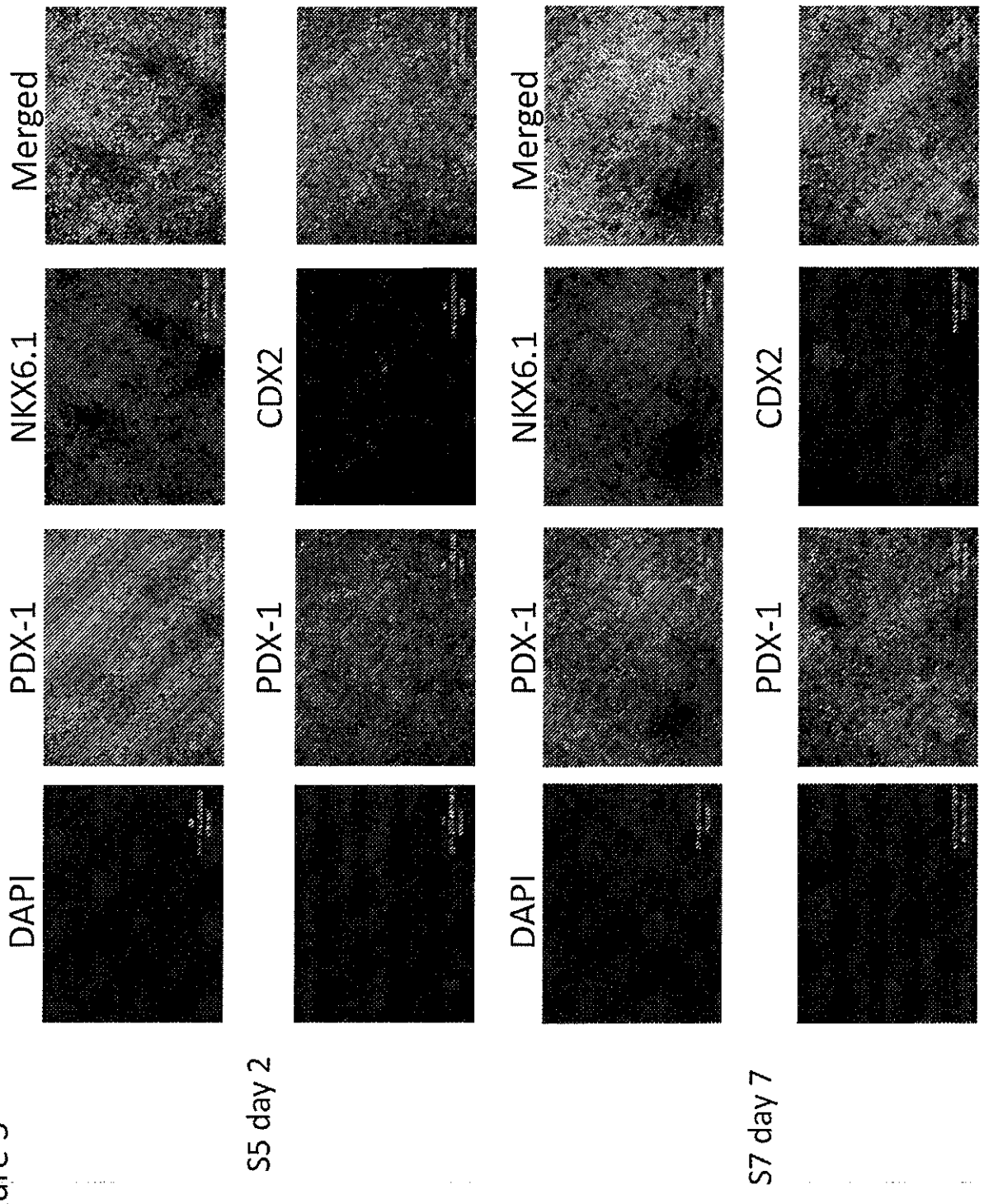

DAPI
PDX-1
NKX6.1
Merged
DAPI
PDX-1
CDX2
Merged
S5 day 2
DAPI
PDX-1
NKX6.1
Merged
DAPI
PDX-1
CDX2
Merged
S7 day 7

Figure 5