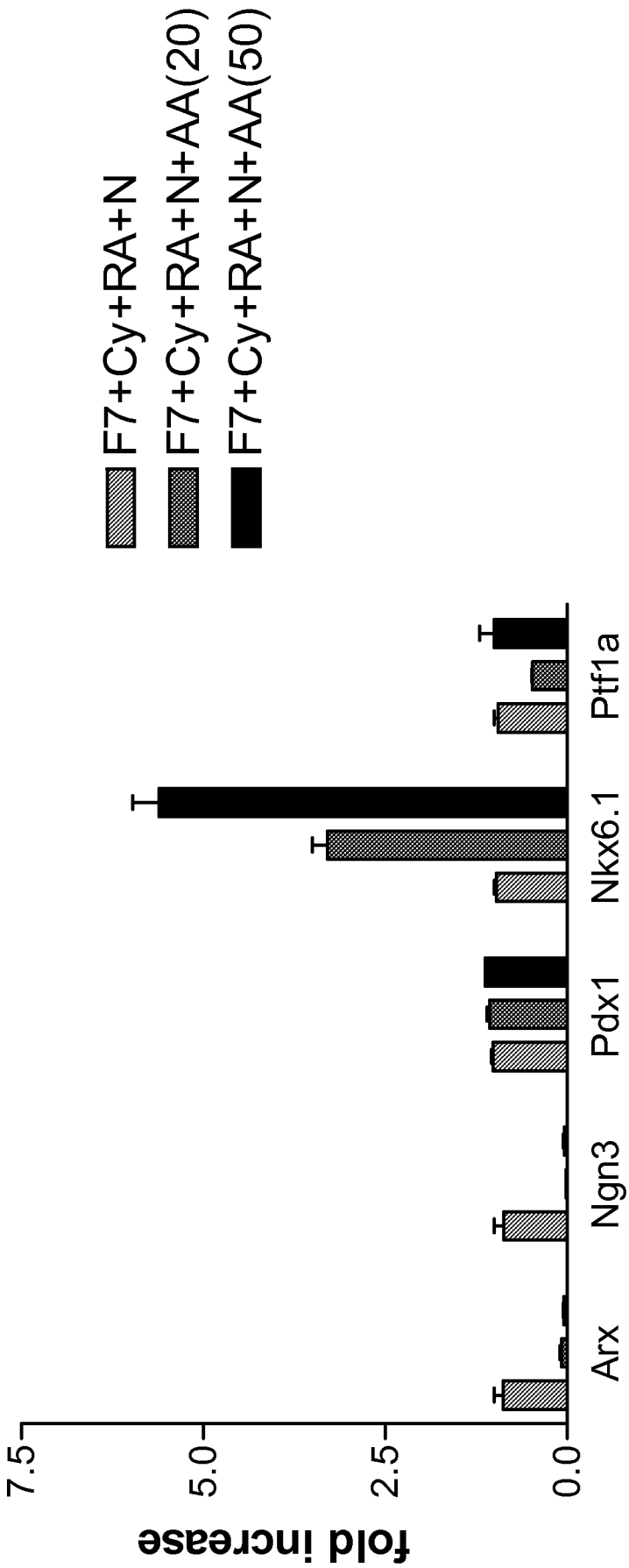
Figure 1



CEN5260WOPCT: Jean Xu -DIFFERENTIATION OF HUMAN EMBRYONIC STEM CELLS

Figure 2

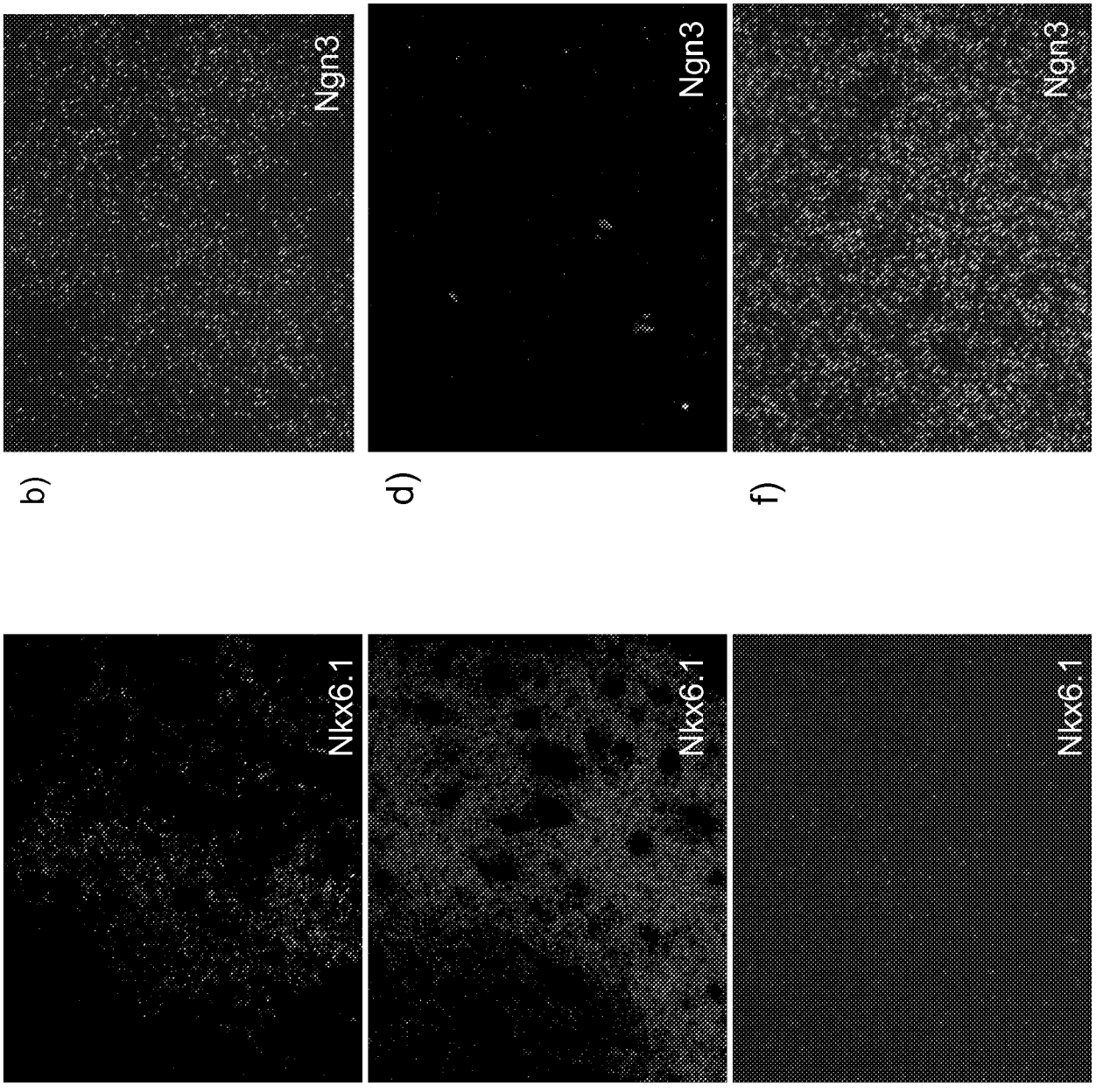


Figure 3

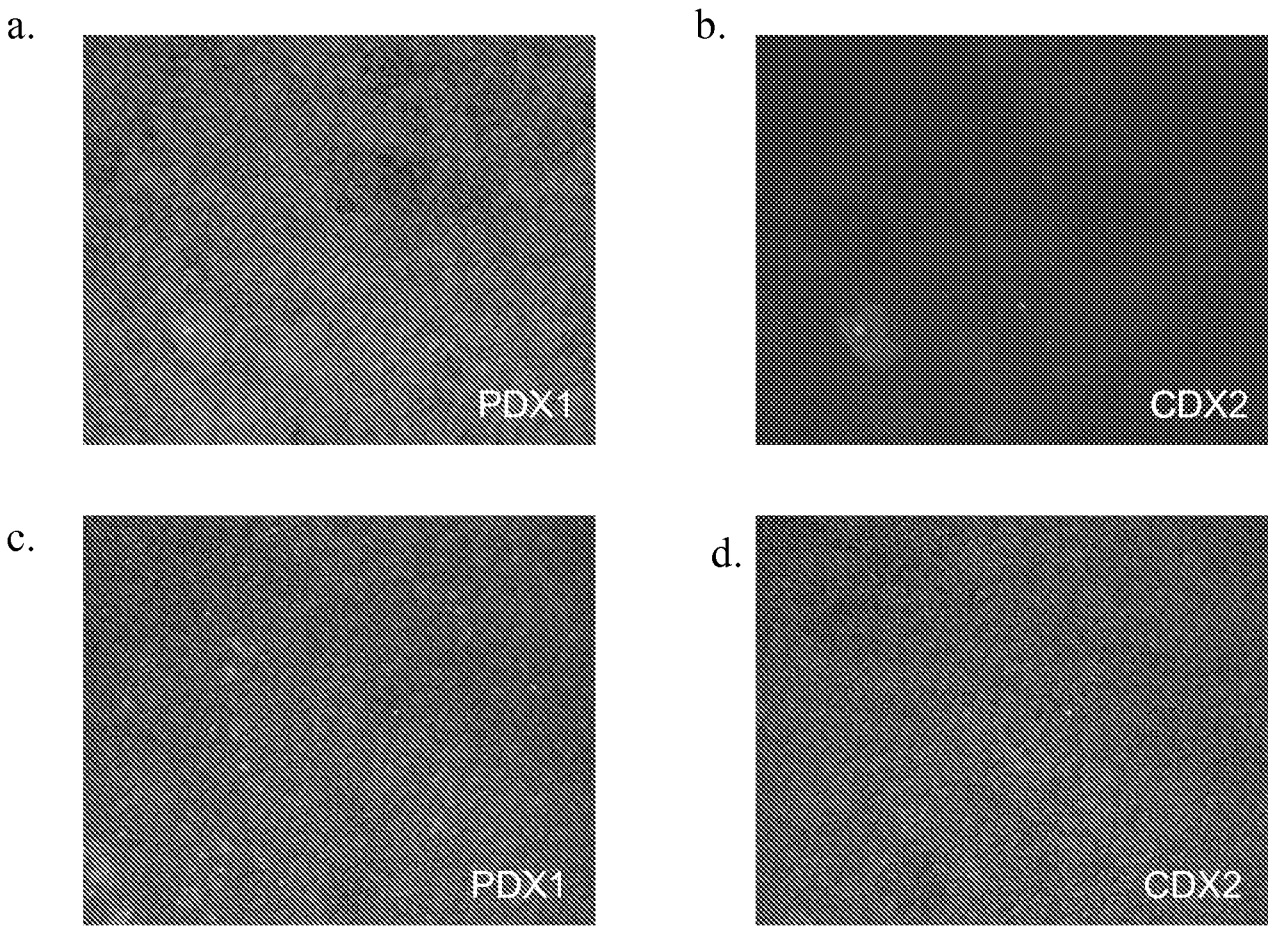
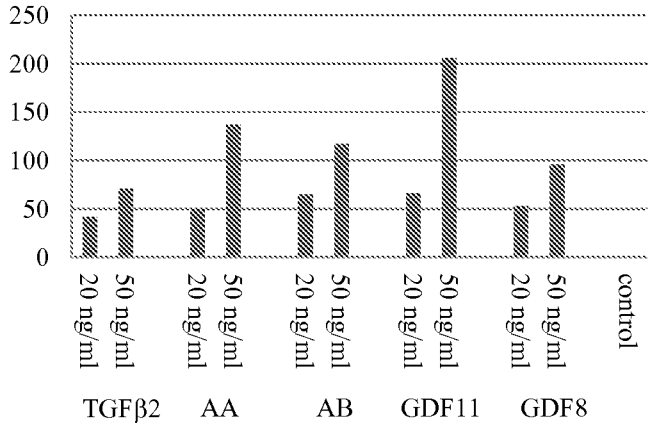
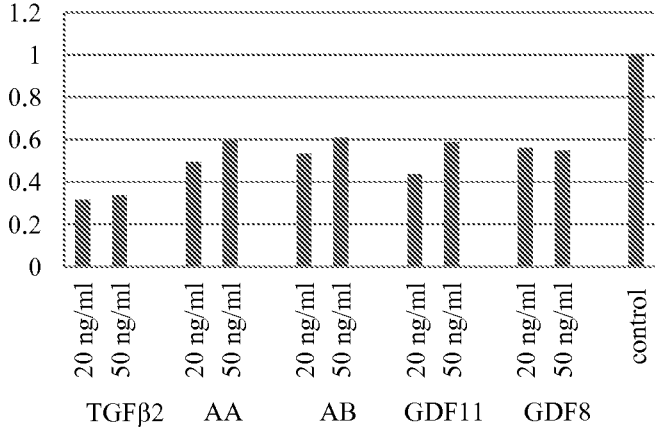


Figure 4

a)


Nkx6.1 Expression
250
200
150
100
50
0
20 ng/ml
50 ng/ml
control
TGFβ2
AA
AB
GDF11
GDF8

b)


Pdx1 Expression
1.2
1
0.8
0.6
0.4
0.2
0
20 ng/ml
50 ng/ml
control
TGFβ2
AA
AB
GDF11
GDF8

c)

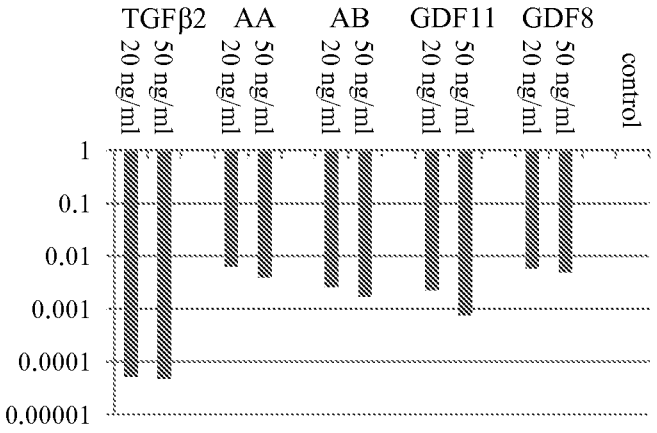
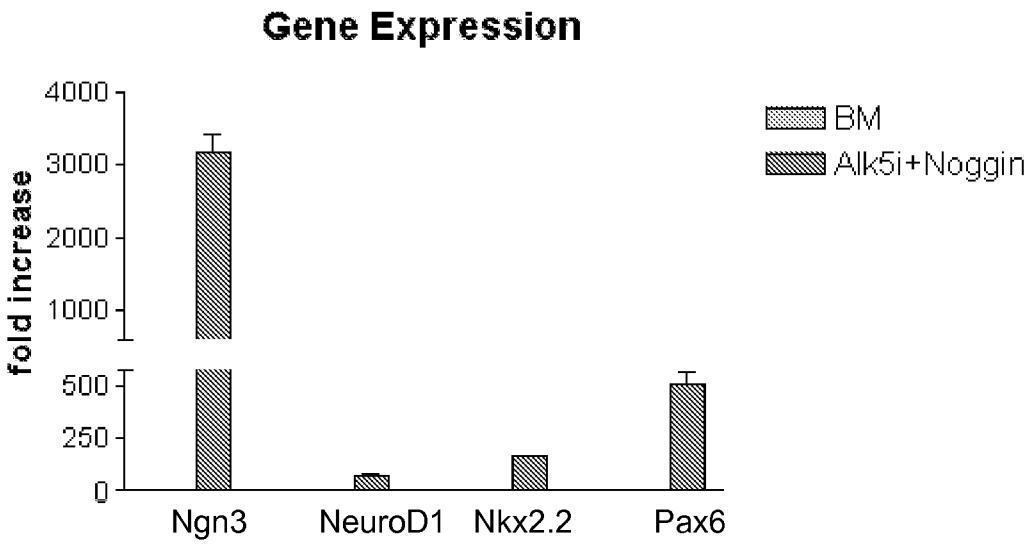

NGN3 Expression
TGFβ2
AA
AB
GDF11
GDF8
20 ng/ml
50 ng/ml
control
1
0.1
0.01
0.001
0.0001
0.00001

Figure 5.

a)


Gene Expression
fold increase
4000
3000
2000
1000
500
250
0
Ngn3
NeuroD1
Nkx2.2
Pax6
BM
Alk5i+Noggin

b)

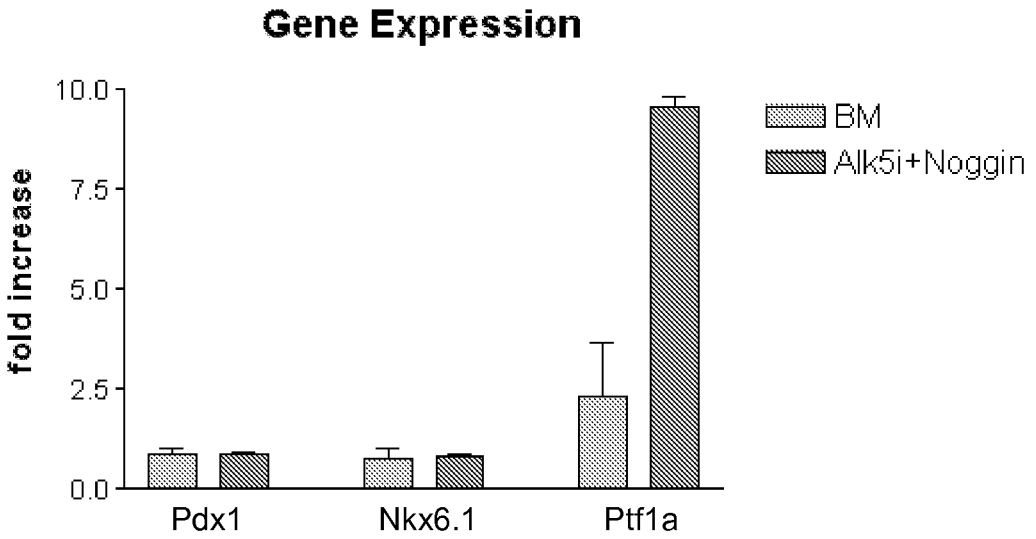
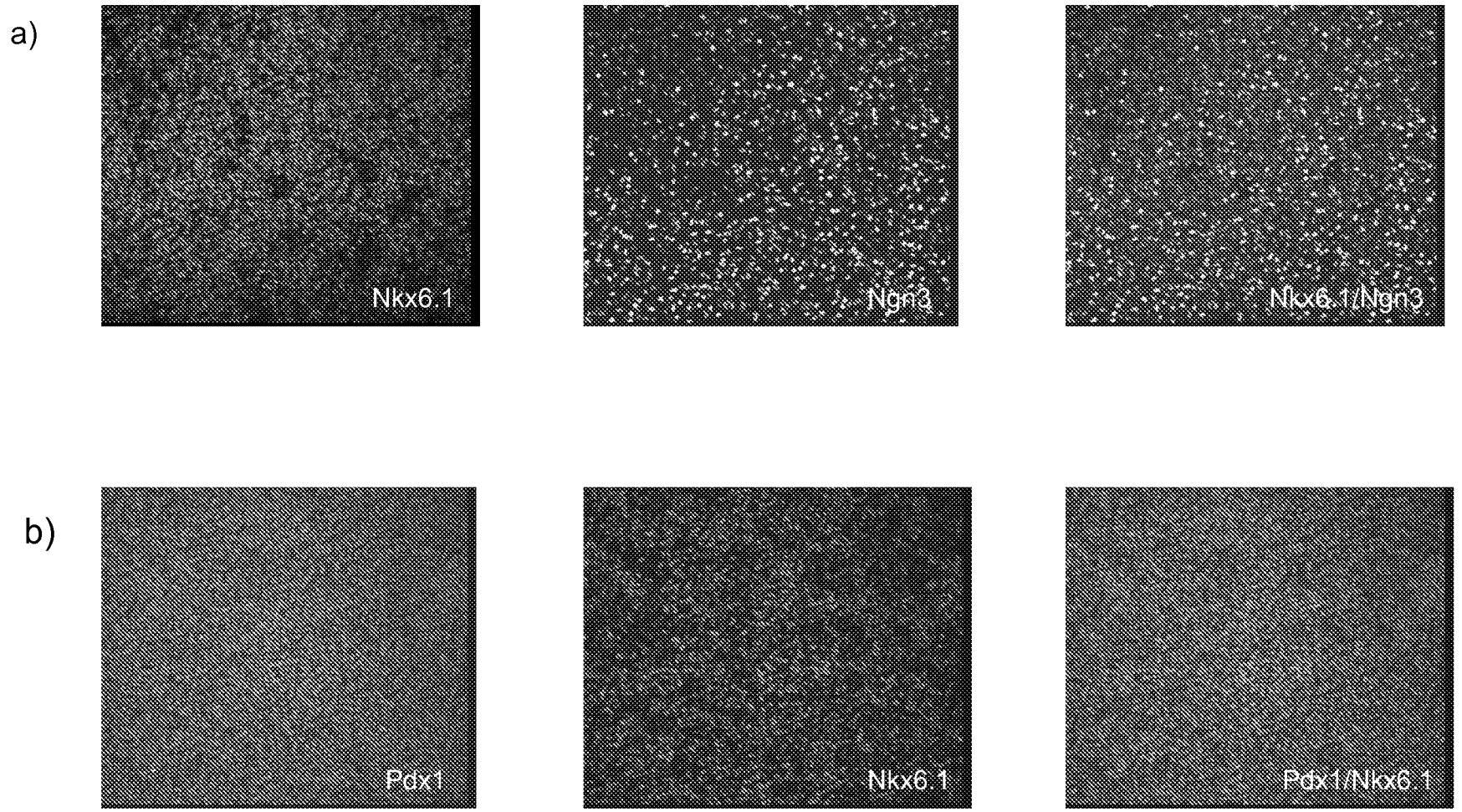

Gene Expression
fold increase
10.0
7.5
5.0
2.5
0.0
Pdx1
Nkx6.1
Ptf1a
BM
Alk5i+Noggin

Figure 6.



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Figure 7

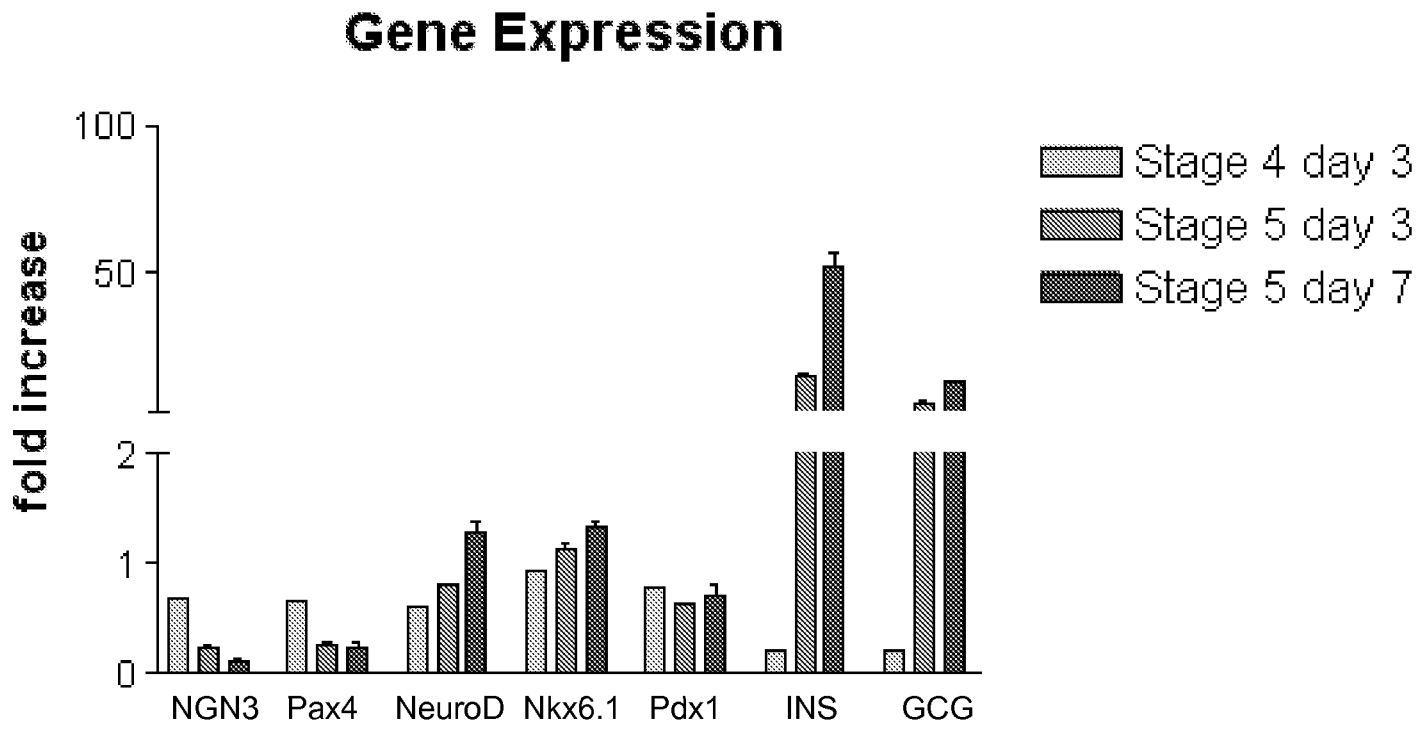
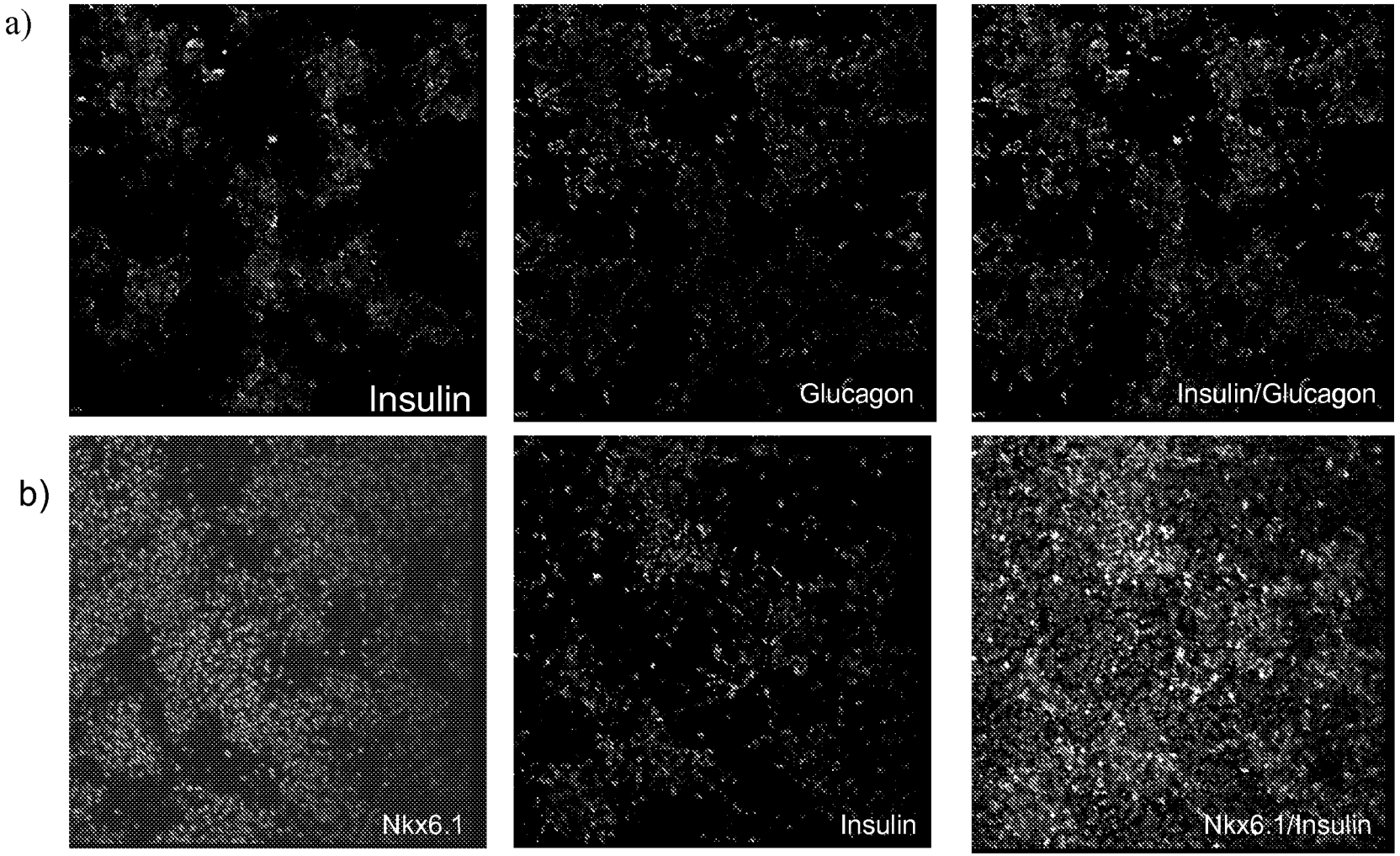
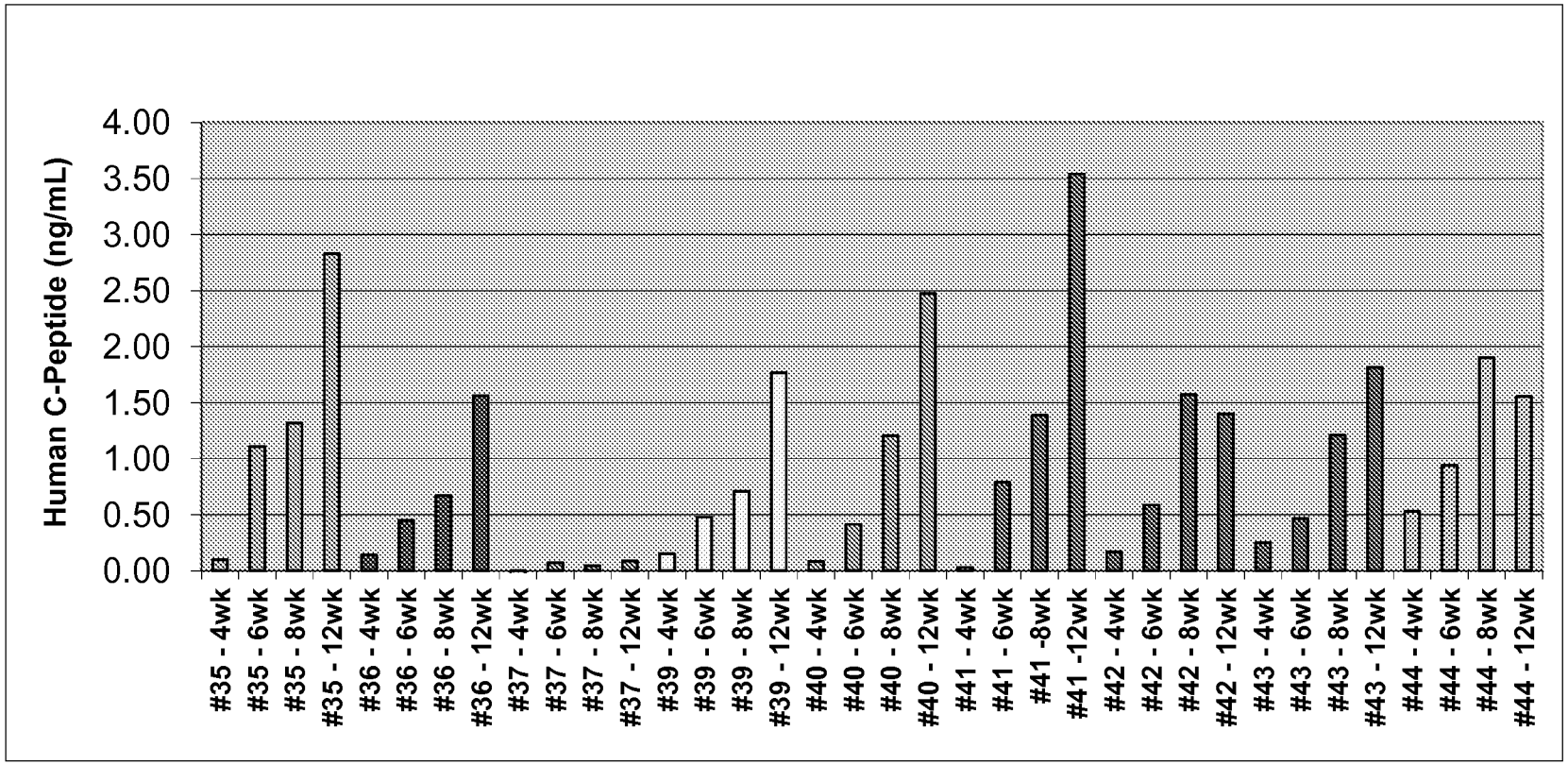

Gene Expression
fold increase
100
50
2
1
0
NGN3
Pax4
NeuroD
Nkx6.1
Pdx1
INS
GCG
Stage 4 day 3
Stage 5 day 3
Stage 5 day 7

Figure 8.



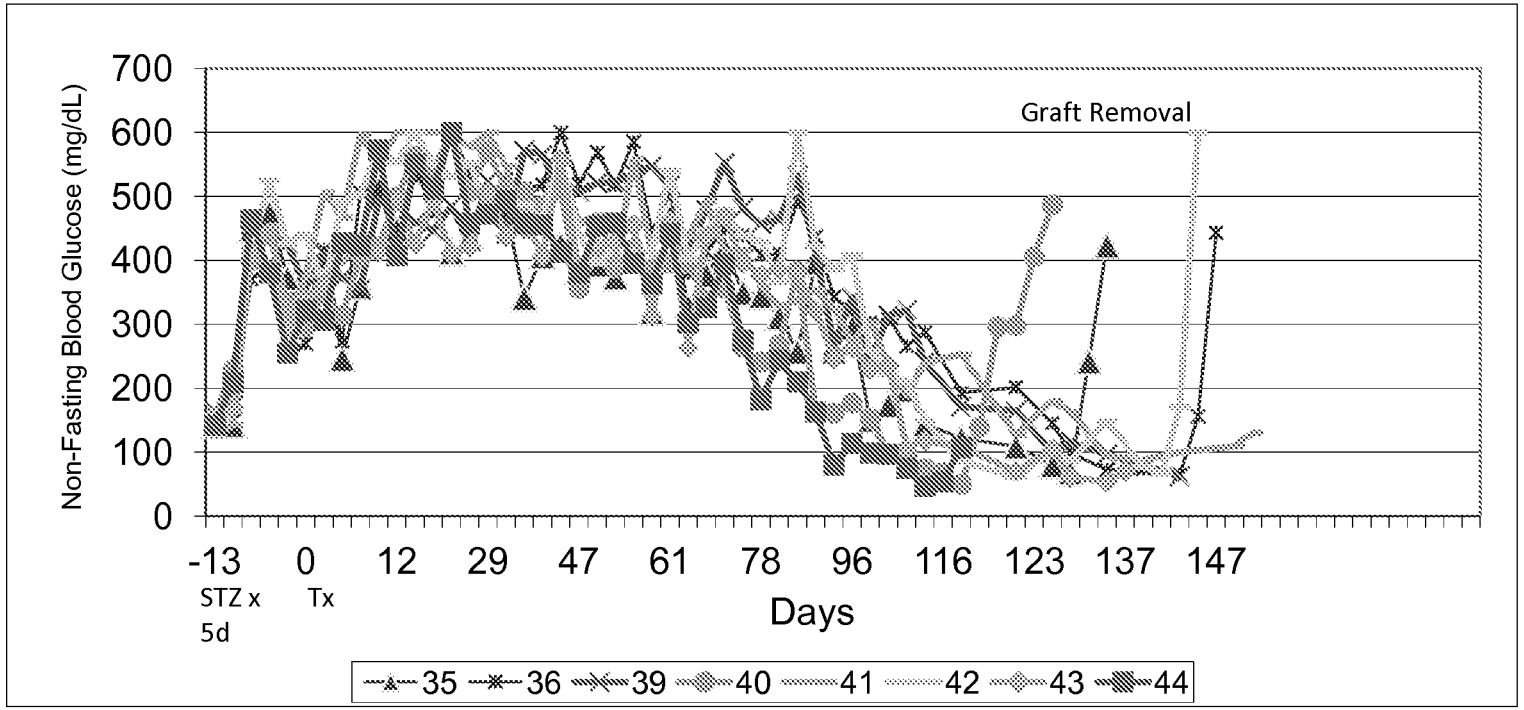
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Figure 9a.



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Figure 9b.



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