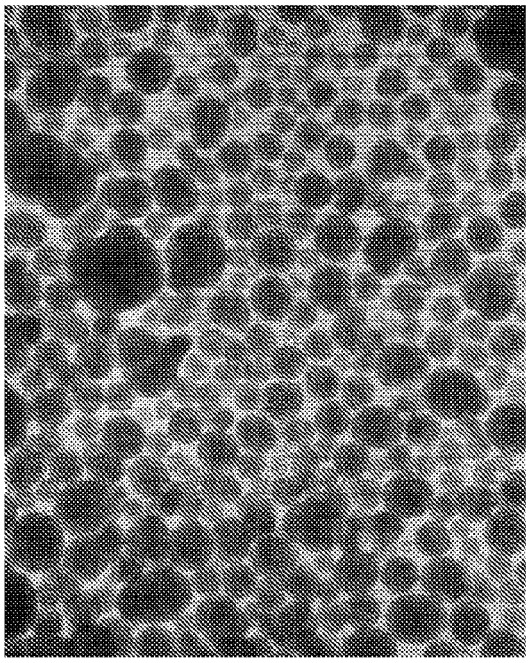
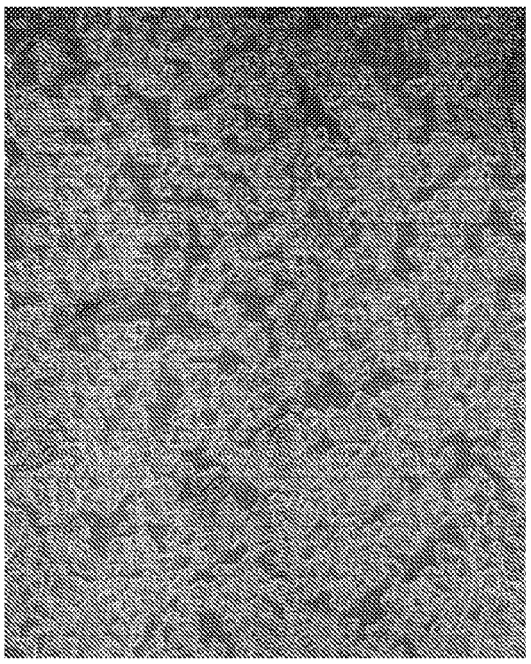
Figure 1a



24 hours in non-adherent static culutre



Immediately after lifting

Figure 1b

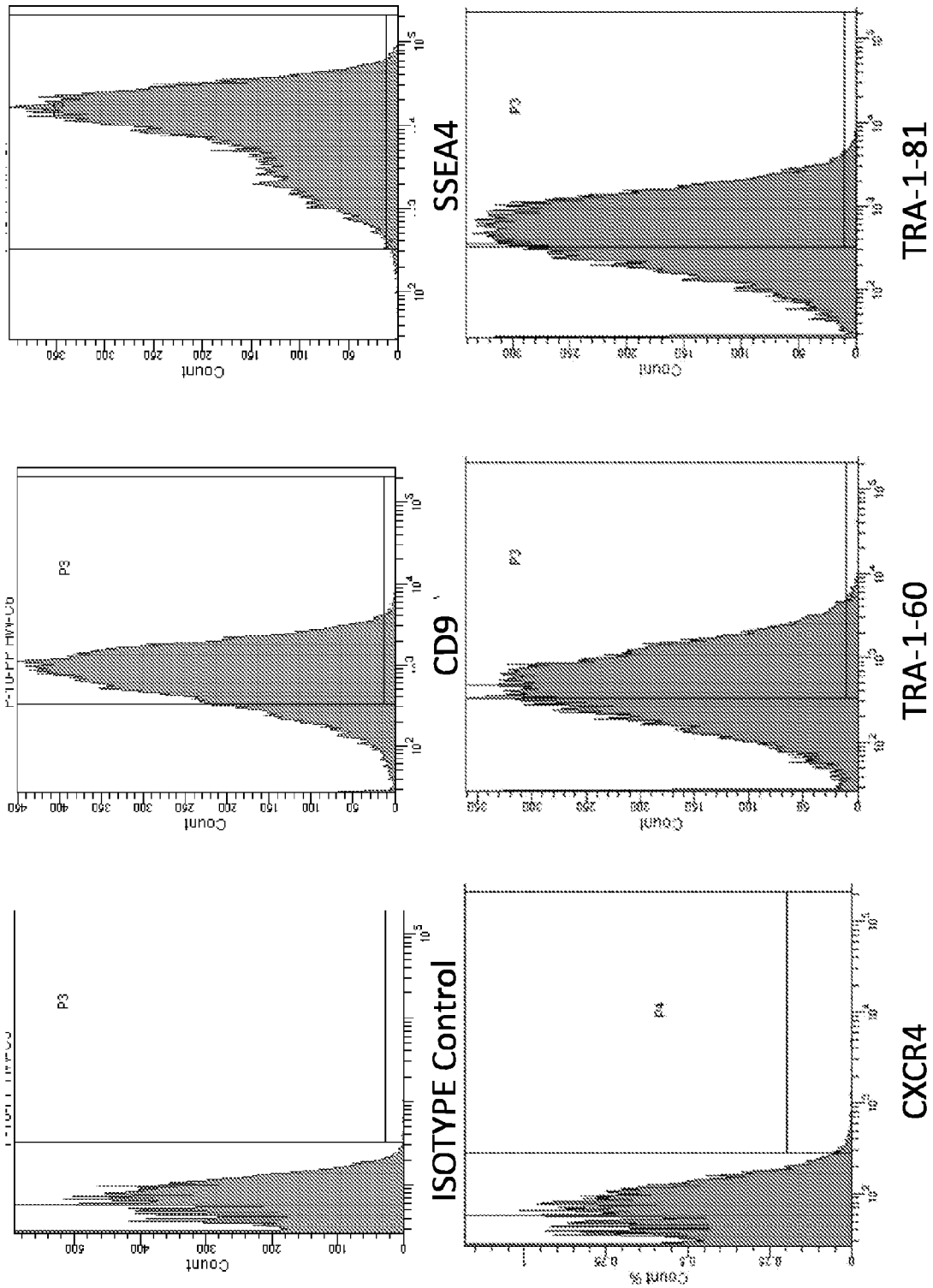


Figure 1c

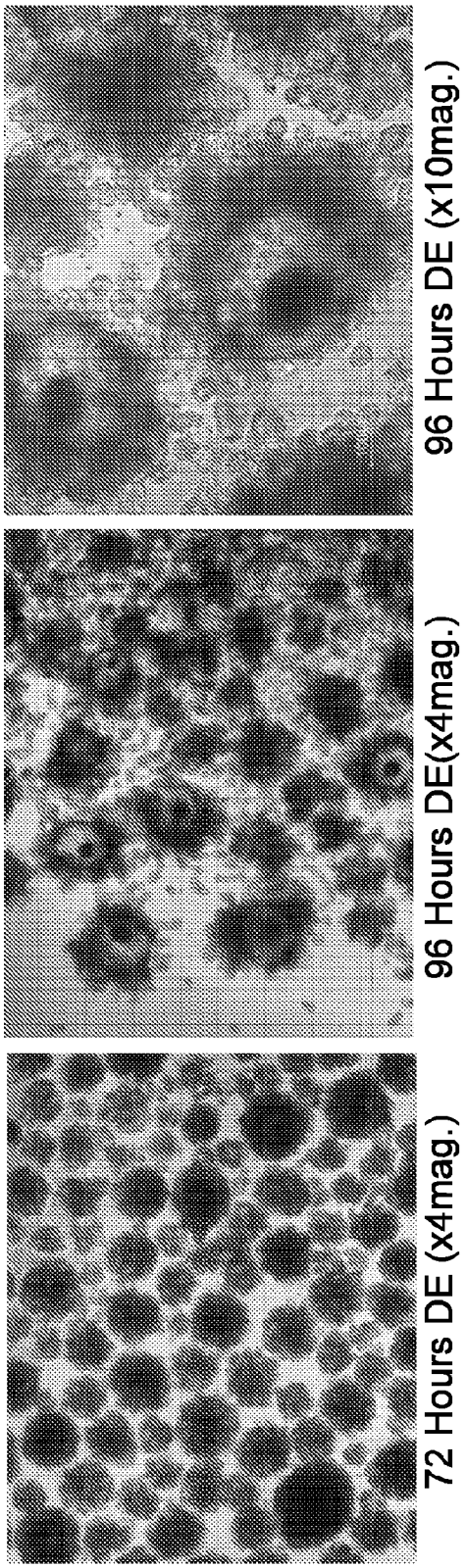
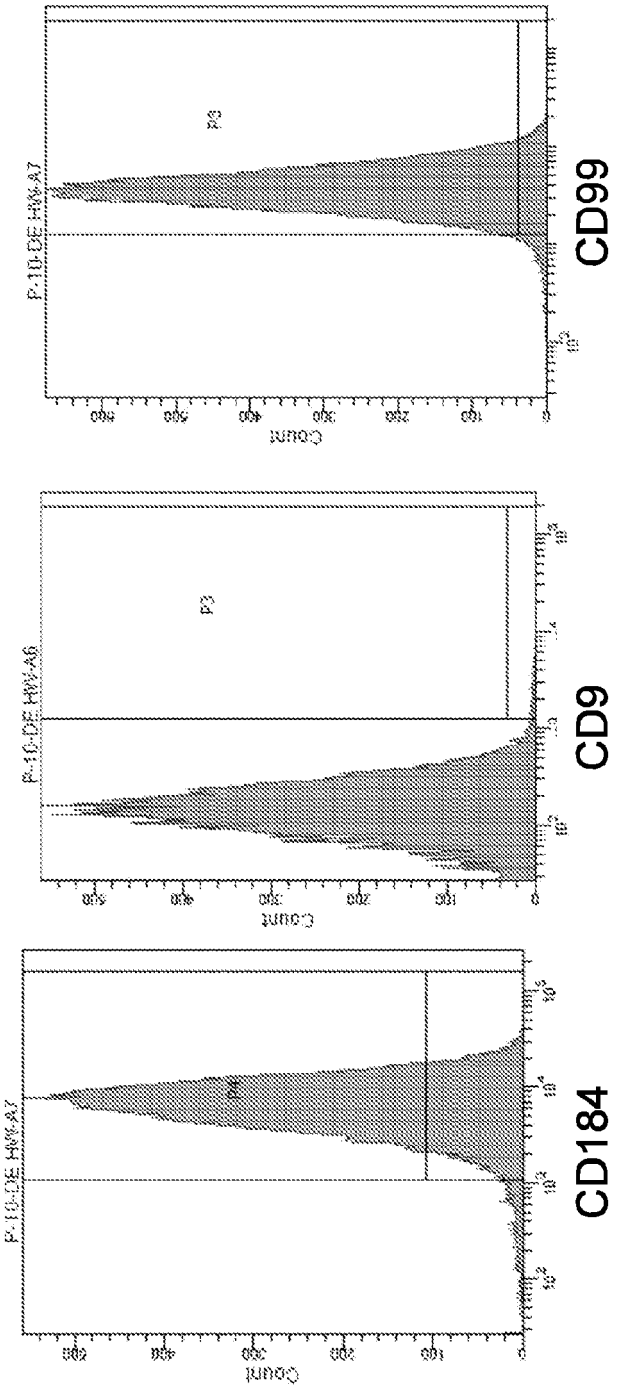


Figure 1d



Marker	CD184	CD9	CD99
% Cells Positive	97.20%	0.50%	97.30%

Figure 1e

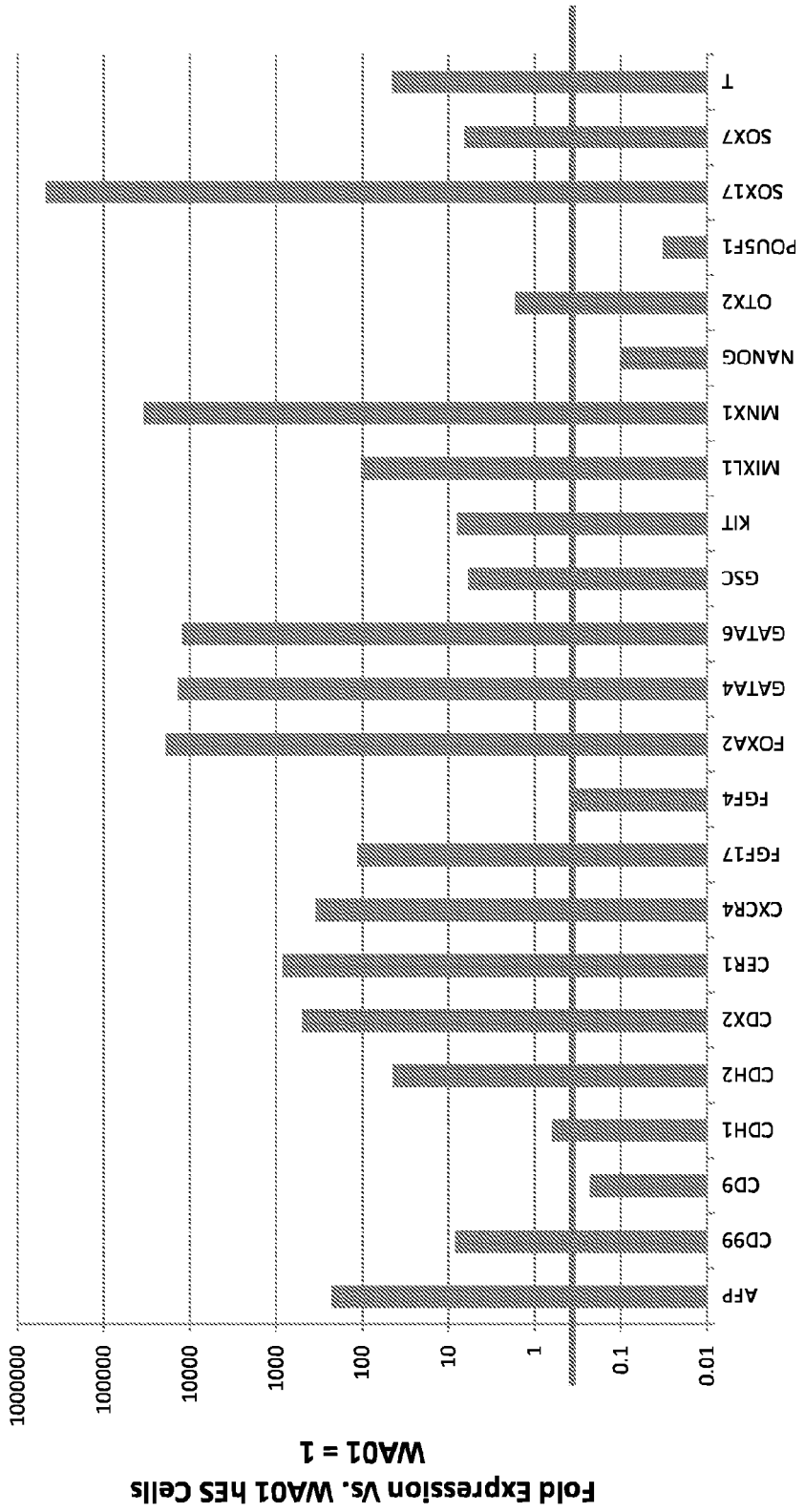

Fold Expression Vs. WA01 hES Cells
WA01 = 1
1000000
100000
10000
1000
100
10
1
0.1
0.01
AFP
CD99
CD9
CDH1
CDH2
CDX2
CER1
CXCR4
FGF17
FGF4
FOXA2
GATA4
GATA6
GSC
KIT
MIXL1
MNX1
NANOG
OTX2
POU5F1
SOX17
SOX7
T

Figure 1f

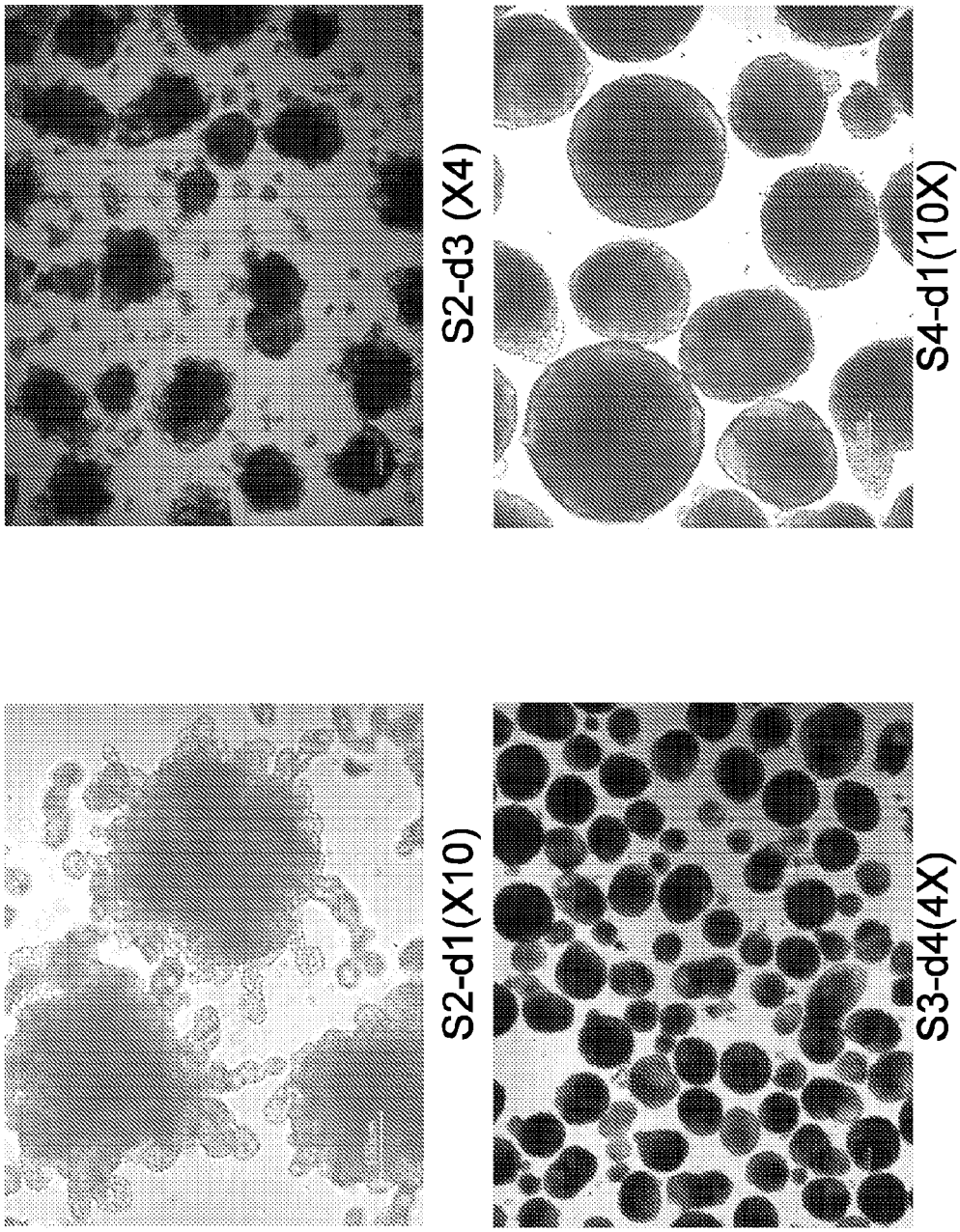


Figure 2a

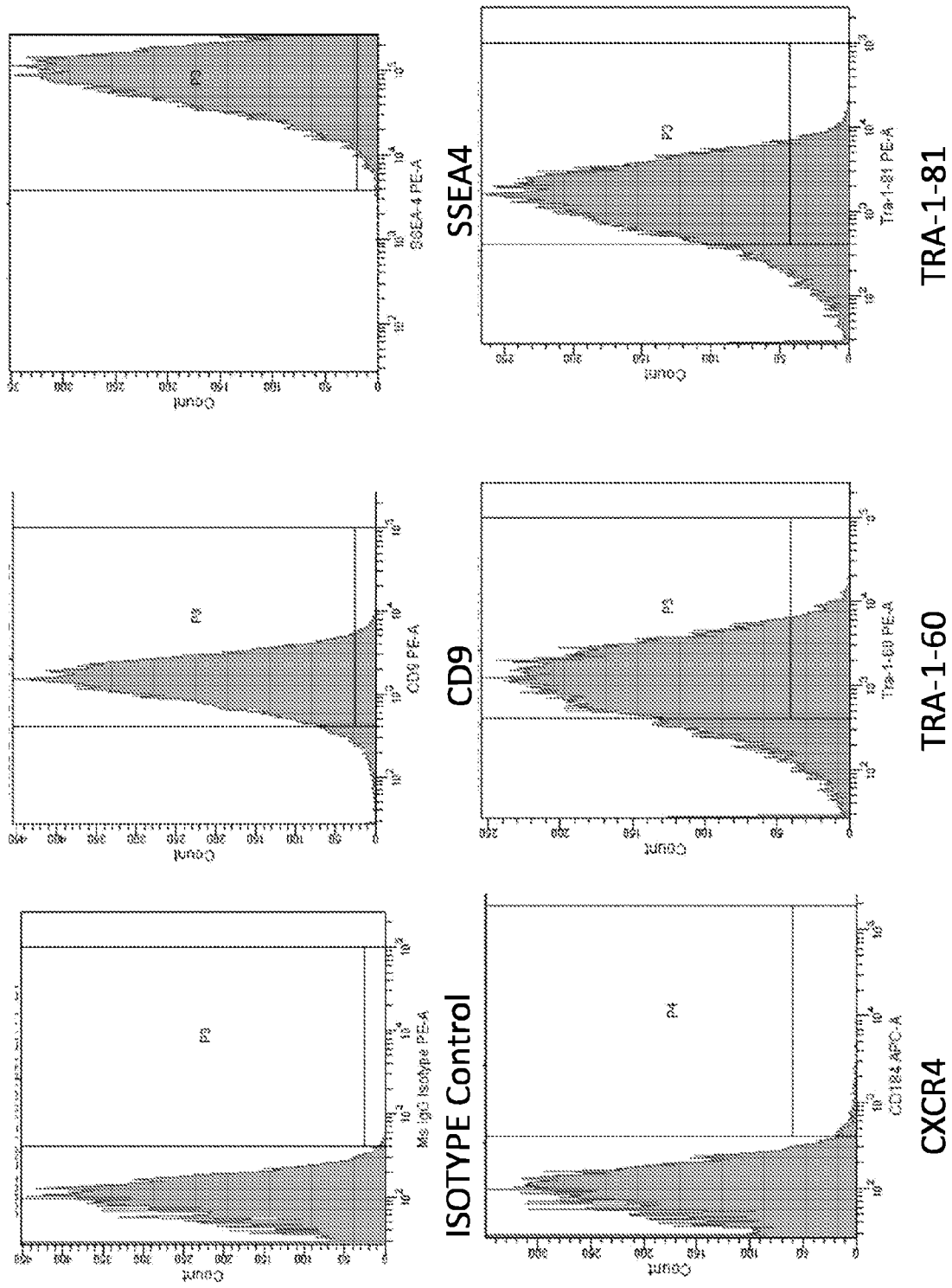

ISOTYPE Control
CD9
SSEA4
TRA-1-60
TRA-1-81
CXCR4
Count
Ms IgG Isotype PE-A
CD9 PE-A
SSEA-4 PE-A
Tra-1-60 PE-A
Tra-1-81 PE-A
CD184 APC-A
P3
P4

Figure 2b

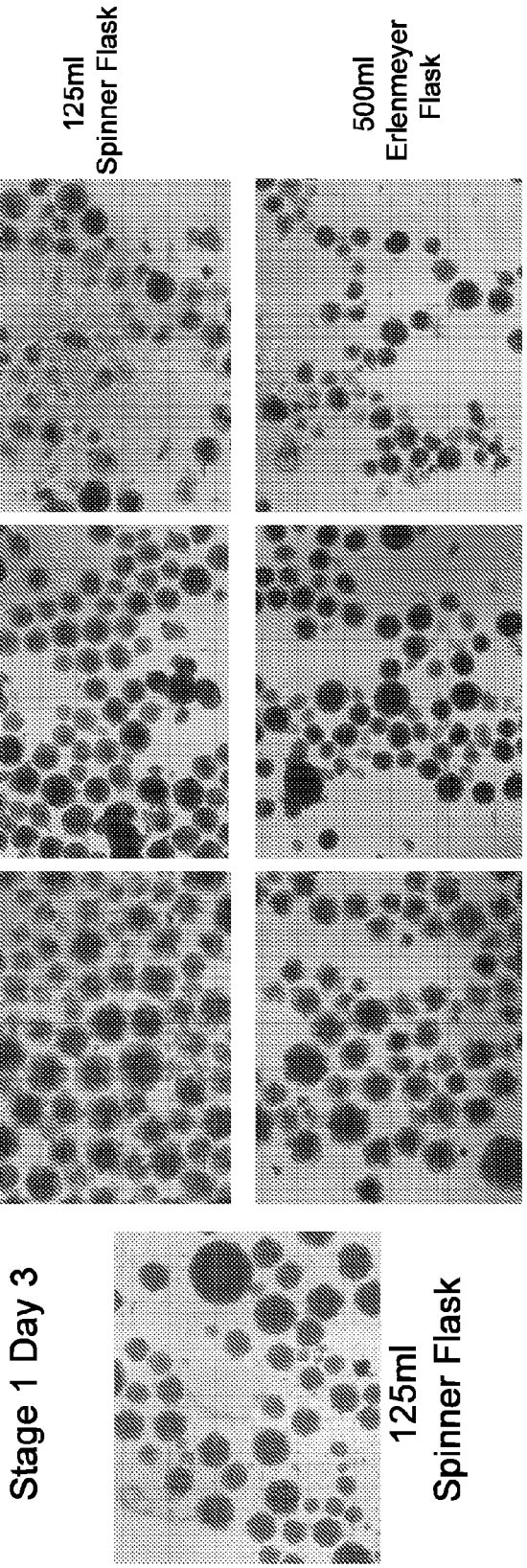

125ml Spinner Flask
500ml Erlenmeyer Flask
Stage 4 Day 3
Stage 4 Day 1
Stage 2 Day 2
Stage 1 Day 3
125ml Spinner Flask

Figure 2c

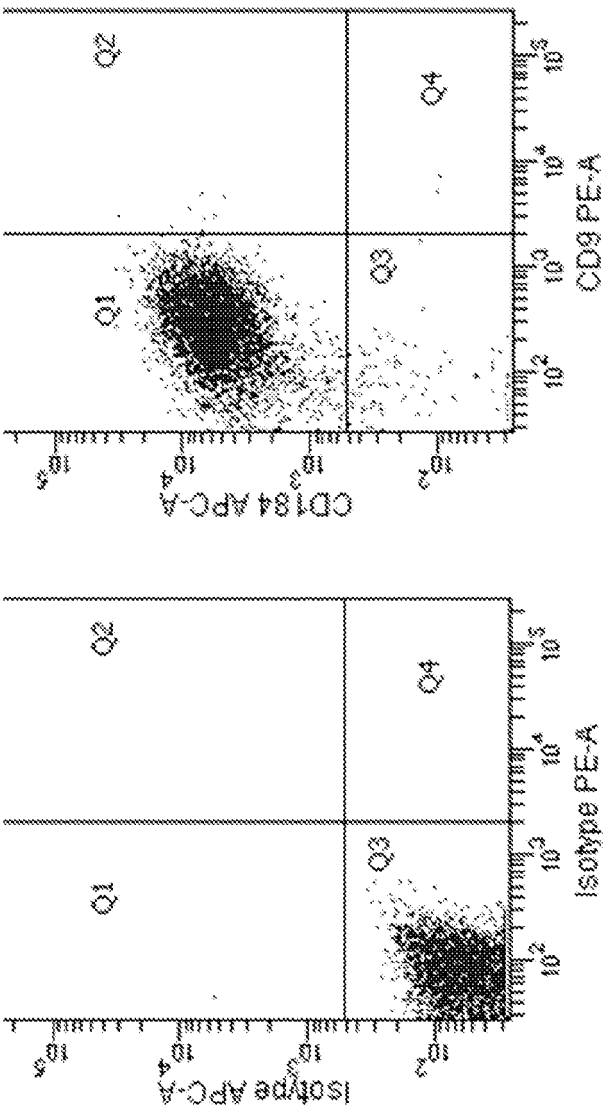


Figure 2d

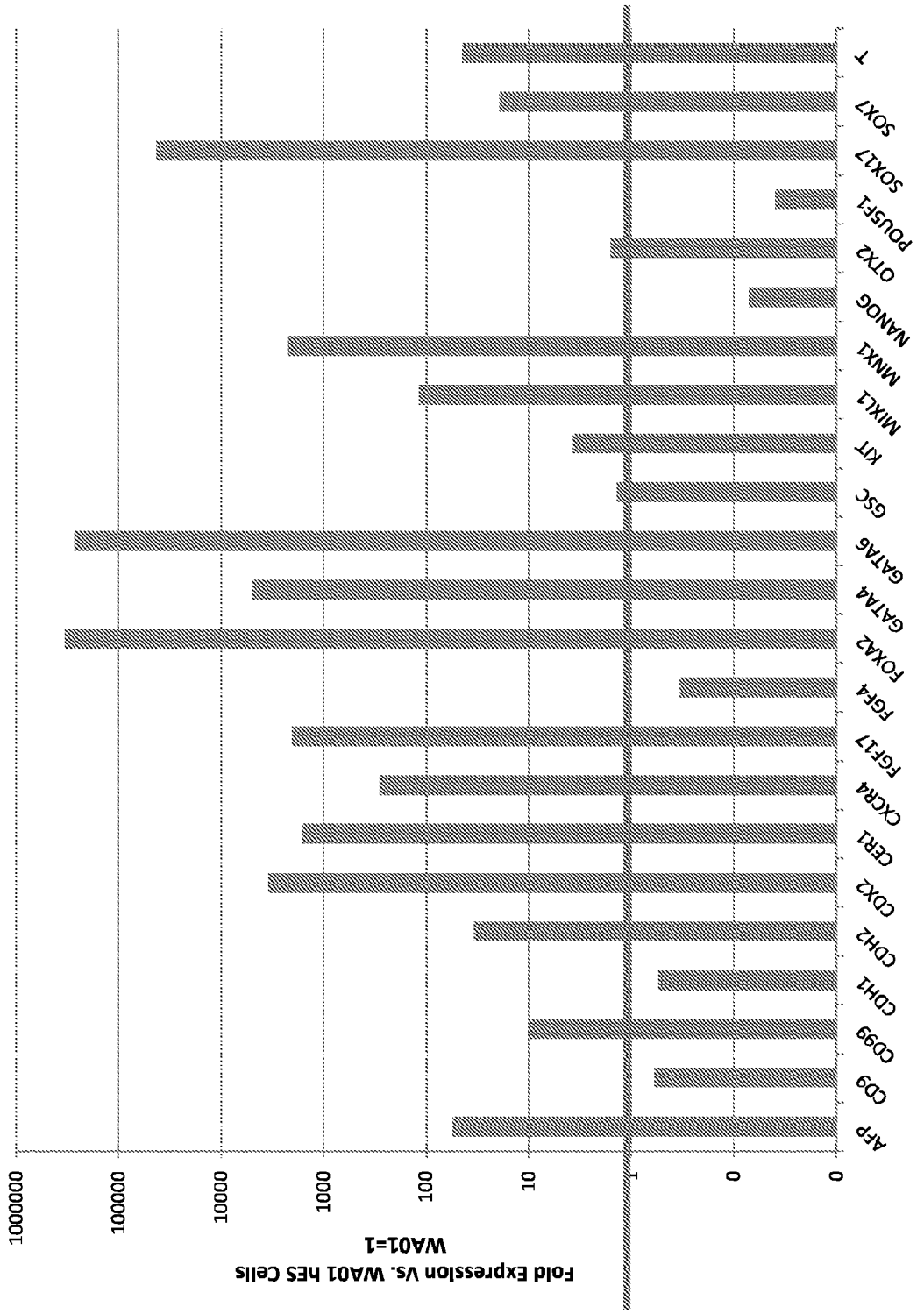

Fold Expression Vs. WA01 hES Cells
WA01=1
1000000
100000
10000
1000
100
10
1
0
0
AFP
CD9
CD99
CDH1
CDH2
CDX2
CER1
CXCR4
FGF17
FGF4
FOXA2
GATA4
GATA6
GSC
KIT
MIXL1
MNX1
NANOG
OTX2
POU5F1
SOX17
SOX7
T

Figure 2E

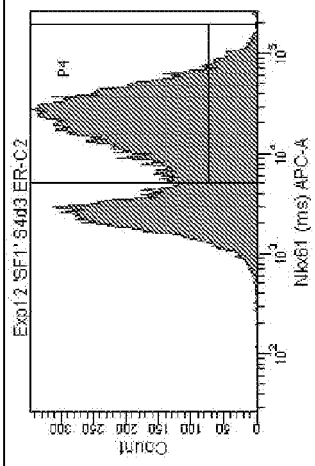
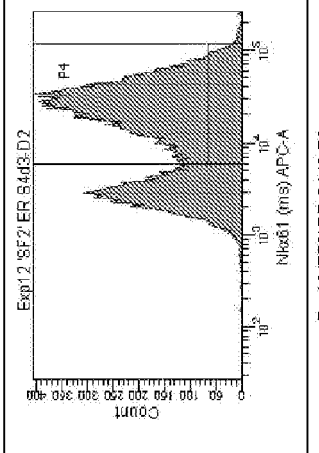
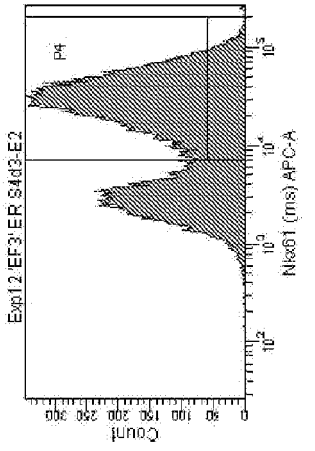
Name	Nkx6.1
Spinner Flask 1	
Spinner Flask 2	
Erlenmeyer Flask	

Figure 2E (continued)

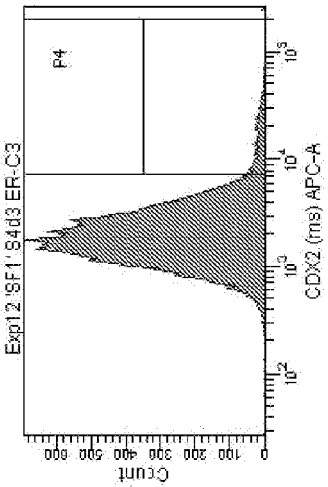
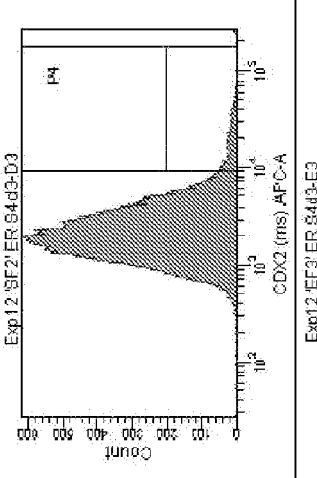
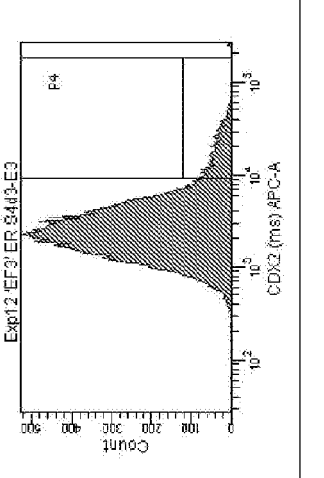
Name	CDX2
Spinner Flask 1	
Spinner Flask 2	
Erlenmeyer Flask	

Figure 2E (continued)

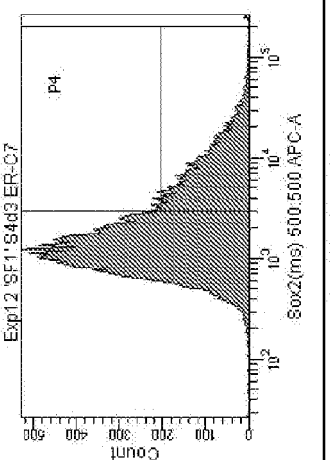
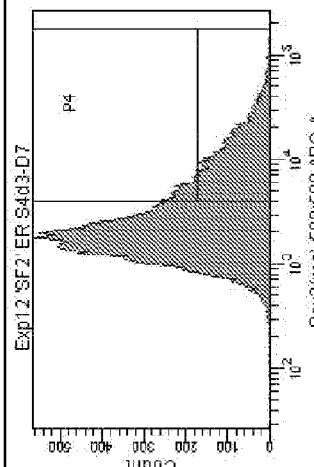
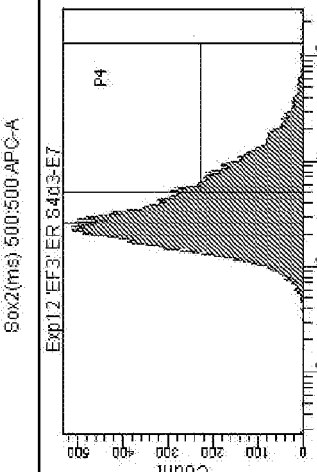
Name	SOX2
Spinner Flask 1	
Spinner Flask 2	
Erlenmeyer Flask	

Figure 2E (continued)

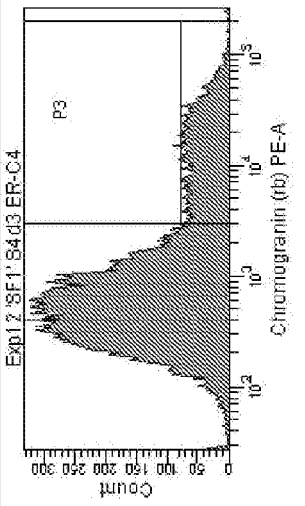
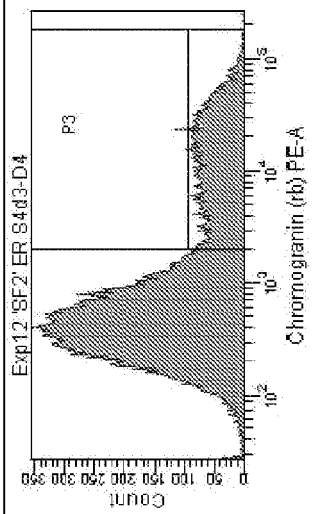
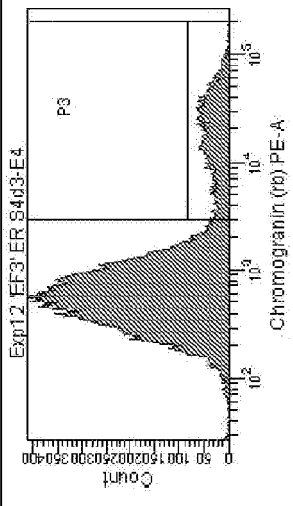
Name	Chromagranin
Spinner Flask 1	
Spinner Flask 2	
Erlenmeyer Flask	

Figure 2f

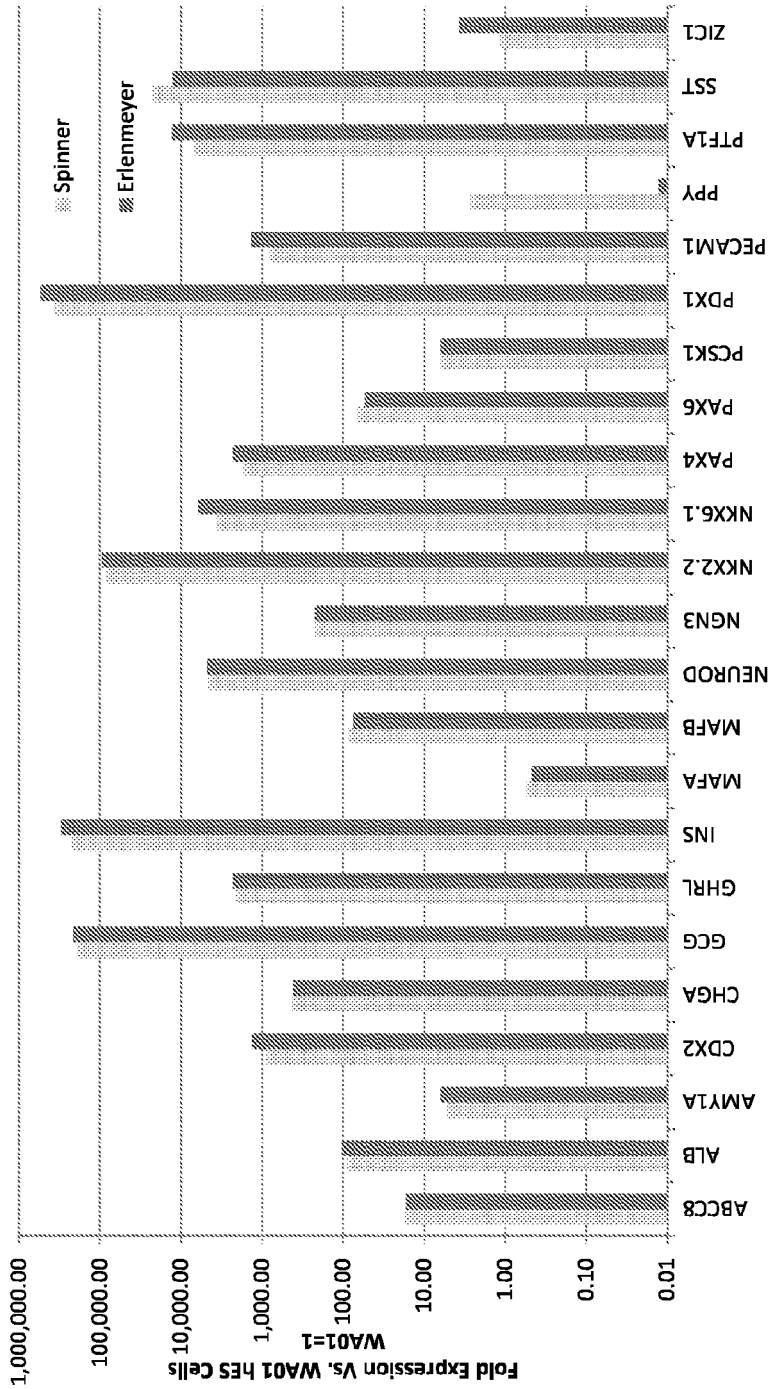
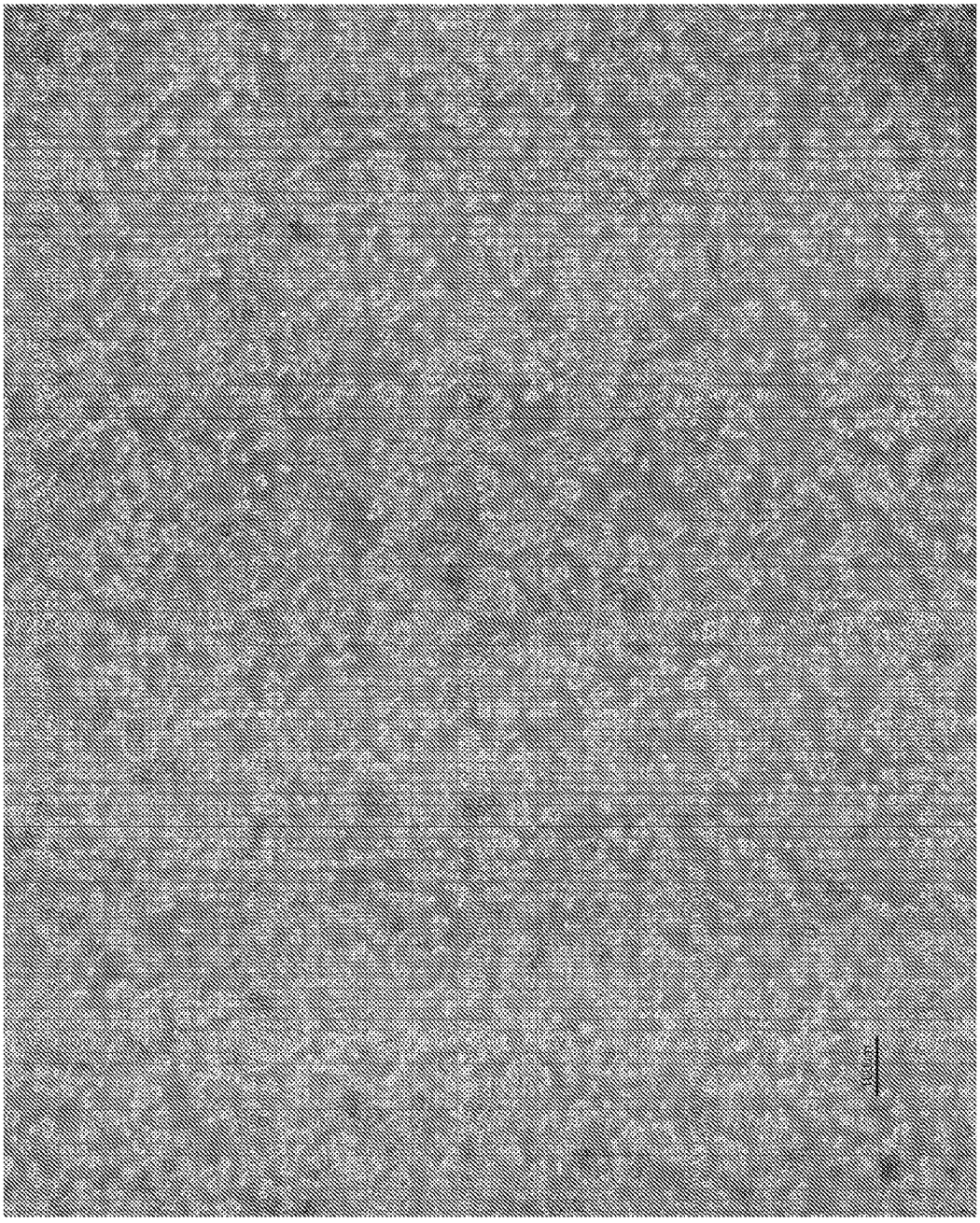

Fold Expression Vs. WA01 hES Cells
WA01=1
1,000,000.00
100,000.00
10,000.00
1,000.00
100.00
10.00
1.00
0.10
0.01
Spinner
Erlenmeyer
ABCC8
ALB
AMY1A
CDX2
CHGA
GCG
GHRL
INS
MAFA
MAFB
NEUROD
NGN3
NKX2.2
NKX6.1
PAX4
PAX6
PCSK1
PDX1
PECAM1
PPY
PTF1A
SST
ZIC1

Figure 3a



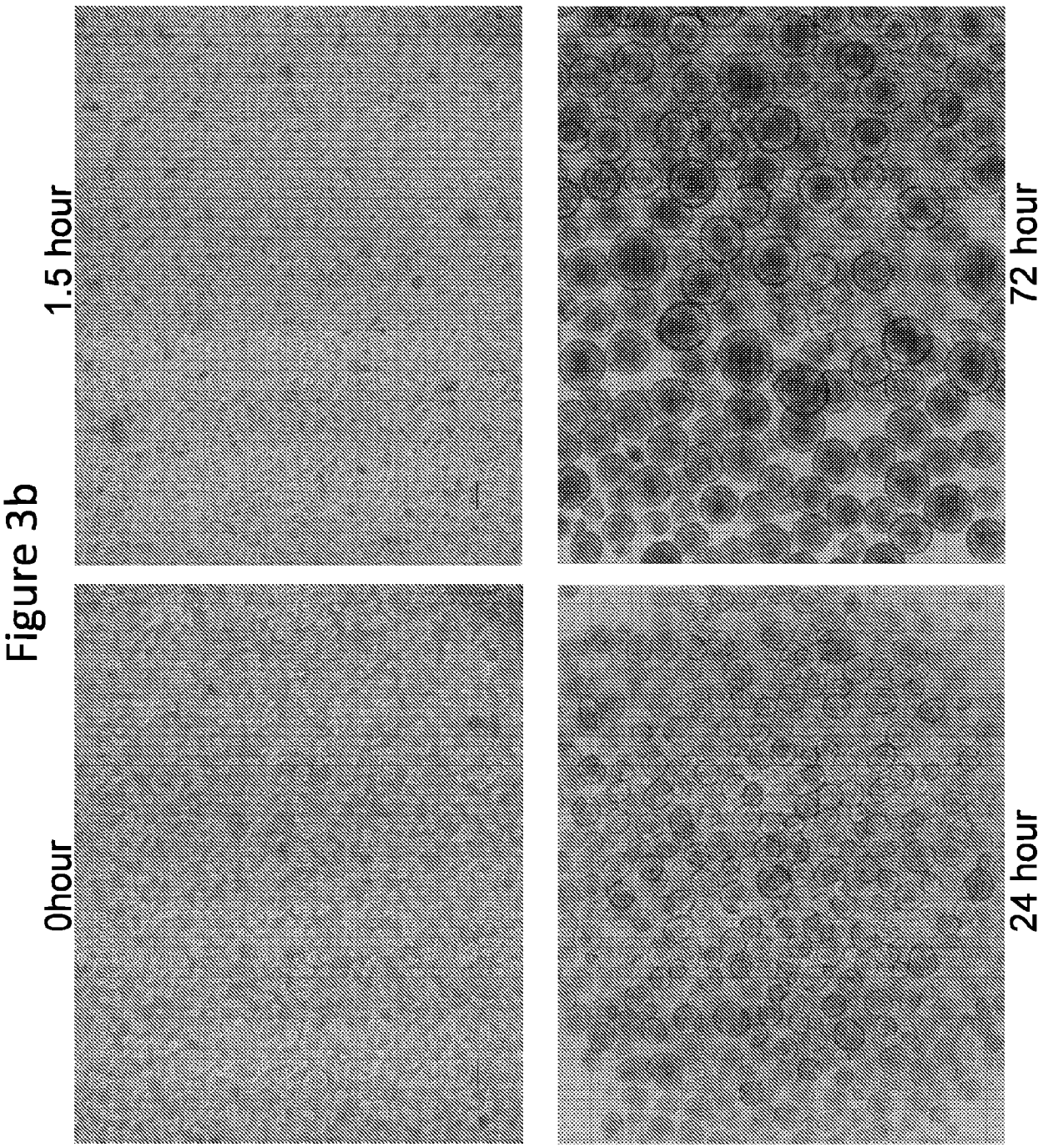


Figure 3b

Figure 3c

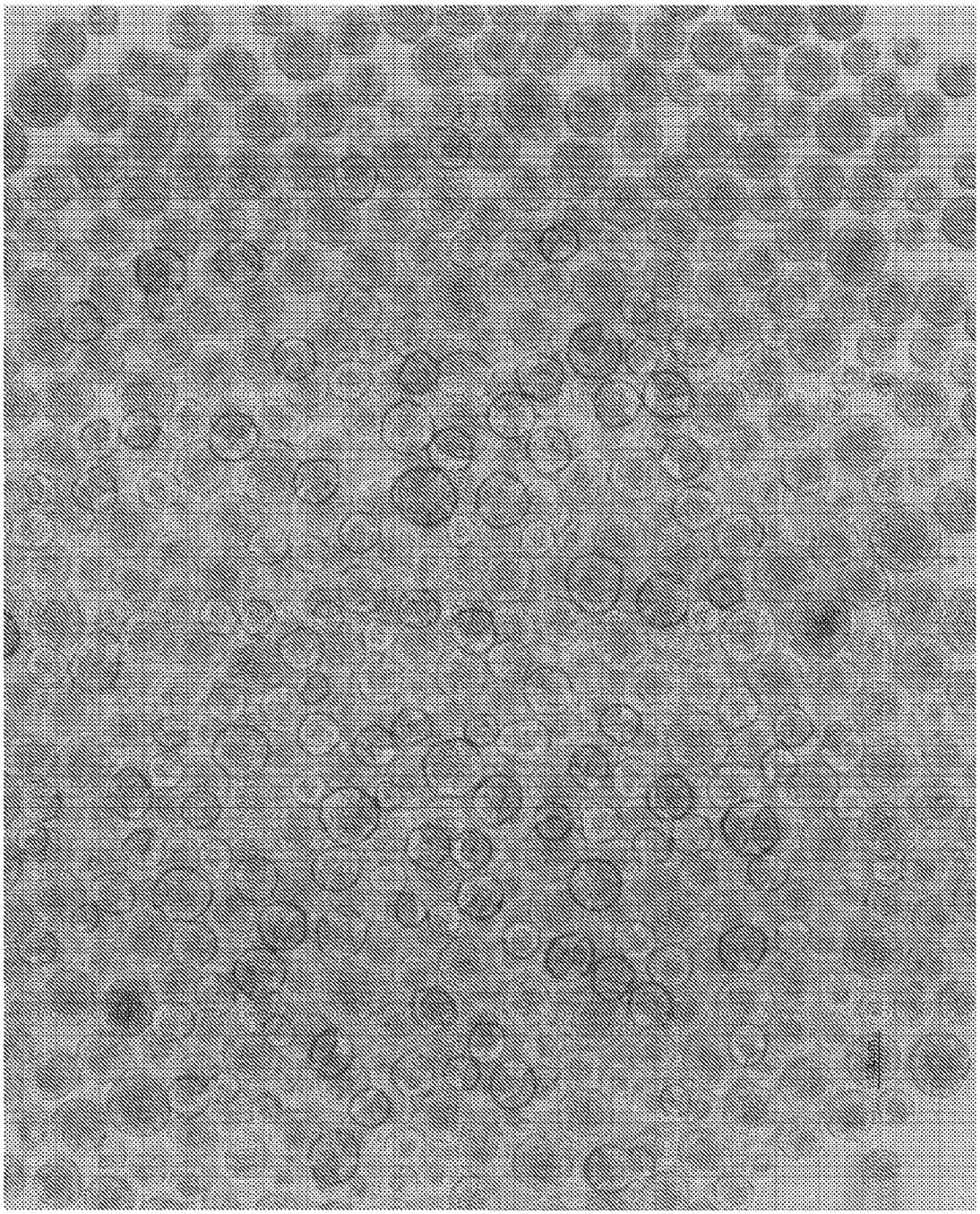


Figure 4a

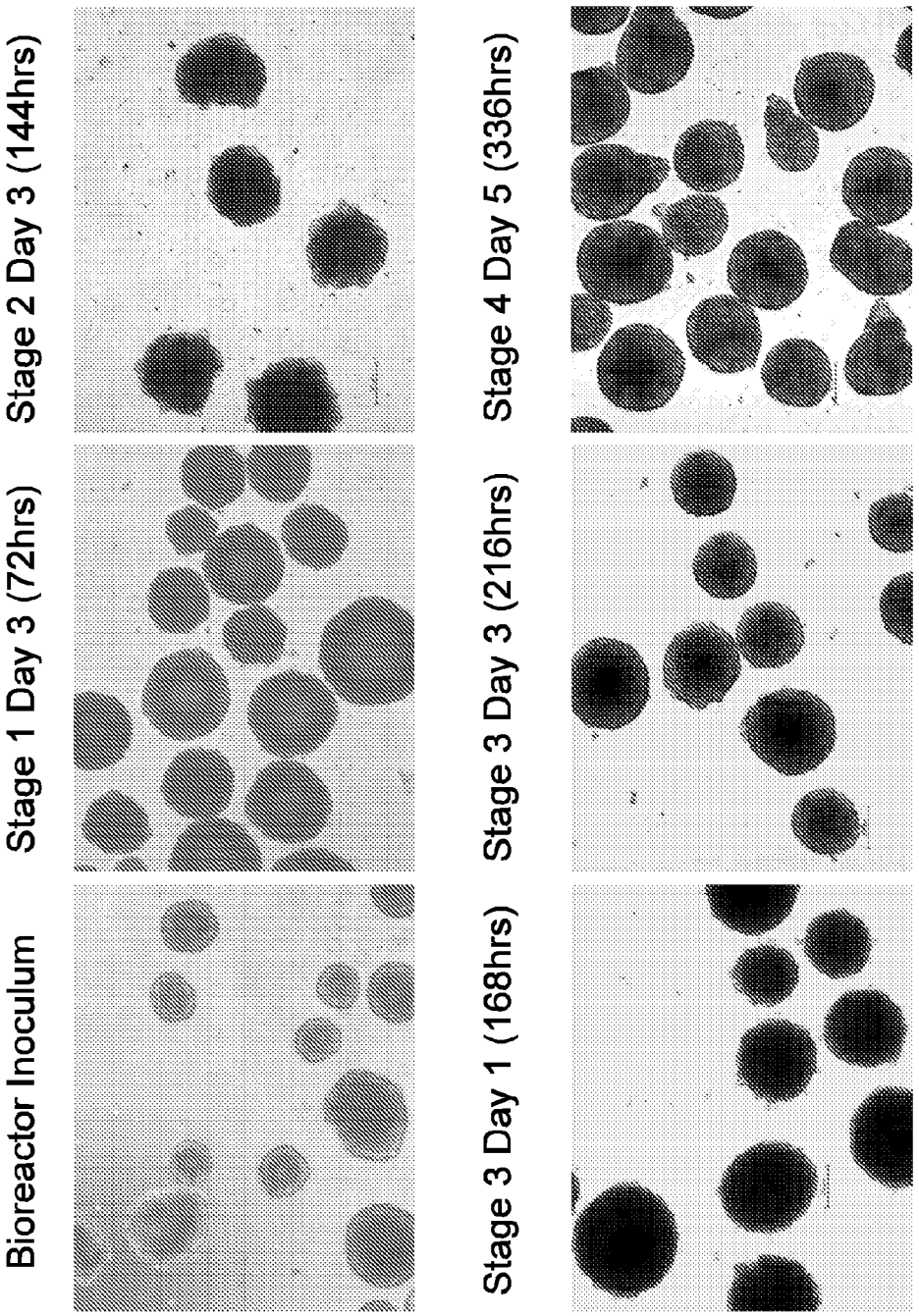

Bioreactor Inoculum
Stage 1 Day 3 (72hrs)
Stage 2 Day 3 (144hrs)
Stage 3 Day 1 (168hrs)
Stage 3 Day 3 (216hrs)
Stage 4 Day 5 (336hrs)

Figure 4b

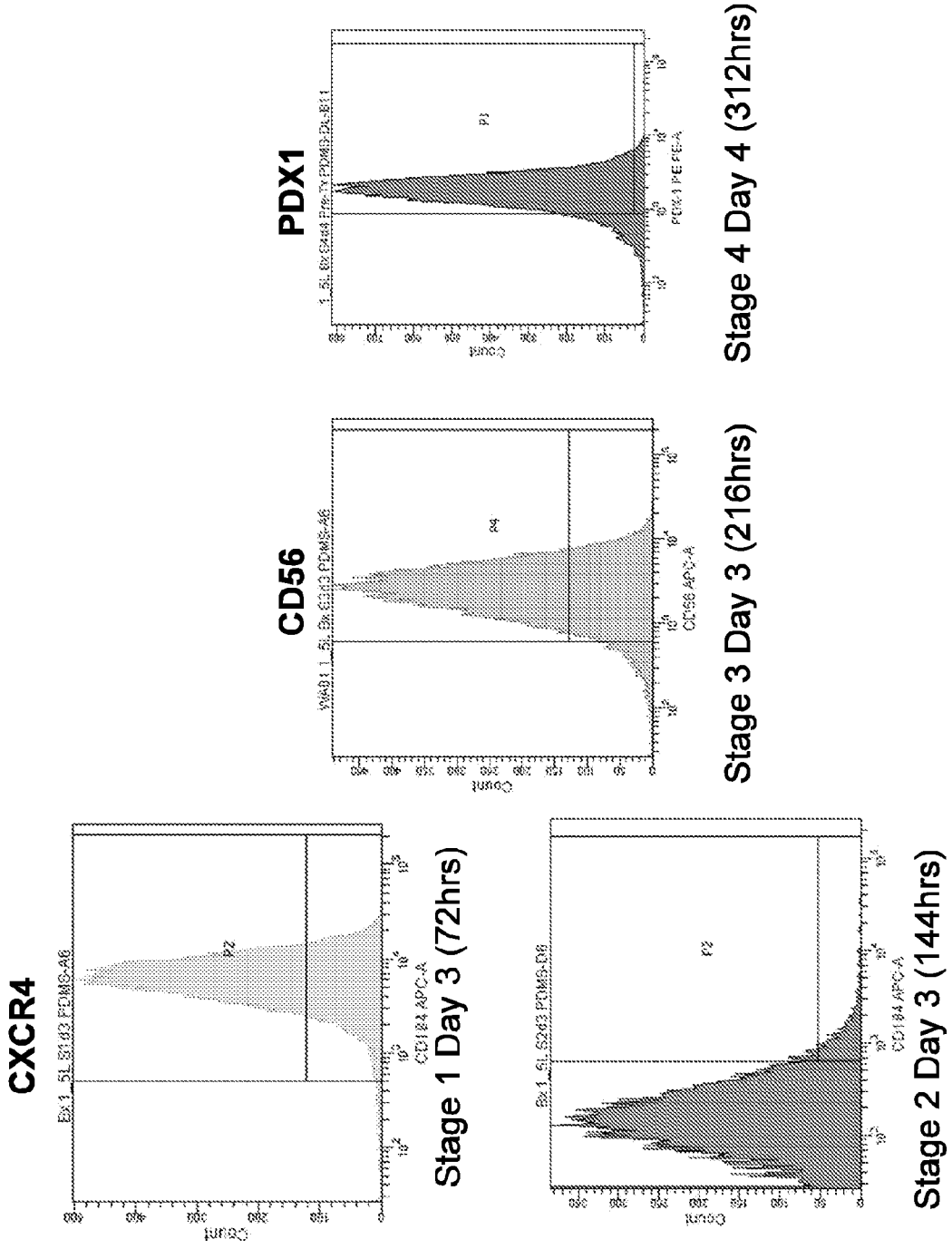

CXCR4
CD56
PDX1
Stage 1 Day 3 (72hrs)
Stage 2 Day 3 (144hrs)
Stage 3 Day 3 (216hrs)
Stage 4 Day 4 (312hrs)
Count
CD184 APC-A
CD56 APC-A
PDX-1 PE PE-A
P2
P4
P1

Figure 4C

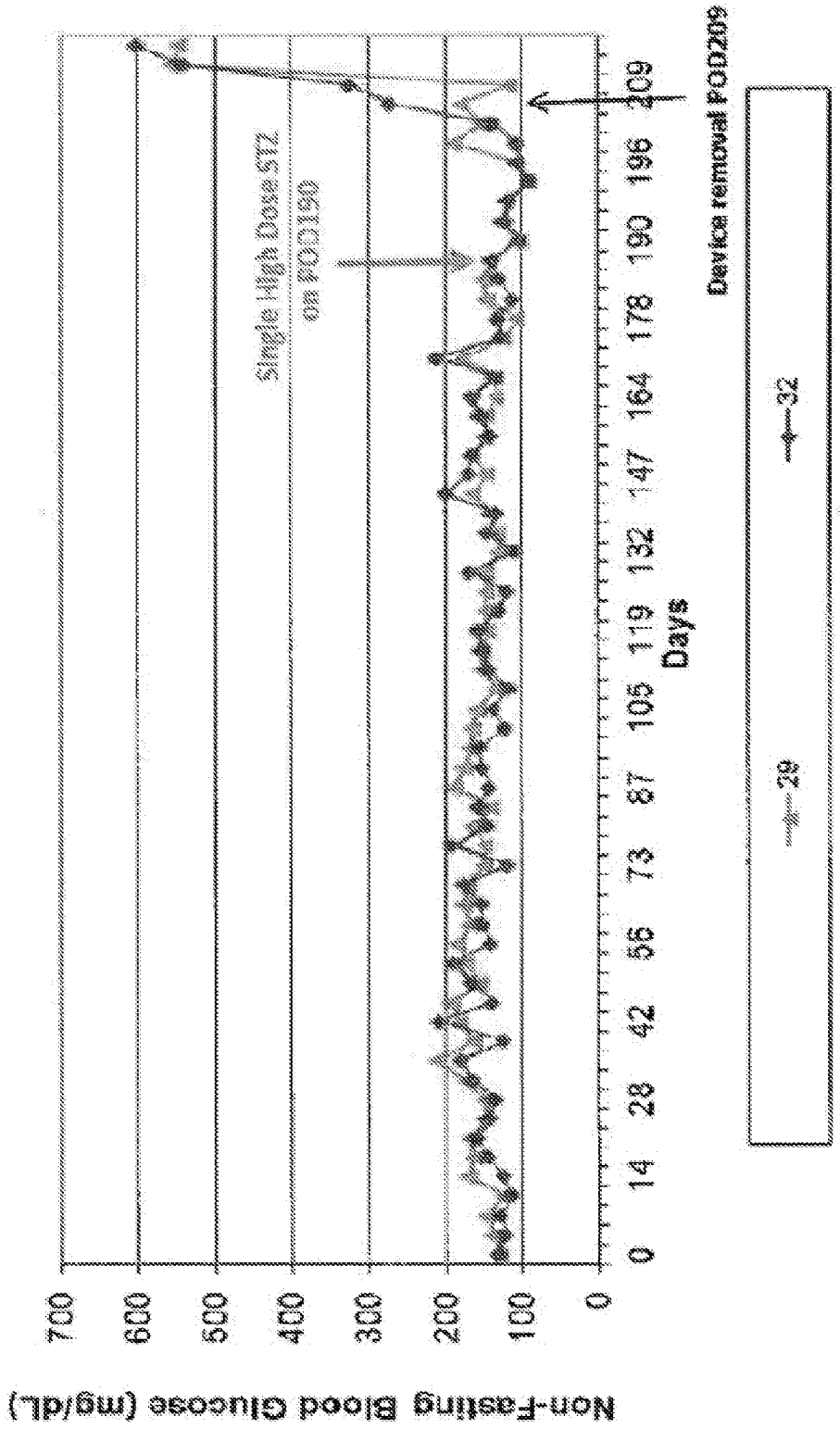

PRD-1130A - Theracyte Device Transplant Recipients
Non-Fasting Blood Glucose (mg/dL)
700
600
500
400
300
200
100
0
0 14 28 42 56 73 87 105 119 132 147 164 178 190 196 209
Days
Single High Dose STZ on POD150
Device removal POD209
32
29

Figure 5a

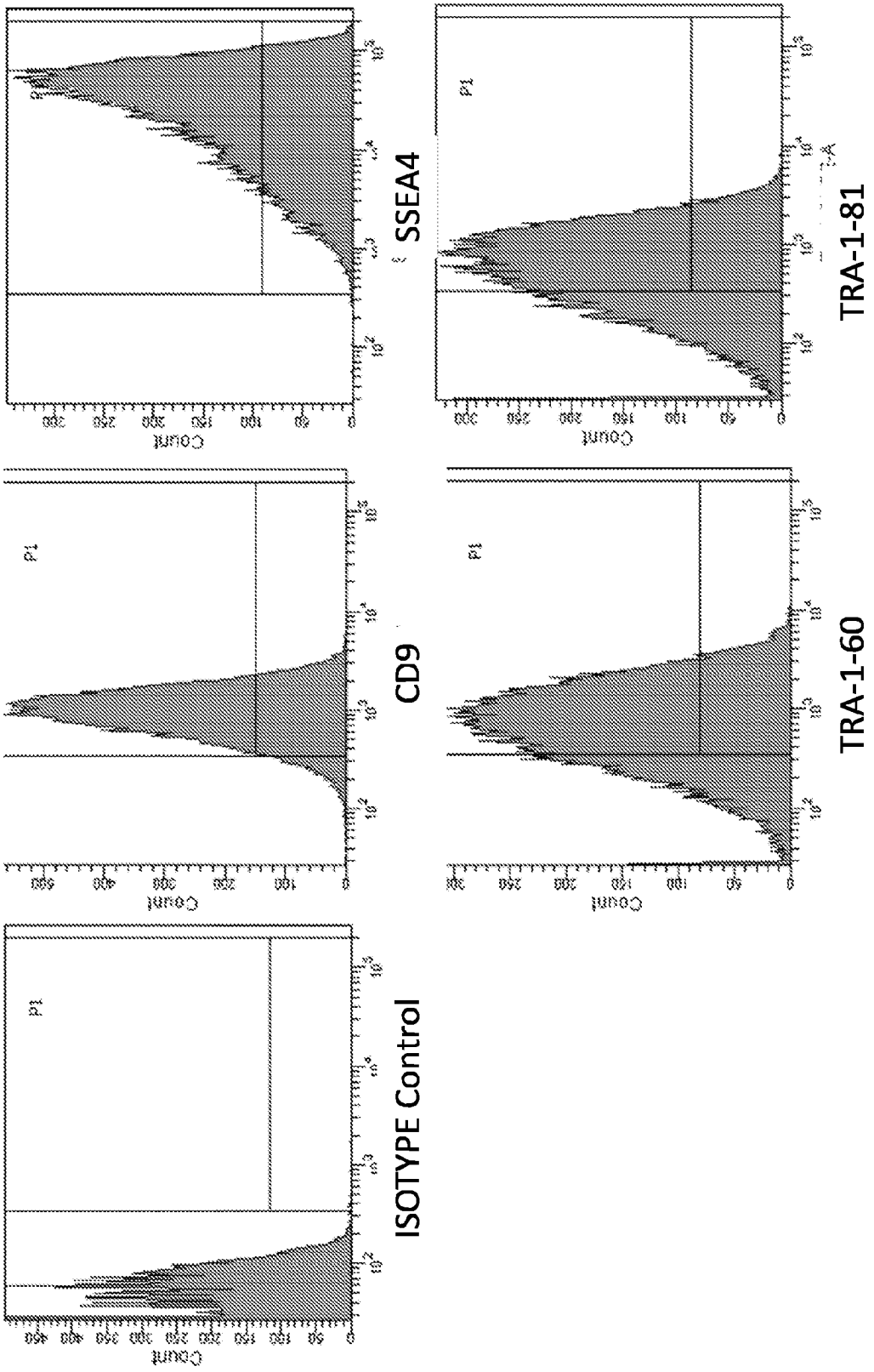


Figure 5b

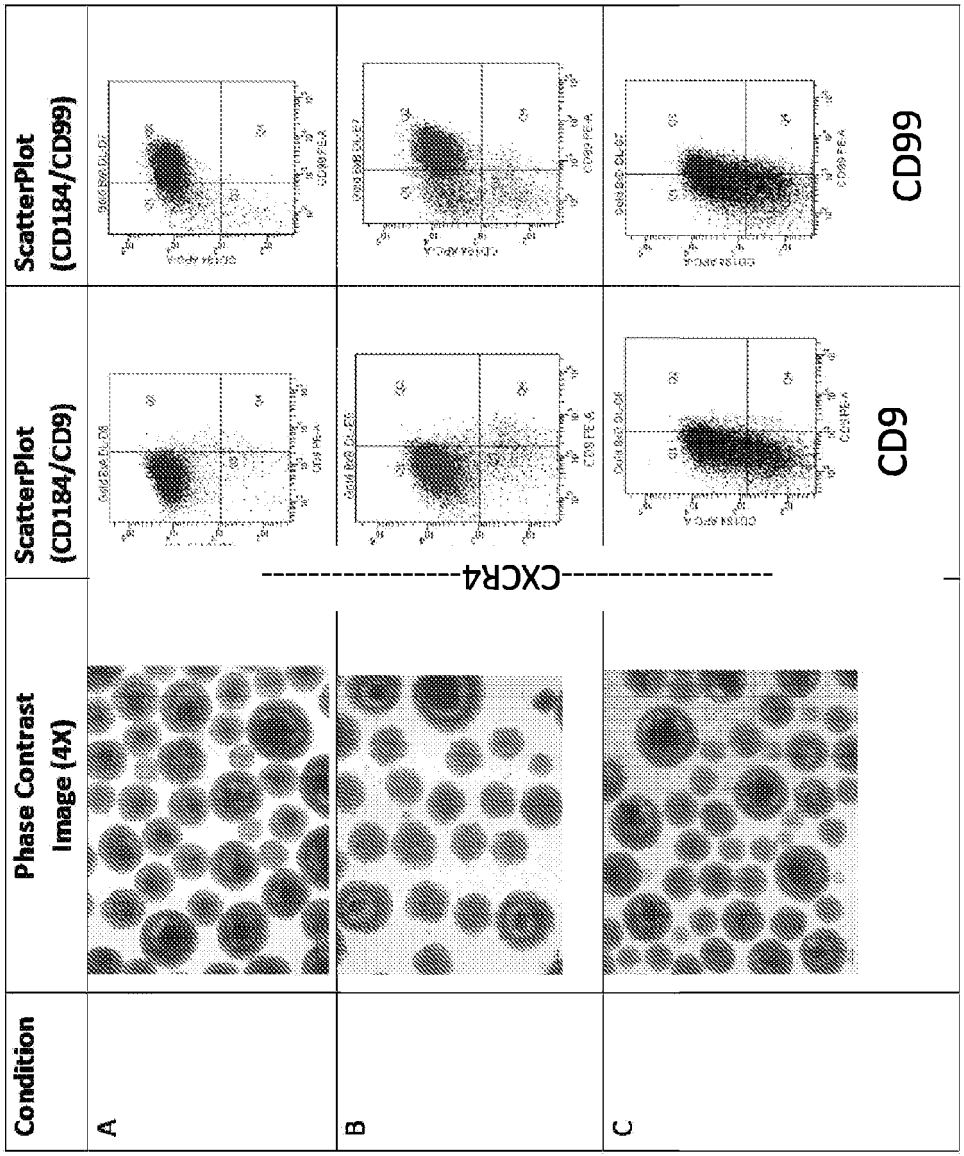
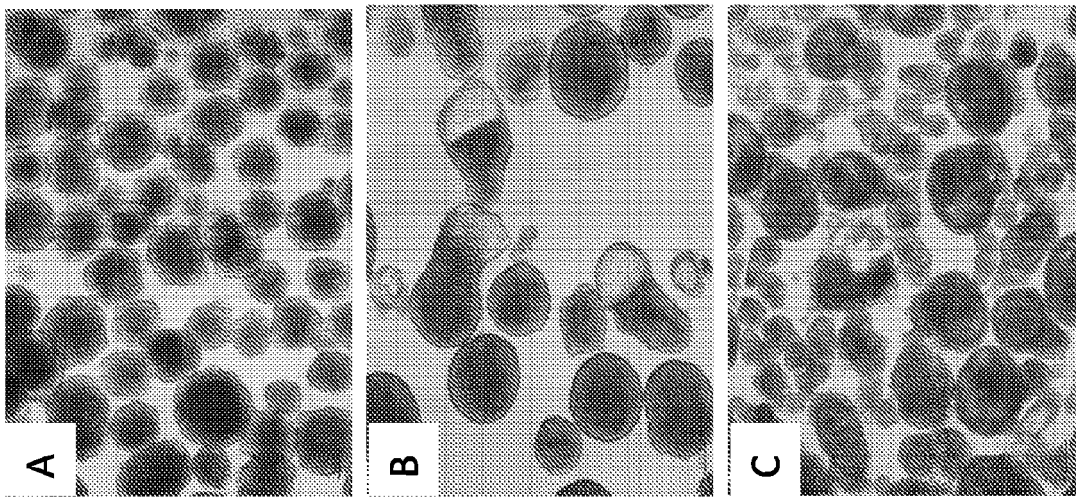

Condition
Phase Contrast Image (4X)
ScatterPlot (CD184/CD9)
ScatterPlot (CD184/CD99)
A
B
C
CXCR4
CD9
CD99

Figure 5c



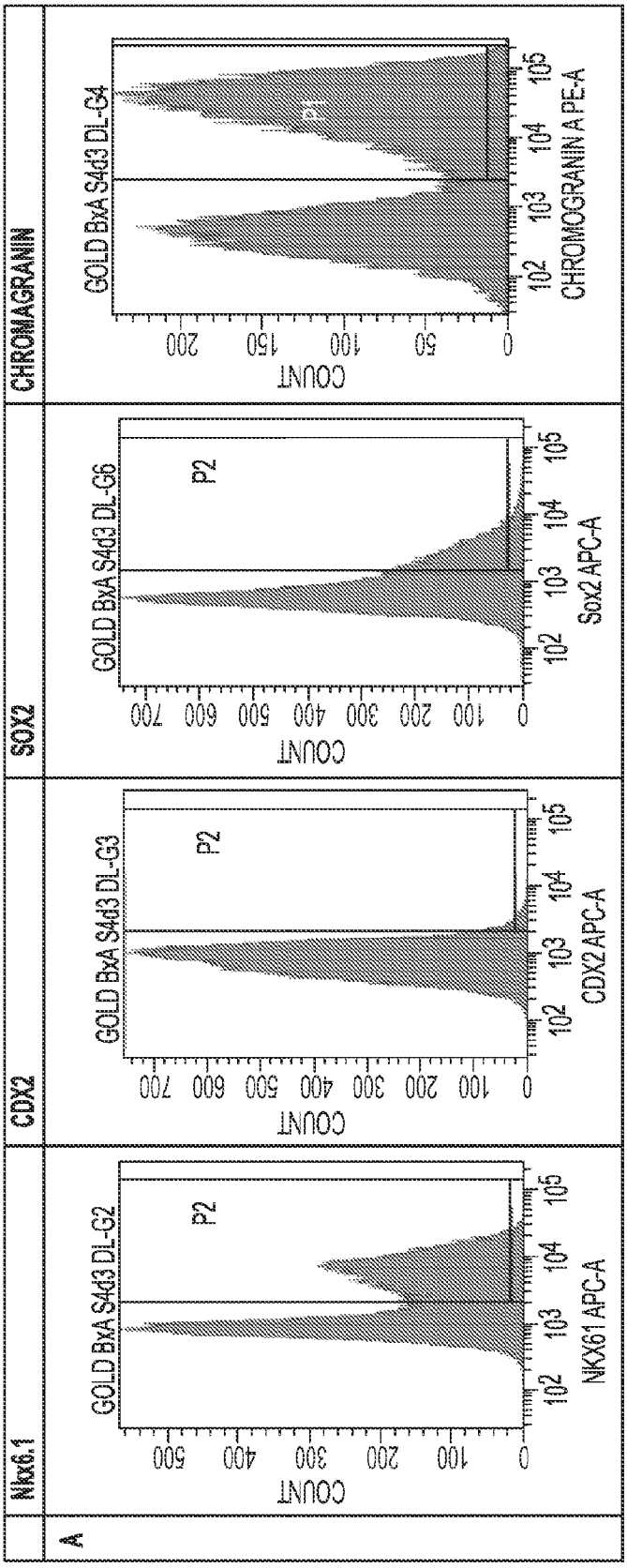

A
Nkx6.1
CDX2
SOX2
CHROMAGRANIN
GOLD BxA S4d3 DL-G2
P2
COUNT
NKX61 APC-A
GOLD BxA S4d3 DL-G3
CDX2 APC-A
GOLD BxA S4d3 DL-G6
Sox2 APC-A
GOLD BxA S4d3 DL-G4
P1
CHROMOGRANIN A PE-A

FIG. 5D

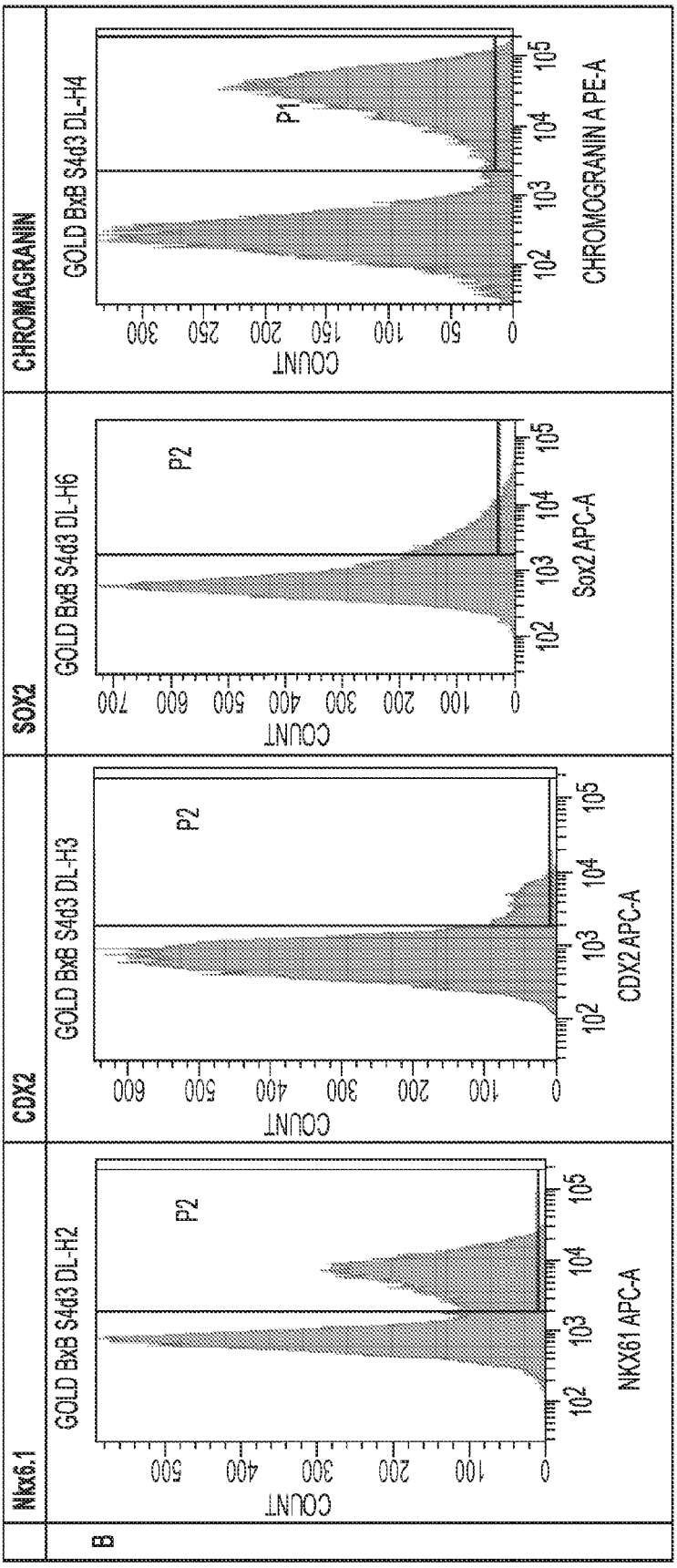


FIG. 5D (Continued)

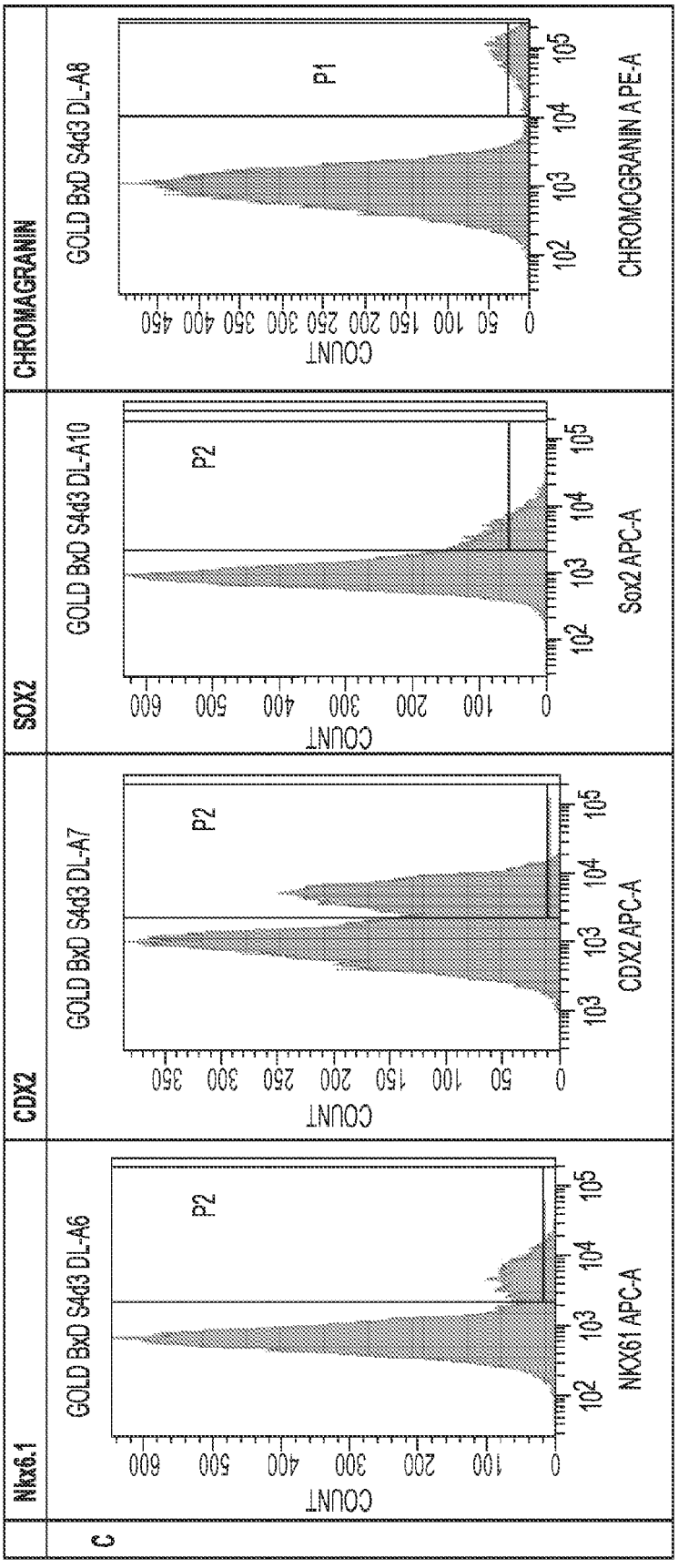


FIG. 5D (Continued)

Figure 5E

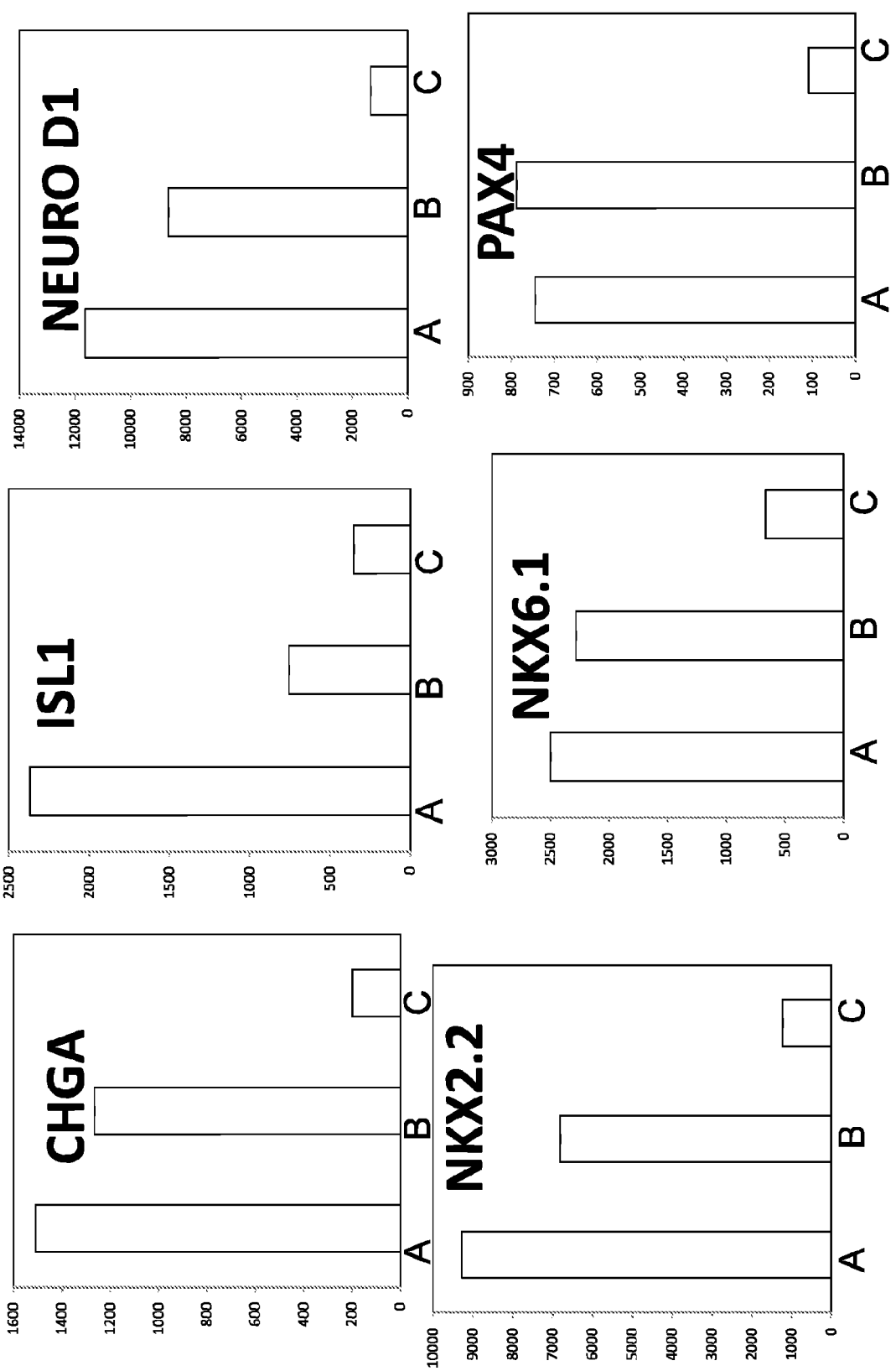

NEURO D1
A
B
C
0
2000
4000
6000
8000
10000
12000
14000
PAX4
0
100
200
300
400
500
600
700
800
900
ISL1
0
500
1000
1500
2000
2500
NKX6.1
0
500
1000
1500
2000
2500
3000
CHGA
0
200
400
600
800
1000
1200
1400
1600
NKX2.2
0
1000
2000
3000
4000
5000
6000
7000
8000
9000
10000

Figure 5E (continued)

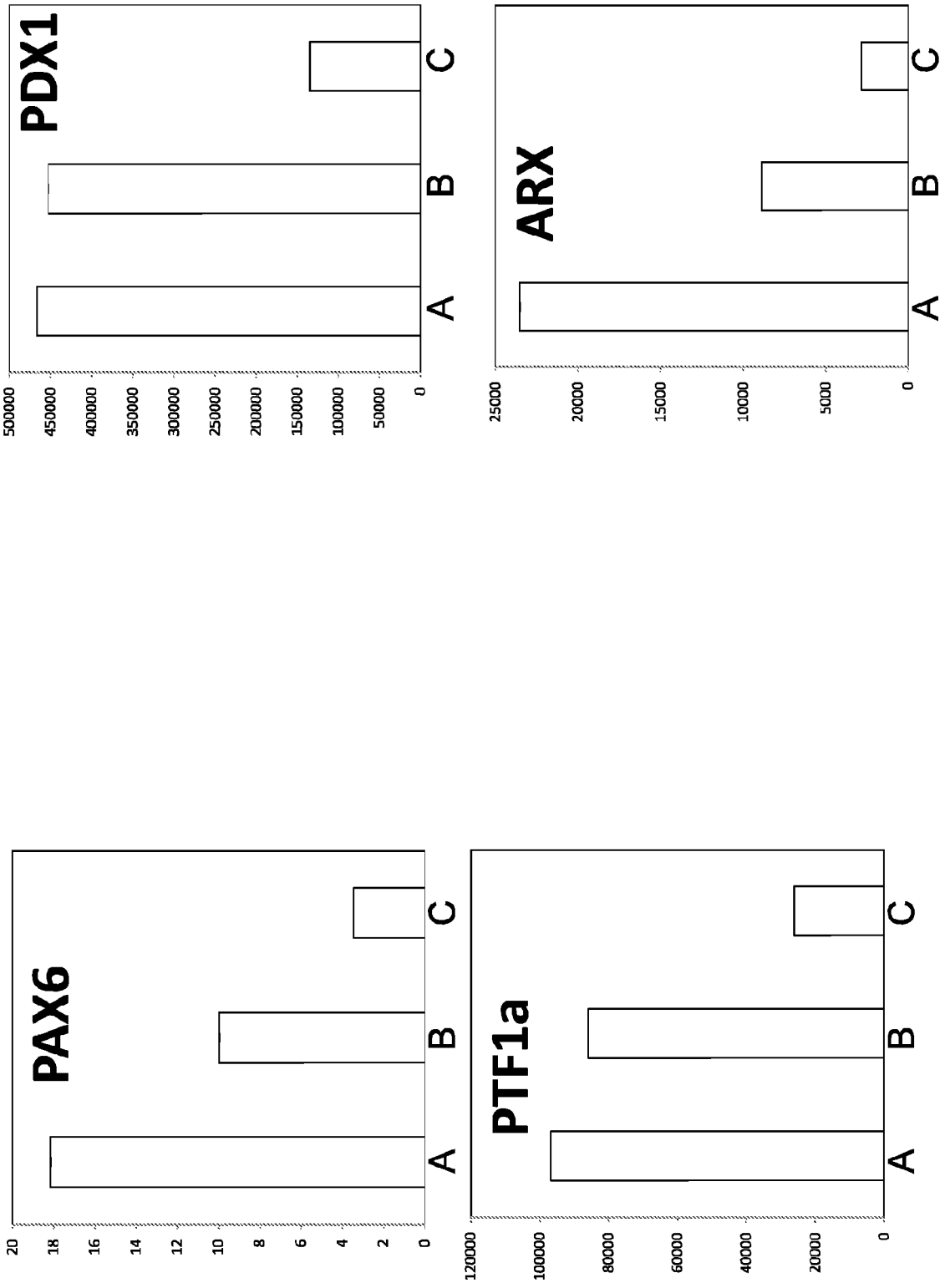


Figure 5E (continued)

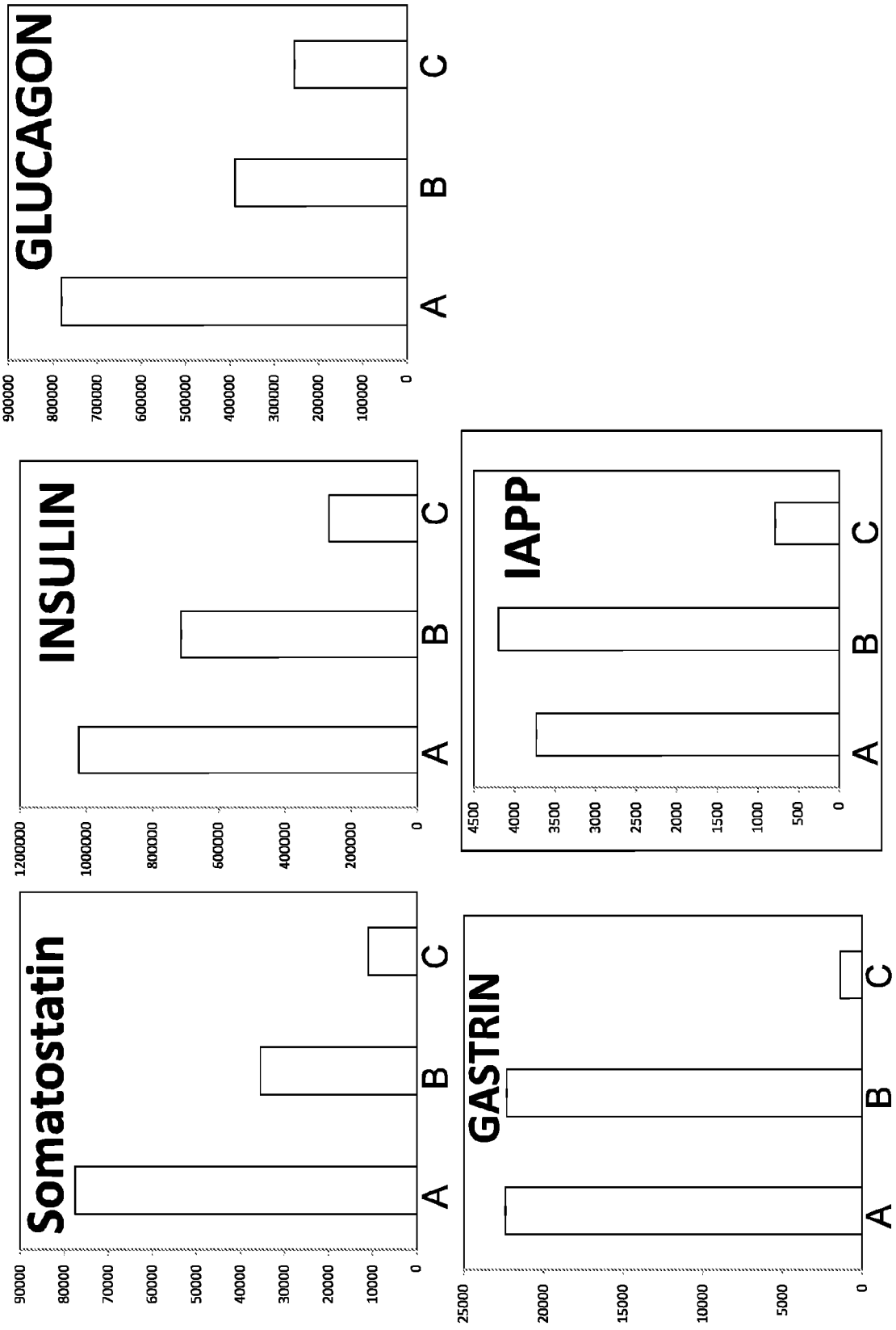


Figure 5E (continued)

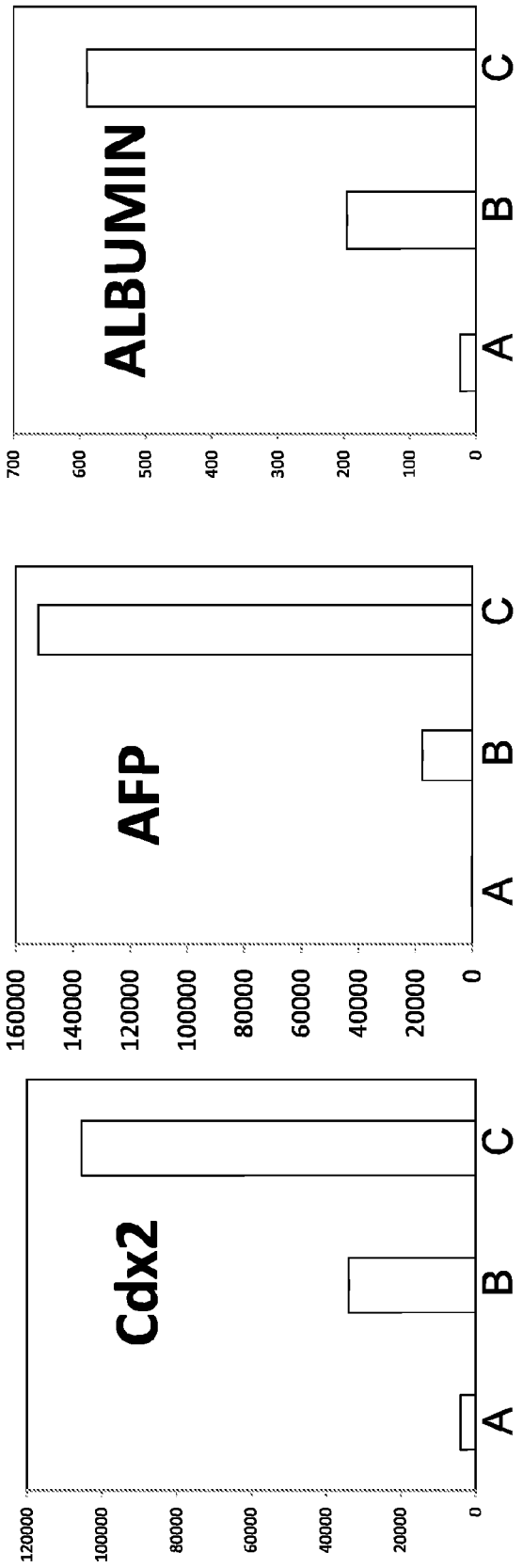


Figure 5f

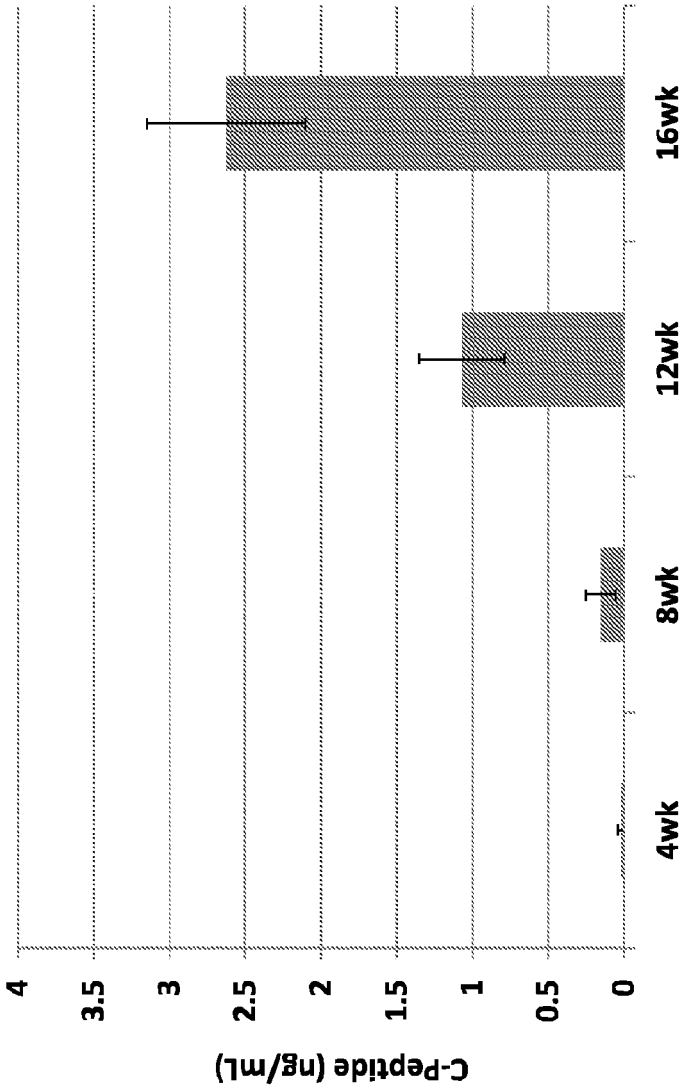


Figure 5g

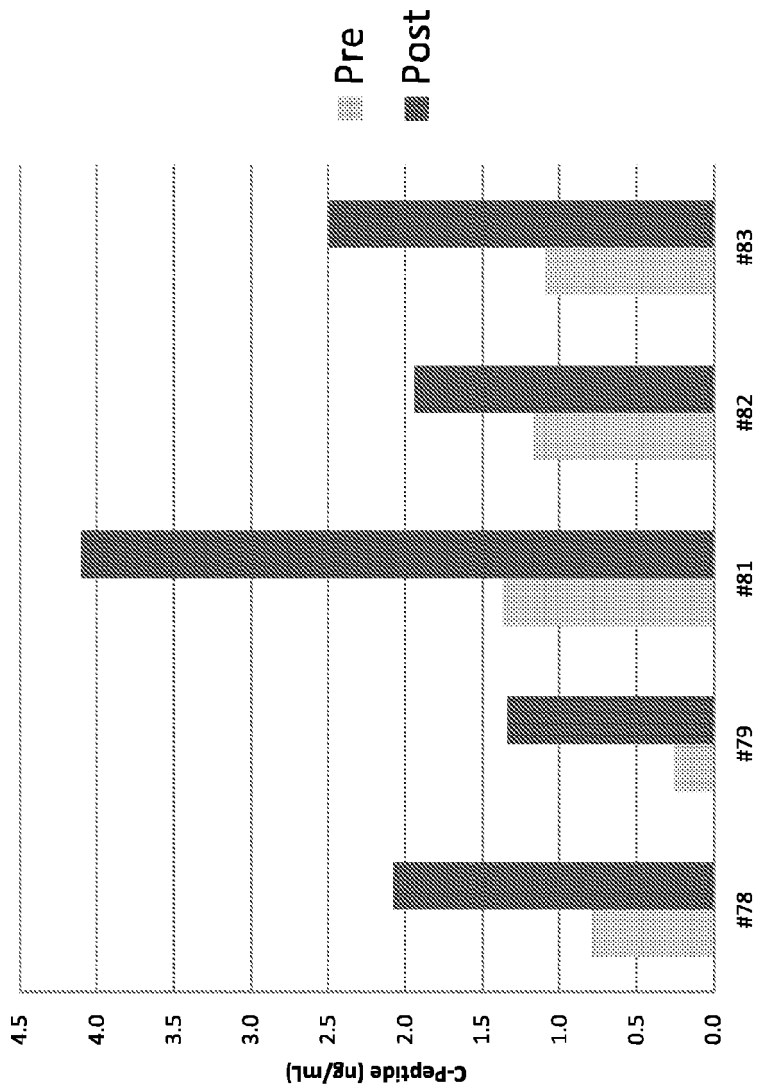


Figure 5h

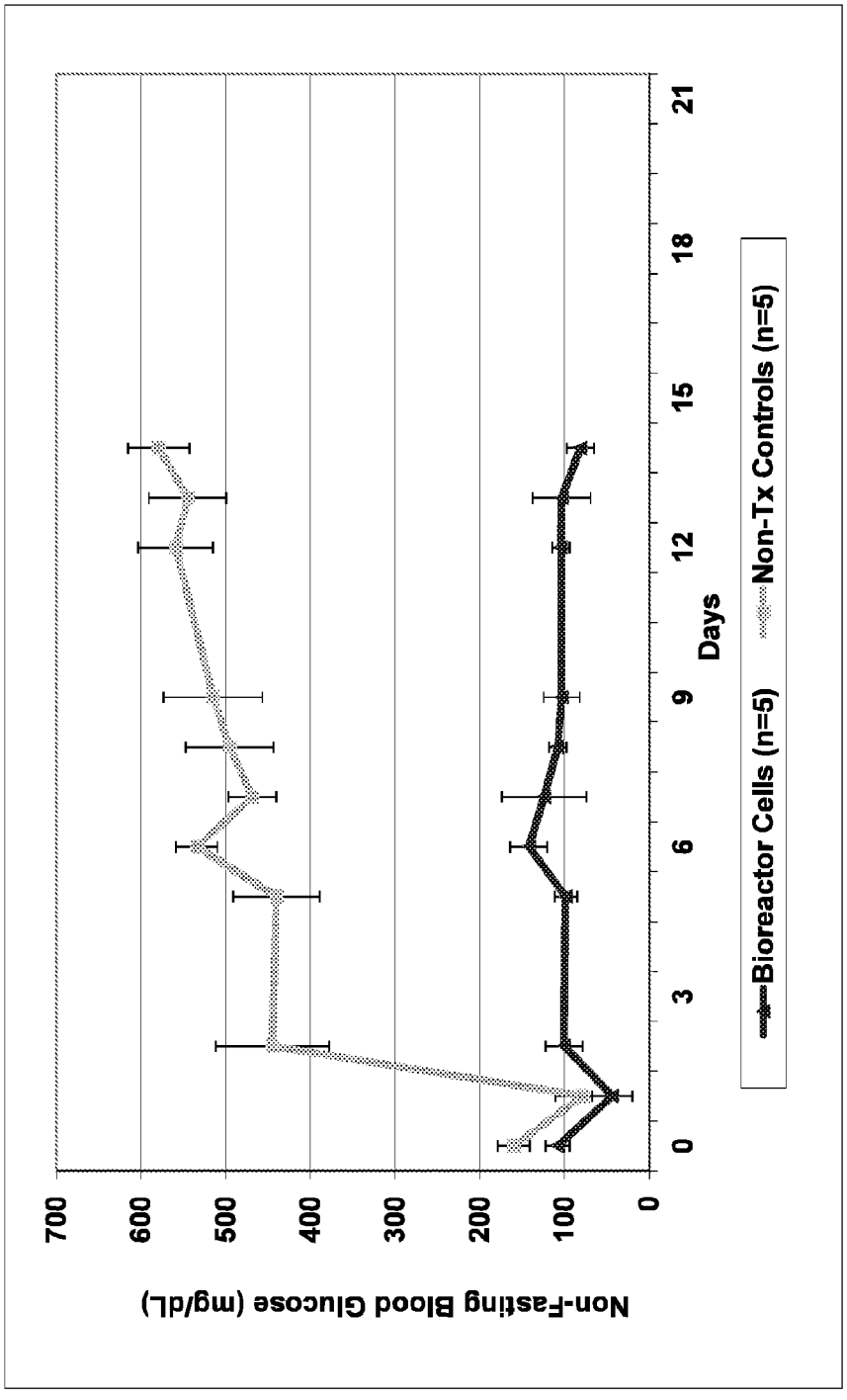
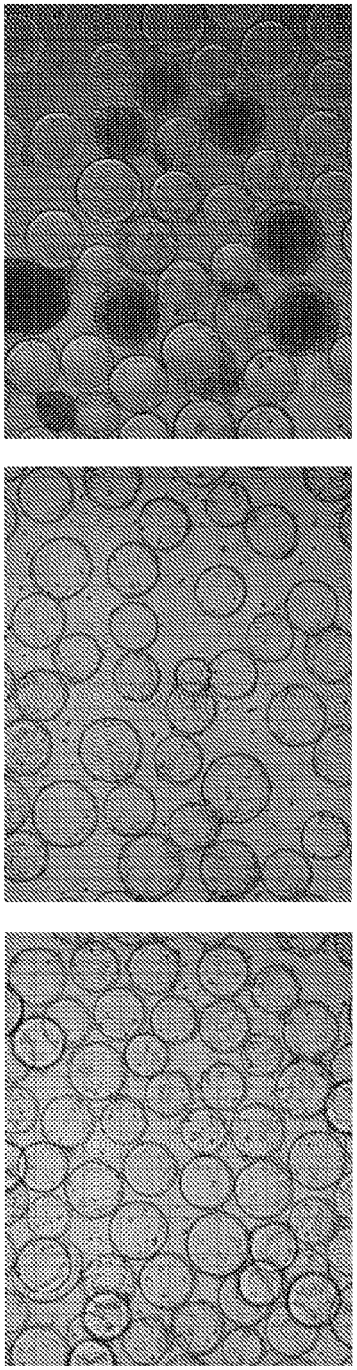

Non-Fasting Blood Glucose (mg/dL)
700
600
500
400
300
200
100
0
0
3
6
9
12
15
18
21
Days
Bioreactor Cells (n=5)
Non-Tx Controls (n=5)

Figure 6a



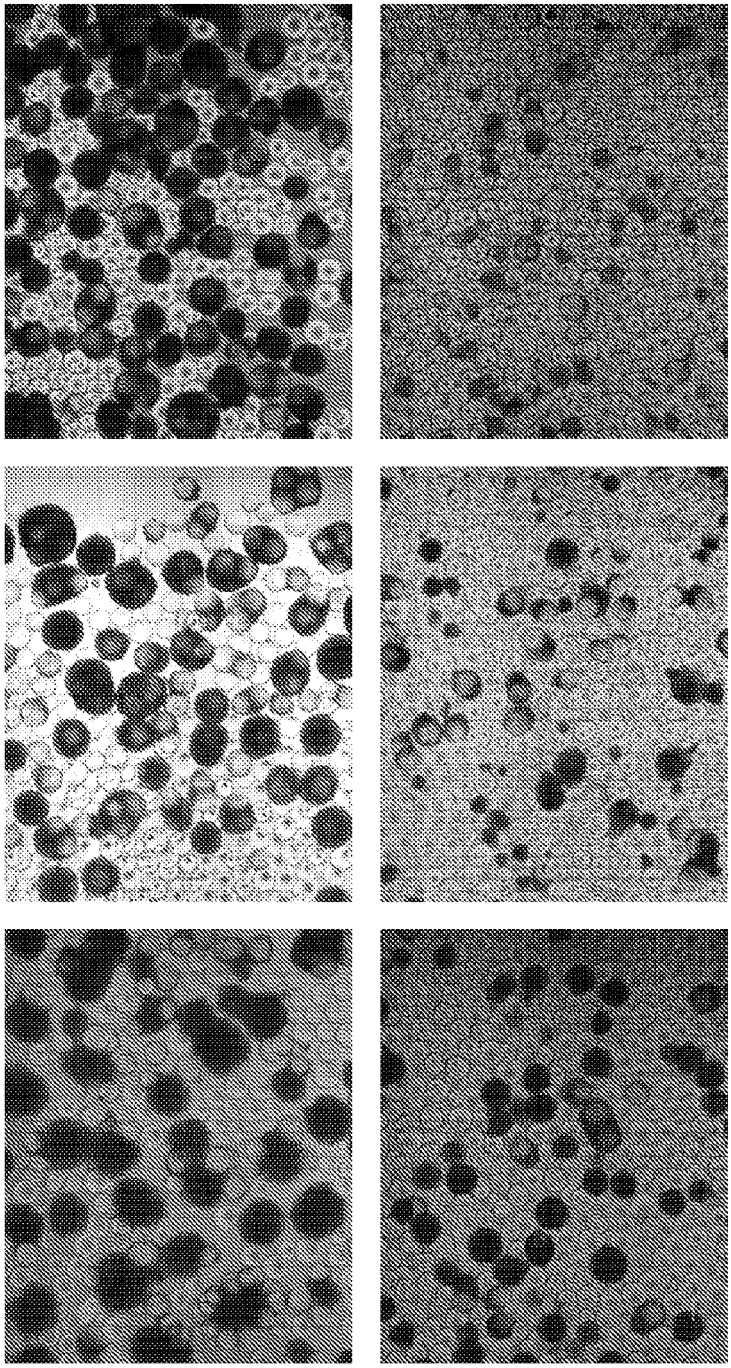


Figure 6b

Figure 6c

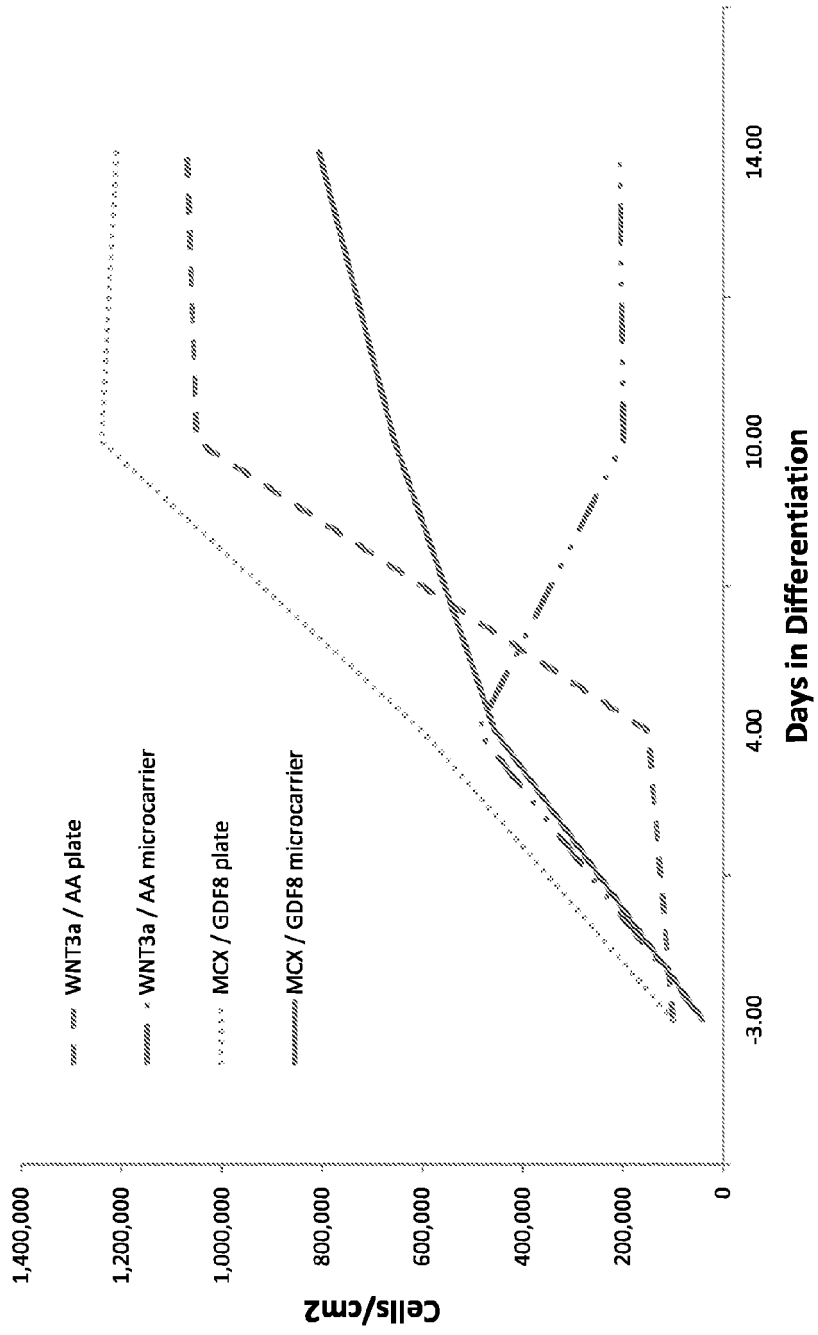

WNT3a / AA plate
WNT3a / AA microcarrier
MCX / GDF8 plate
MCX / GDF8 microcarrier
Cells/cm2
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
-3.00
4.00
10.00
14.00
Days in Differentiation

Figure 6d

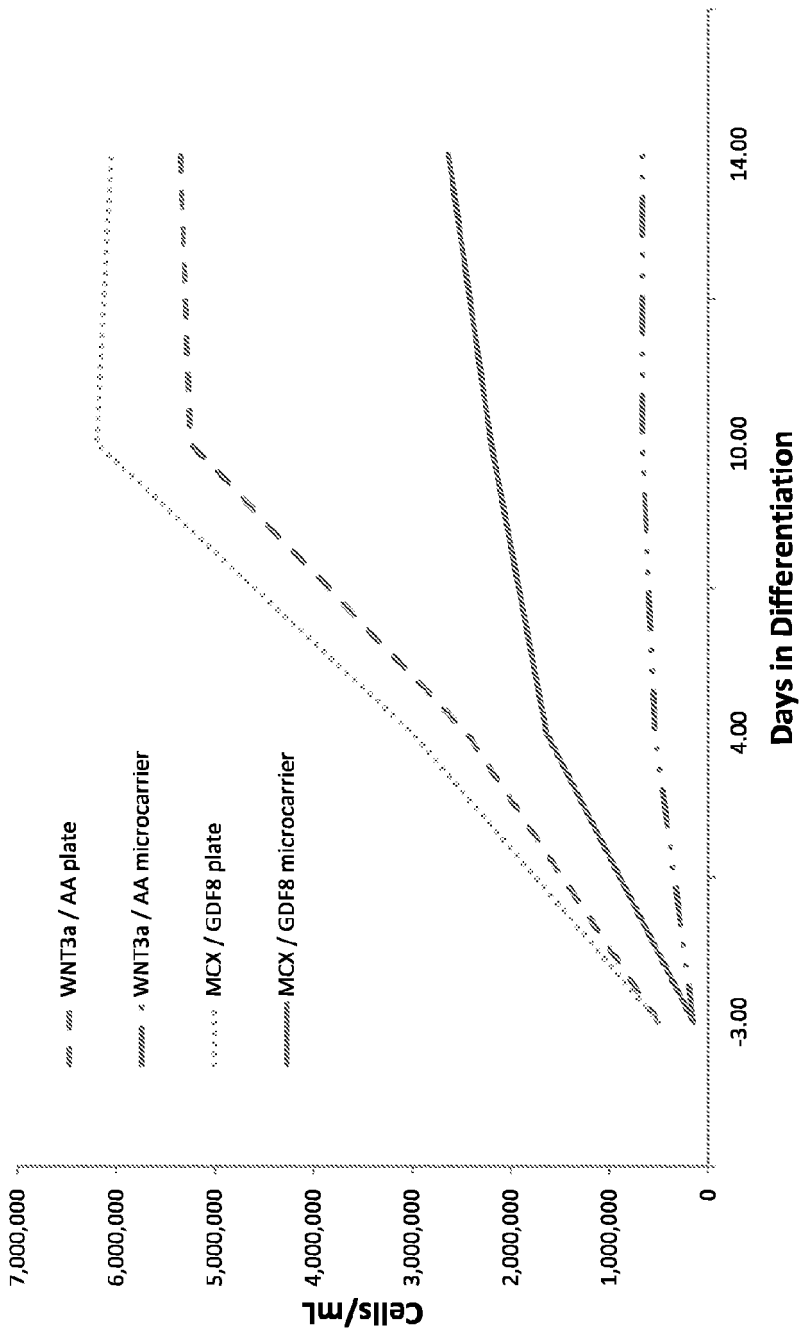

WNT3a / AA plate
WNT3a / AA microcarrier
MCX / GDF8 plate
MCX / GDF8 microcarrier
Cells/mL
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
-3.00
4.00
10.00
14.00
Days in Differentiation

Figure 6e

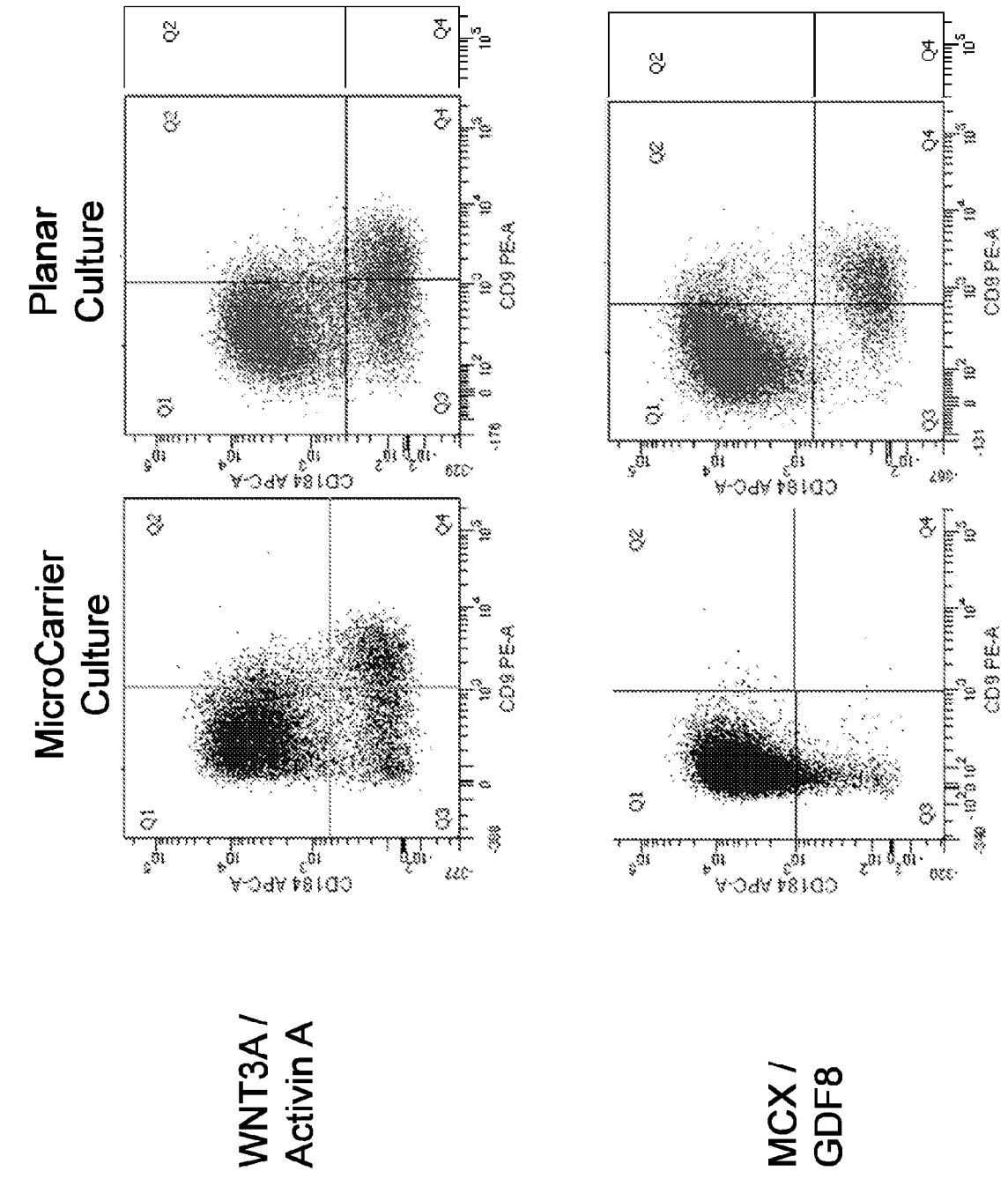

Planar Culture
MicroCarrier Culture
WNT3A / Activin A
MCX / GDF8
CD184 APC-A
CD9 PE-A
Q1
Q2
Q3
Q4

Figure 6f

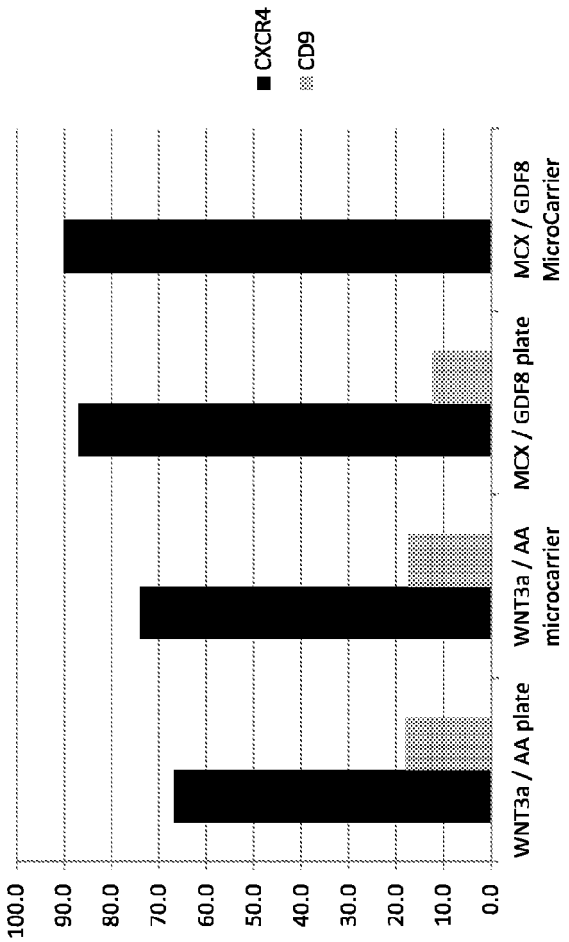

CXCR4
CD9
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
WNT3a / AA plate
WNT3a / AA microcarrier
MCX / GDF8 plate
MCX / GDF8 MicroCarrier

Figure 6g

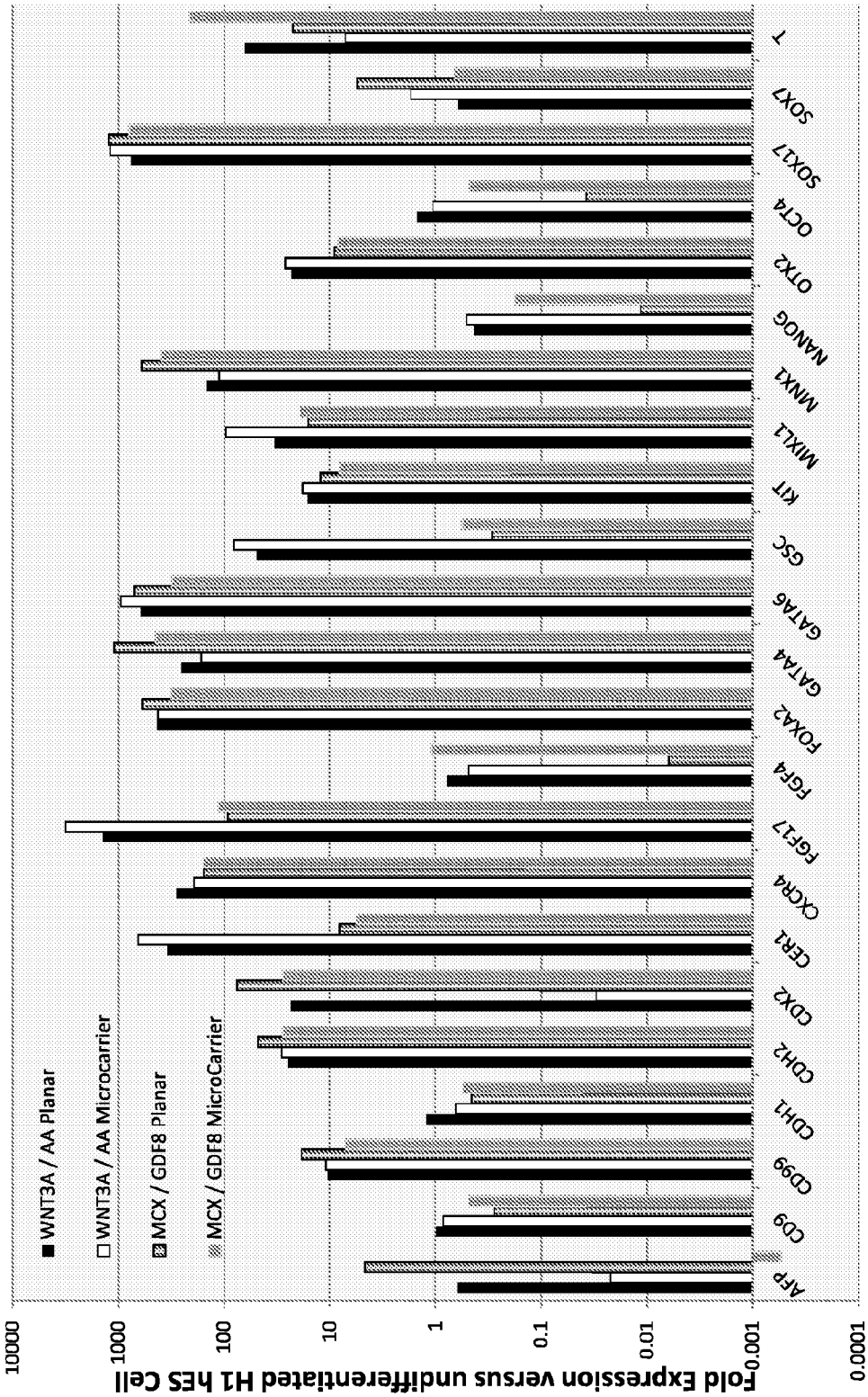

Fold Expression versus undifferentiated H1 hES Cell
10000
1000
100
10
1
0.1
0.01
0.001
0.0001
WNT3A / AA Planar
WNT3A / AA Microcarrier
MCX / GDF8 Planar
MCX / GDF8 MicroCarrier
AFP
CD9
CD99
CDH1
CDH2
CDX2
CER1
CXCR4
FGF17
FGF4
FOXA2
GATA4
GATA6
GSC
KIT
MIXL1
MNX1
NANOG
OTX2
OCT4
SOX17
SOX7
T

Figure 7: Cell Count

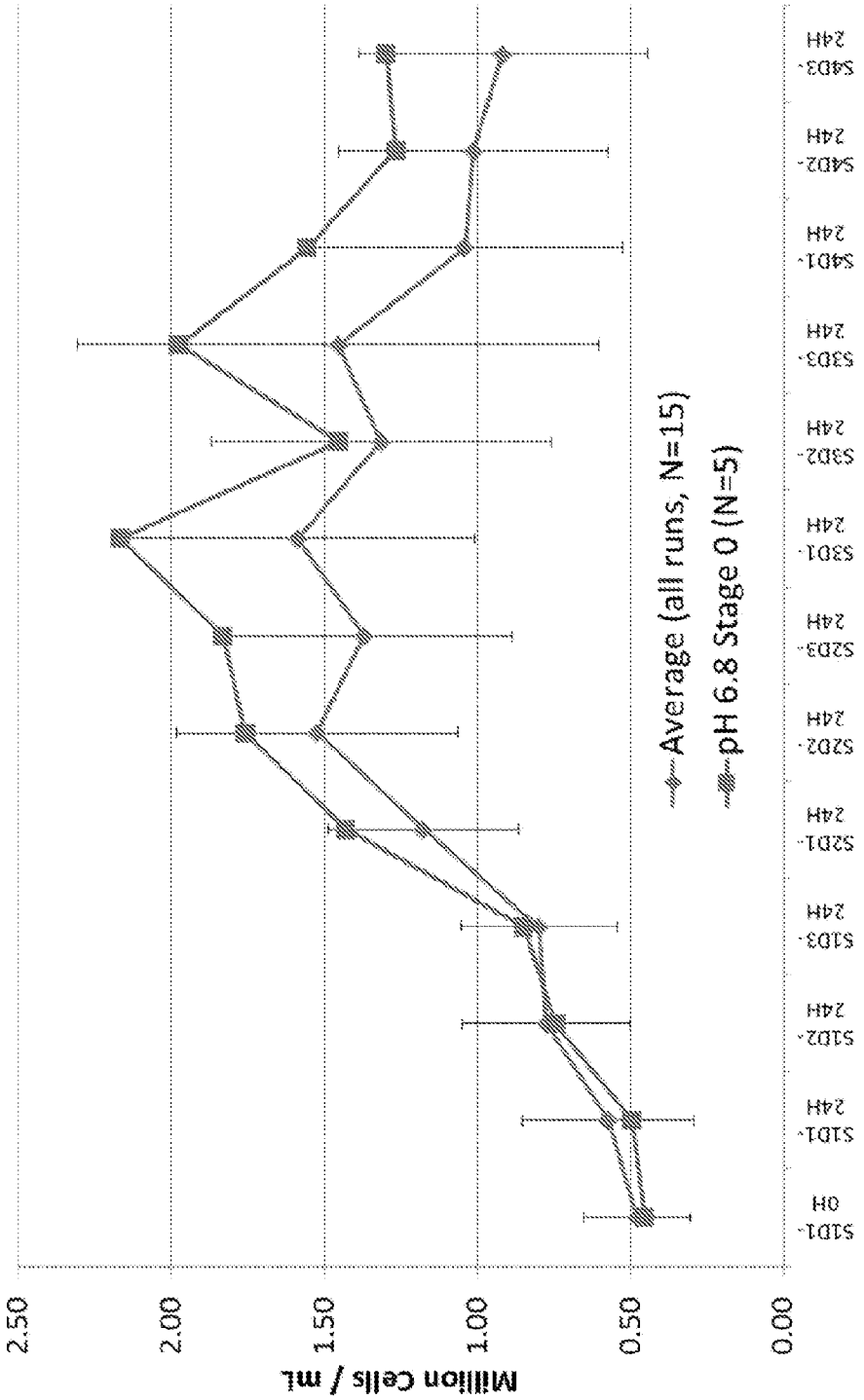


Figure 8: Average Daily Bioreactor pH Levels

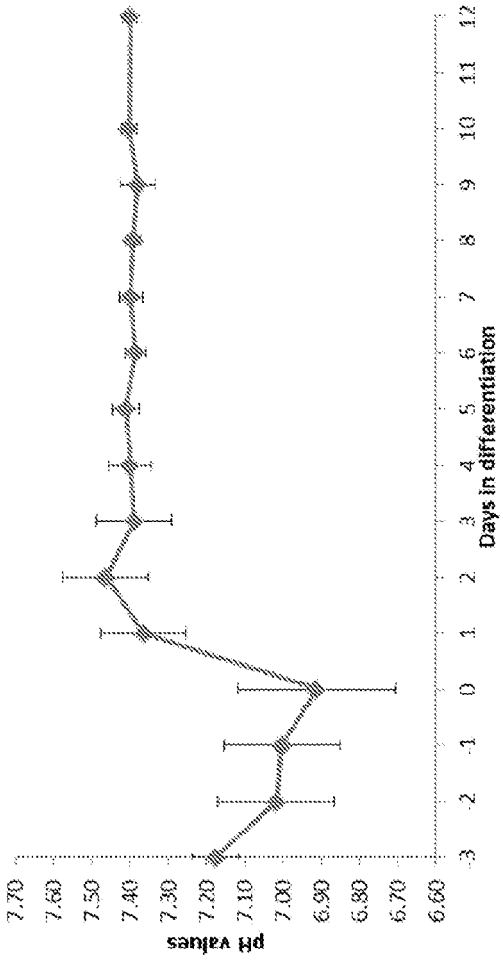


Figure 9: Average Daily Bioreactor Lactate Levels

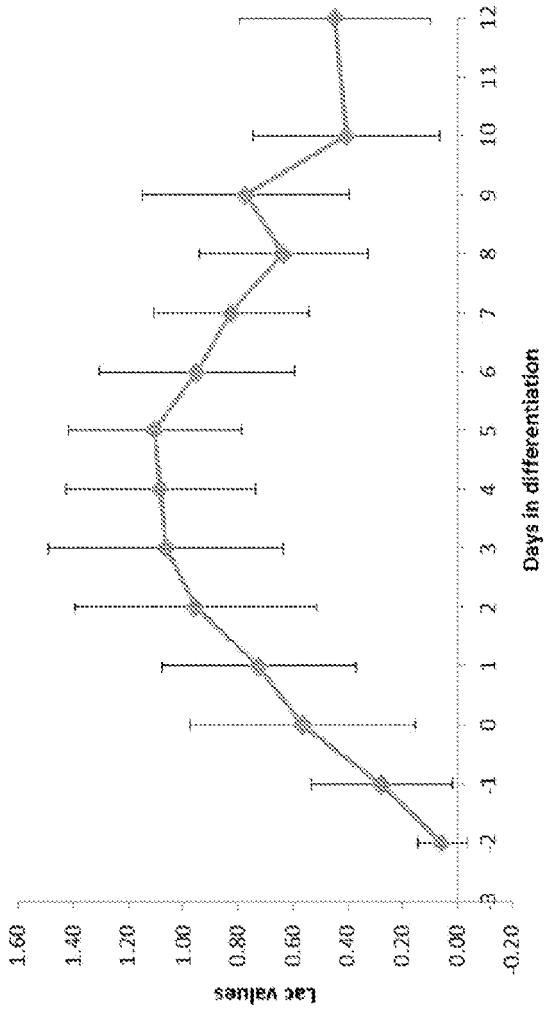


Figure 10: Average Daily Bioreactor Glucose Levels

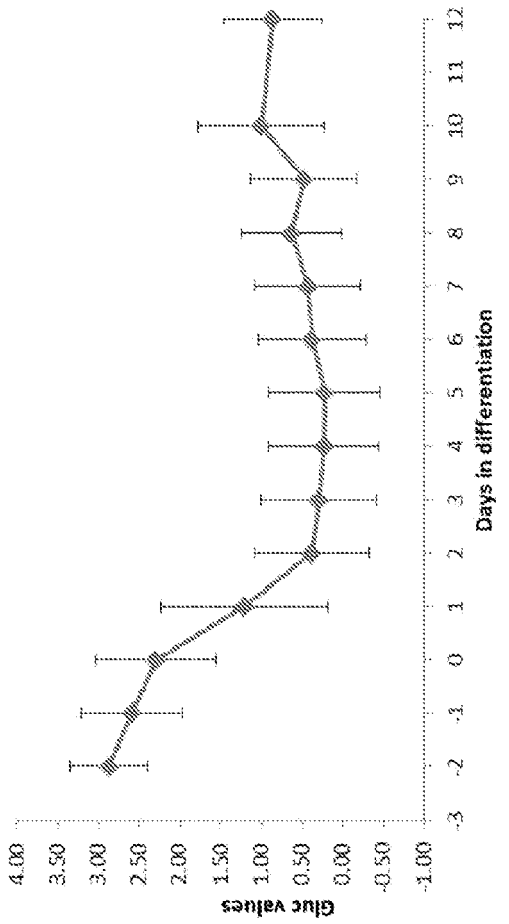


Figure 11: Average Stage 0 Day 1 Expression by qRT-PCR (n=12), Pluripotency Array (mean ± St. Dev.)

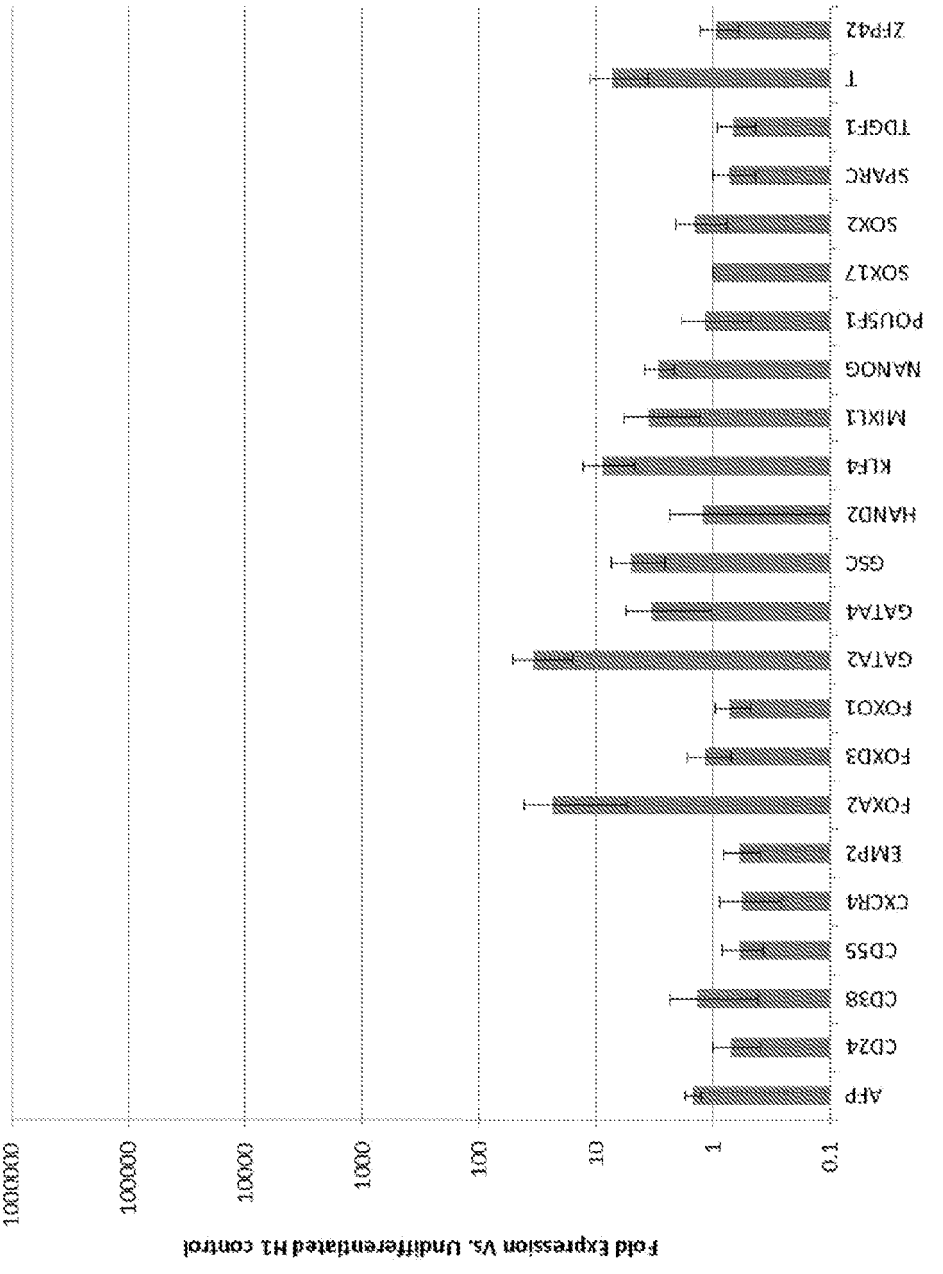


Figure 12: Average Stage 0 Day 1 Expression by qRT-PCR (n=10), DE Array (mean ± St. Dev.)

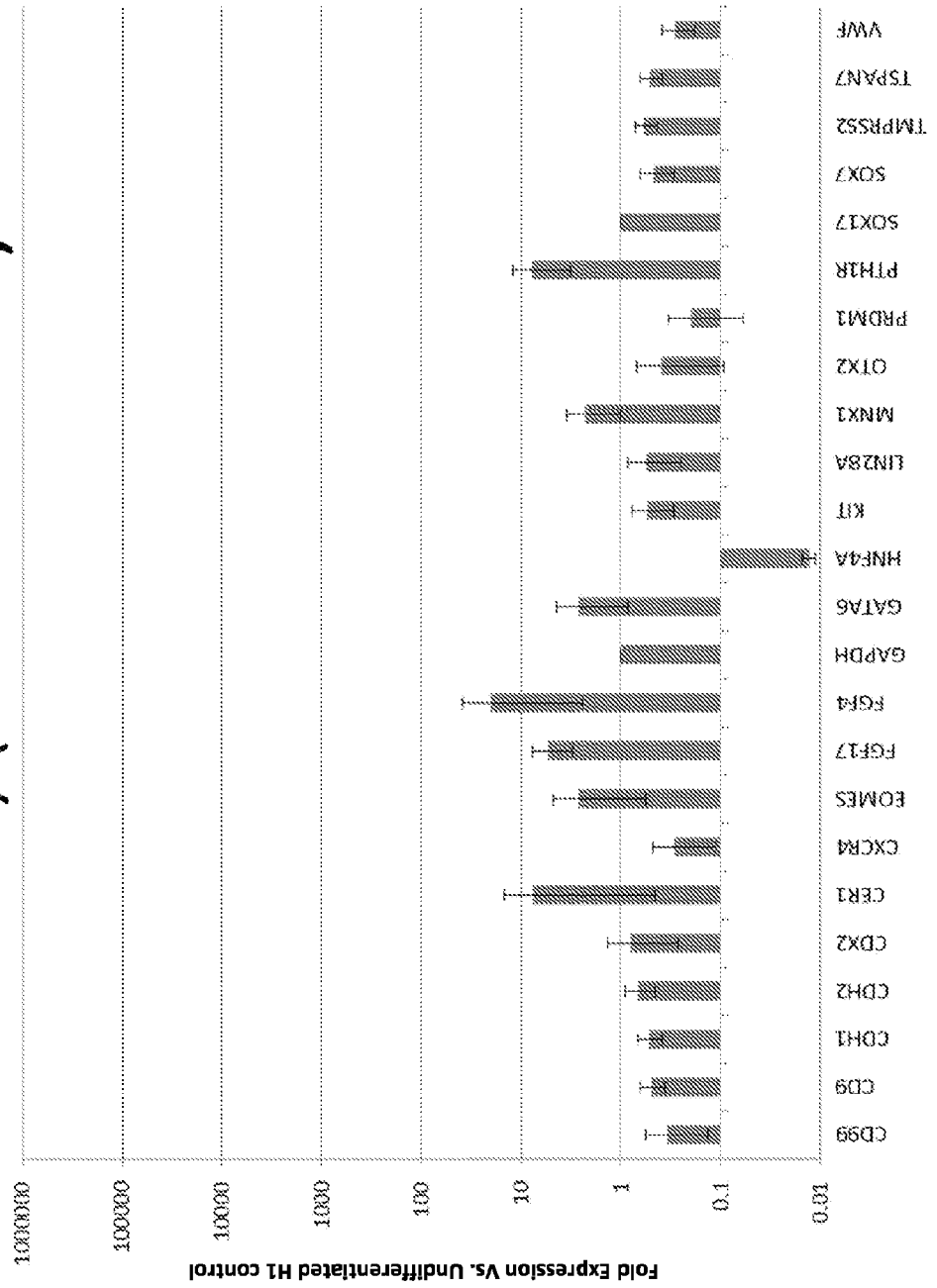


Figure 13: Average Stage 0 Day 3 Expression by qRT-PCR (n=12), Pluripotency Array (mean ± St. Dev.)

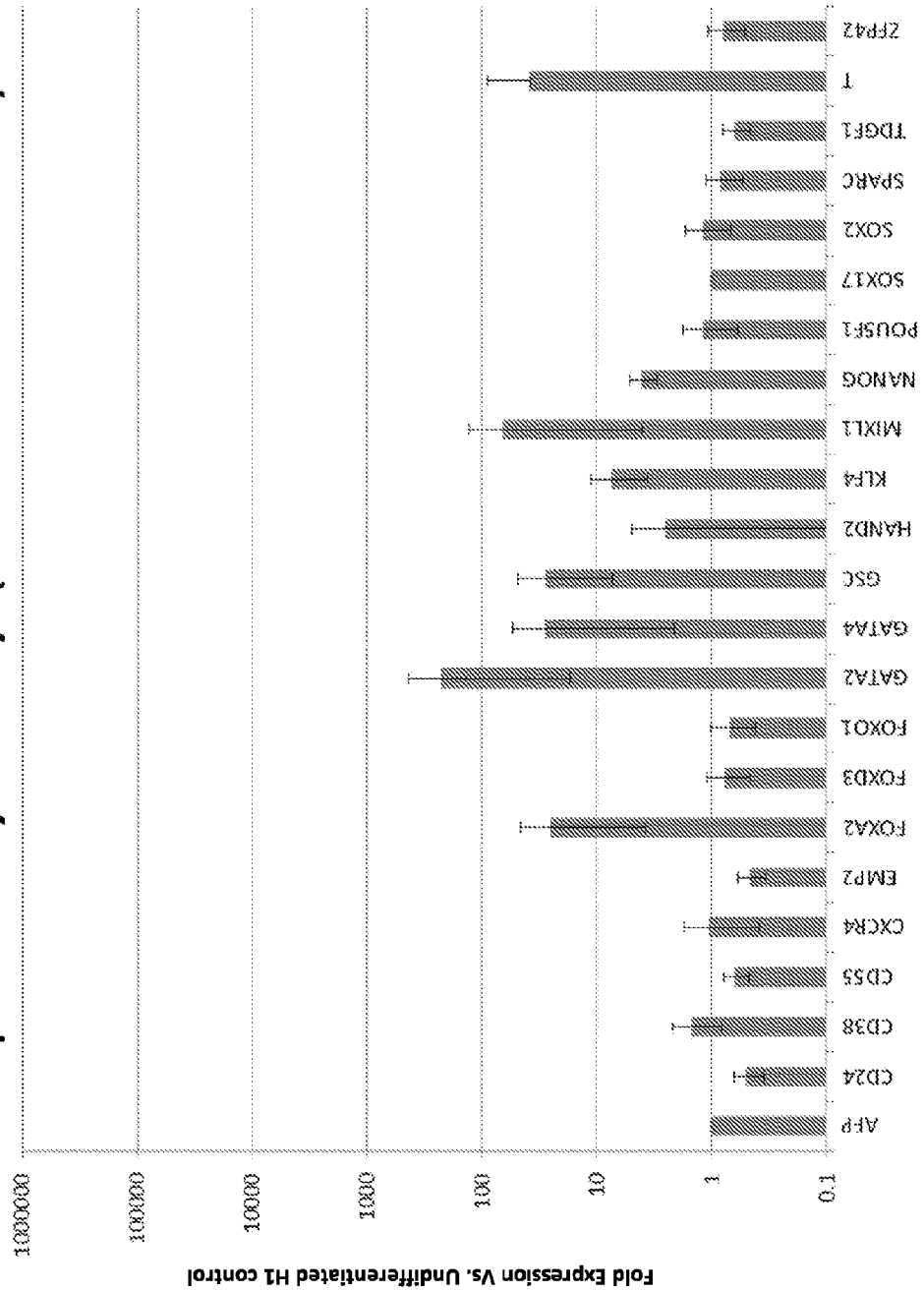


Figure 14: Average Stage 0 Day 3 Expression by qRT-PCR (n=10), DE Array (mean ± St. Dev.)

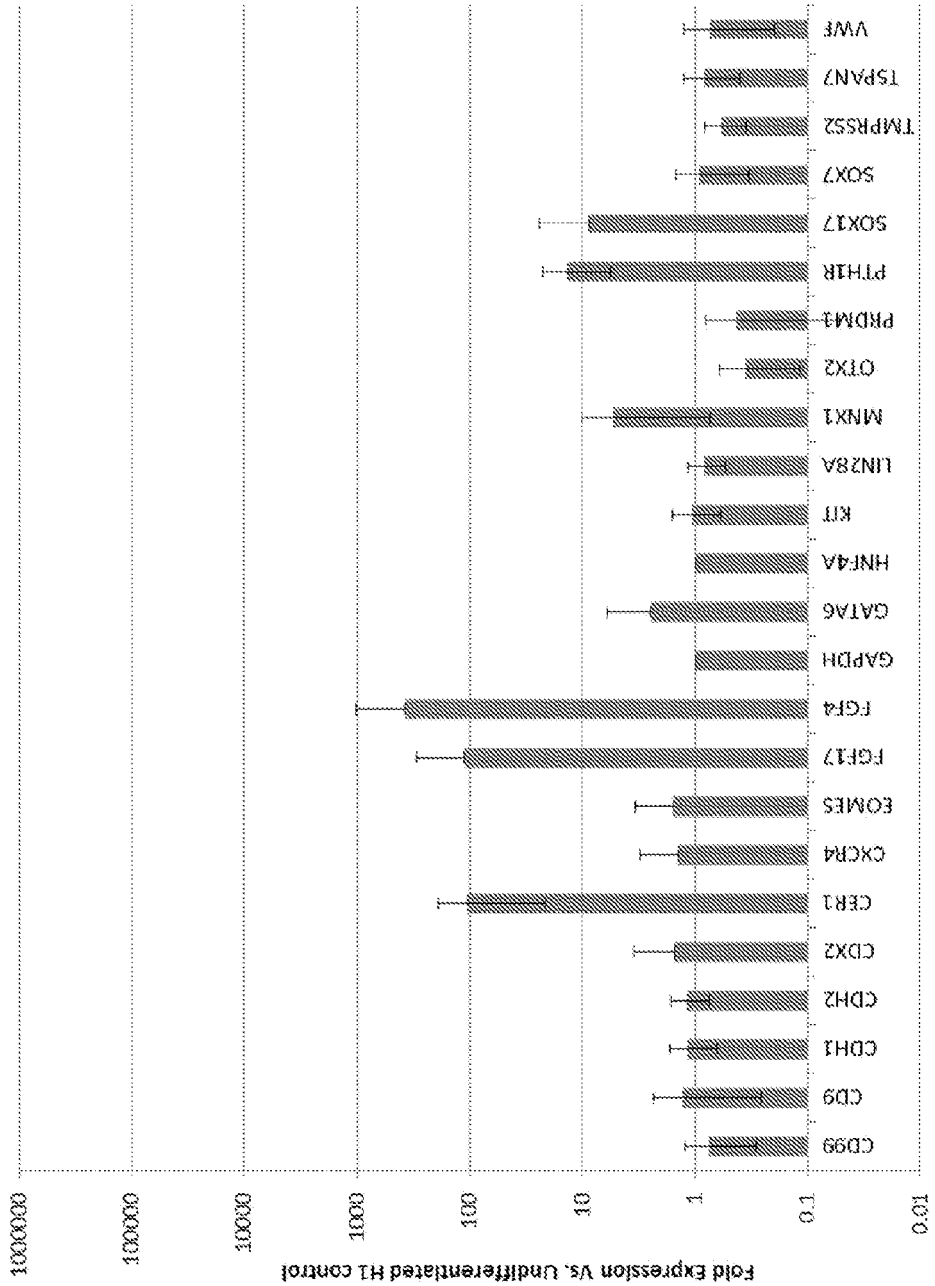


Figure 15: Average FACS Results
Stage 0 Day 3 (mean ± St. Dev.)

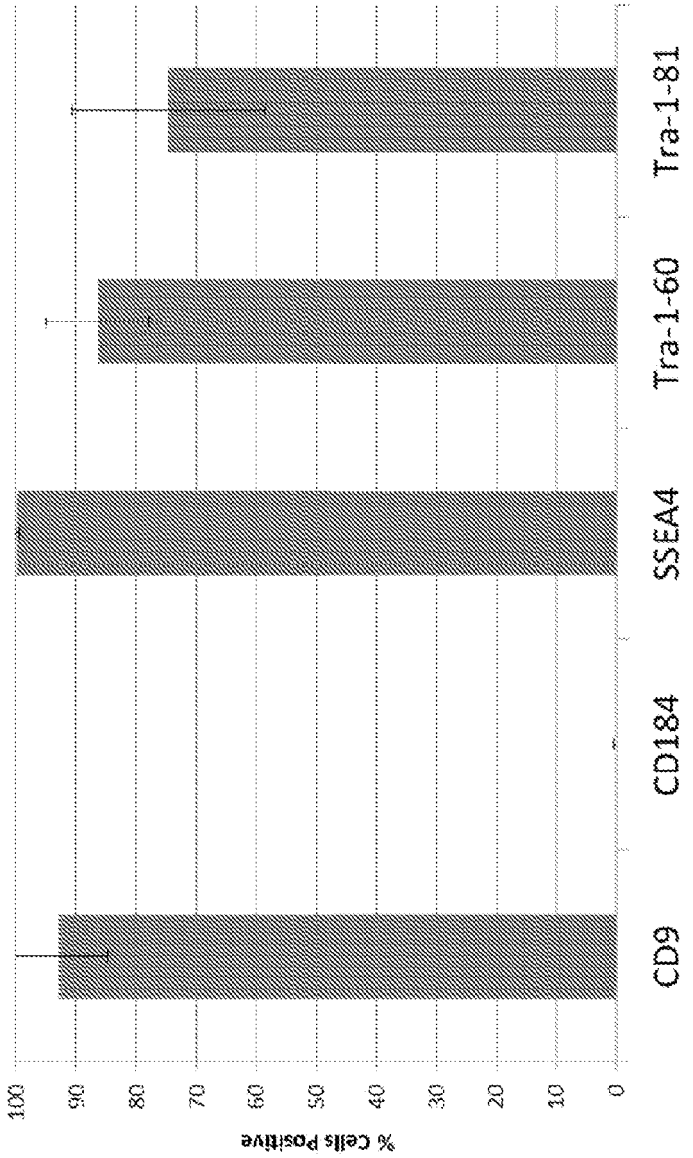


Figure 16: Stage 0 Days 1 and 3 expression (n=12, mean ± St. Dev.) by qRT-PCR Pluripotency Array

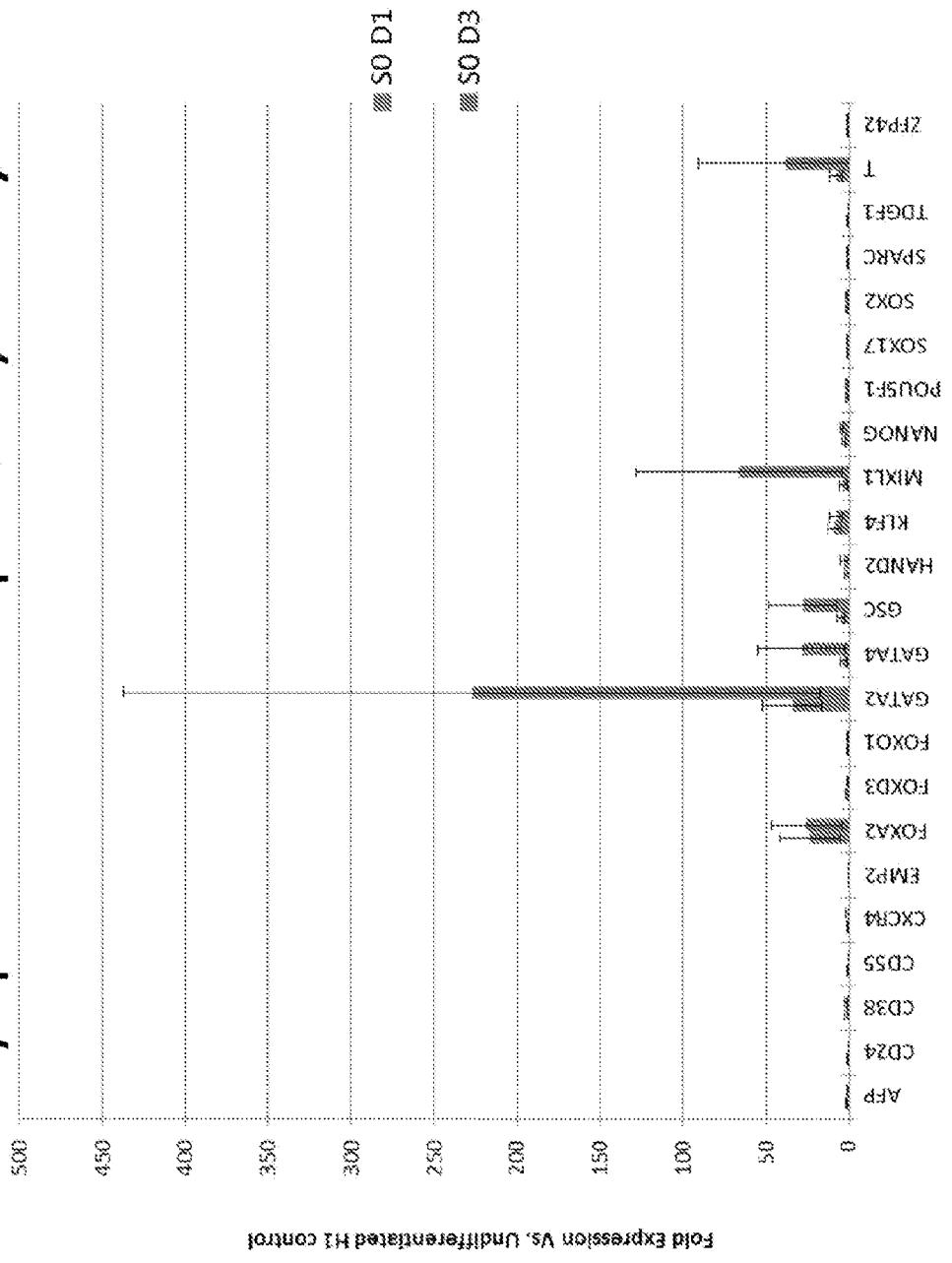


Figure 17: Stage 0 Days 1 and 3 expression (n=10, mean ± St. Dev.) by qRT-PCR DE Array

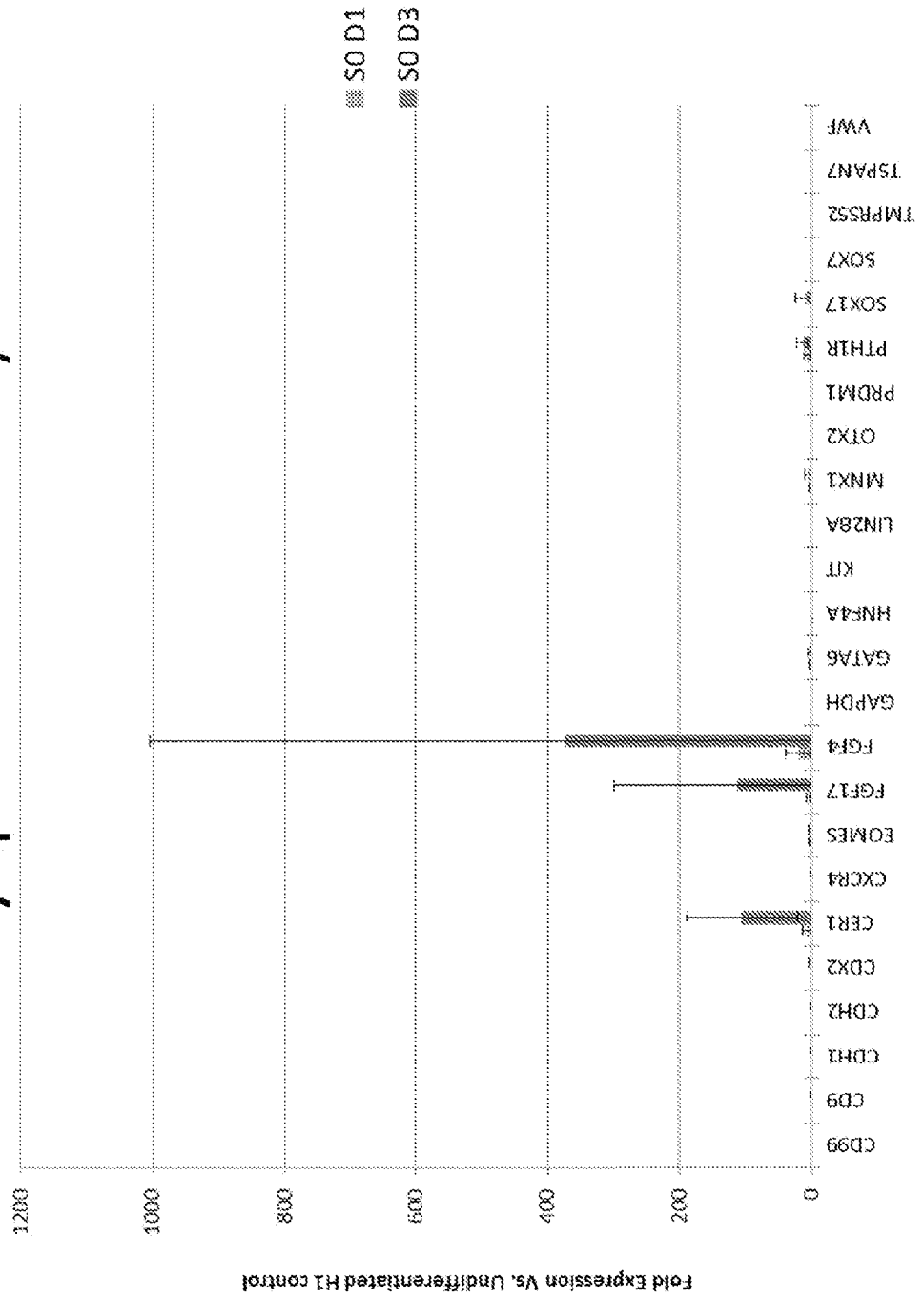


Figure 18: Stage 1 Day 1 expression (n=13, mean ± St. Dev.) by qRT-PCR Pluripotency Array

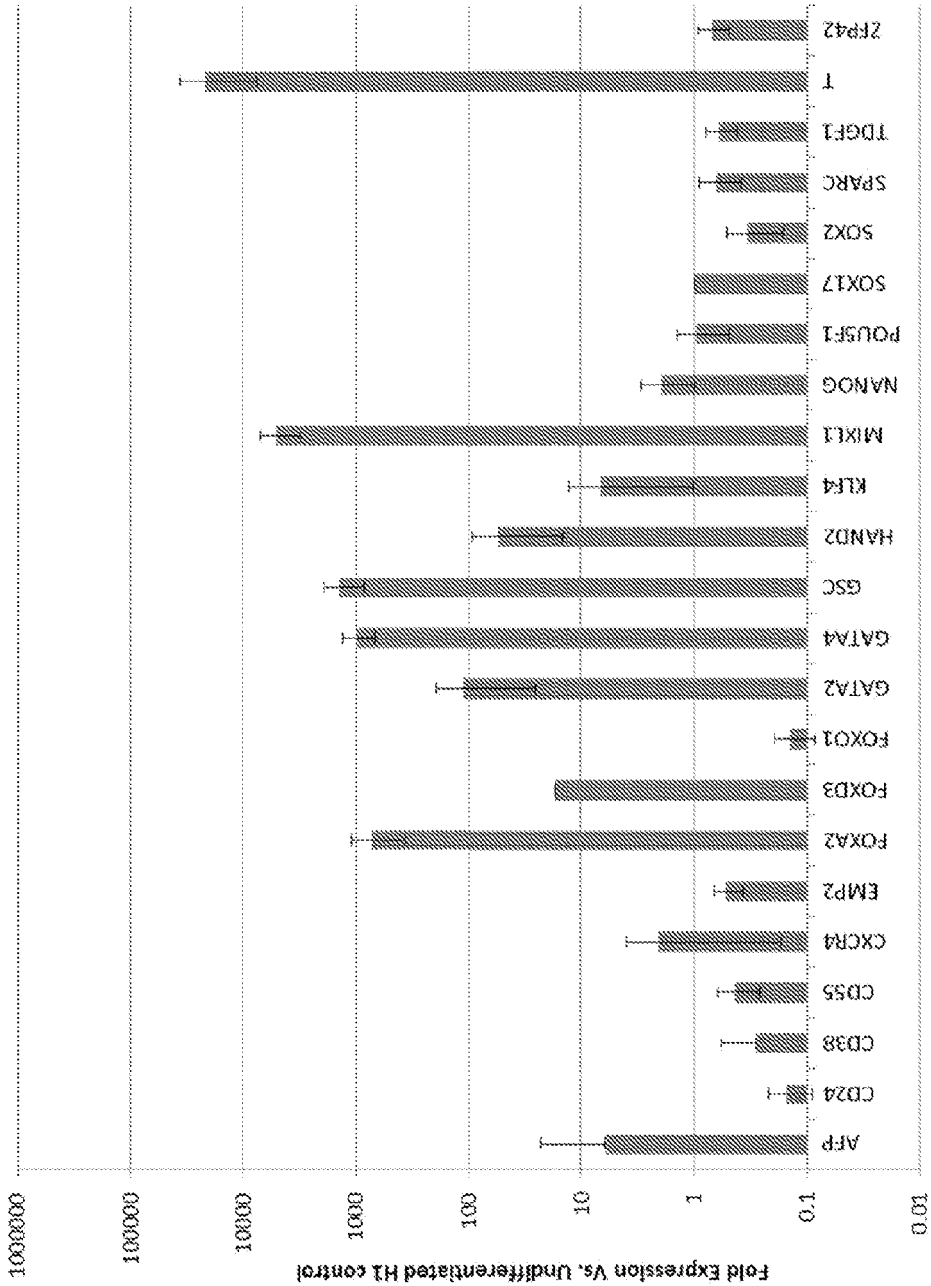


Figure 19: Stage 1 Day 1 expression (n=14, mean ± St. Dev.) by qRT-PCR DE Array

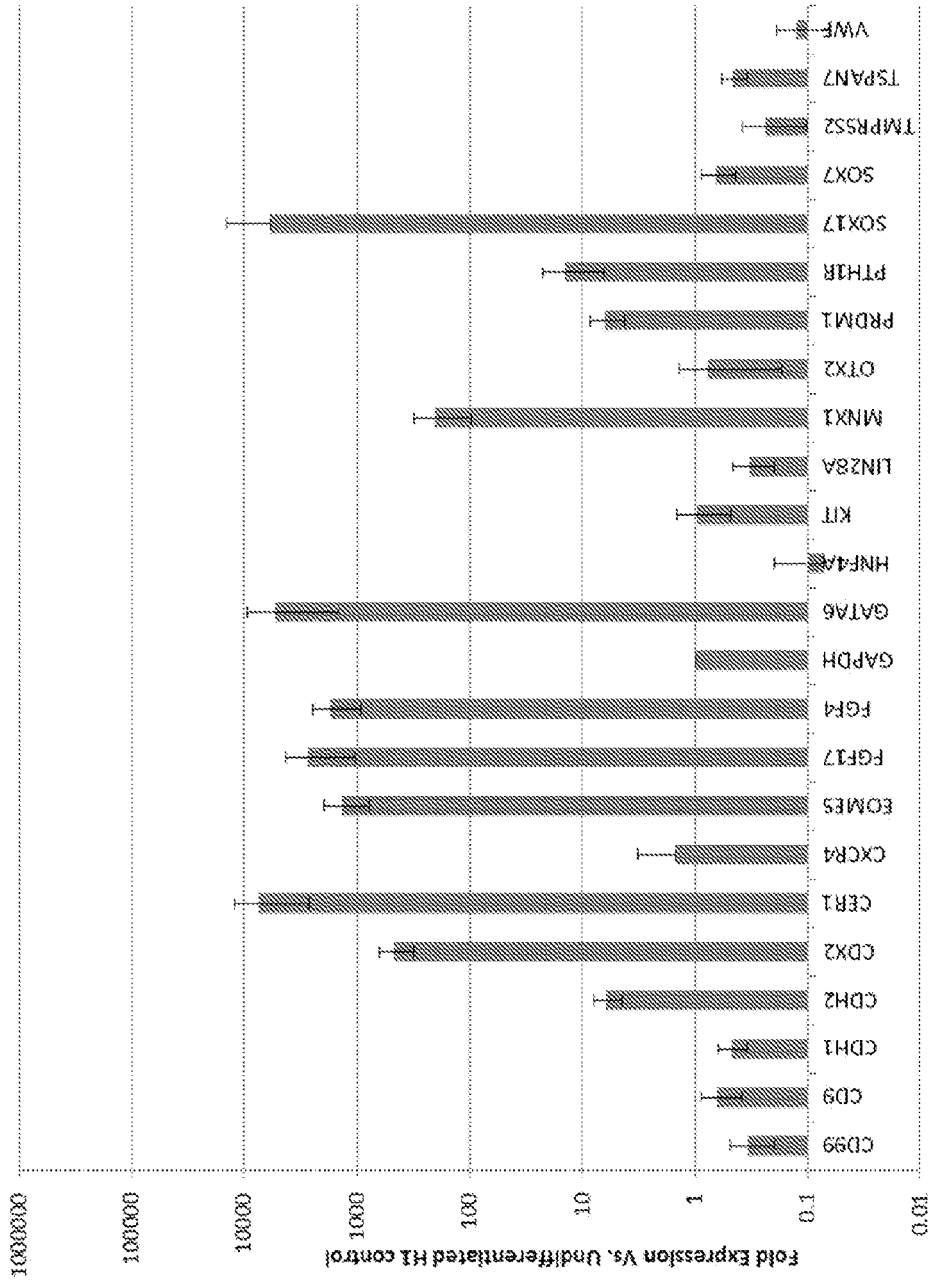


Figure 20: Stage 1 Day 3 expression (n=13, mean ± St. Dev.) by qRT-PCR Pluripotency Array

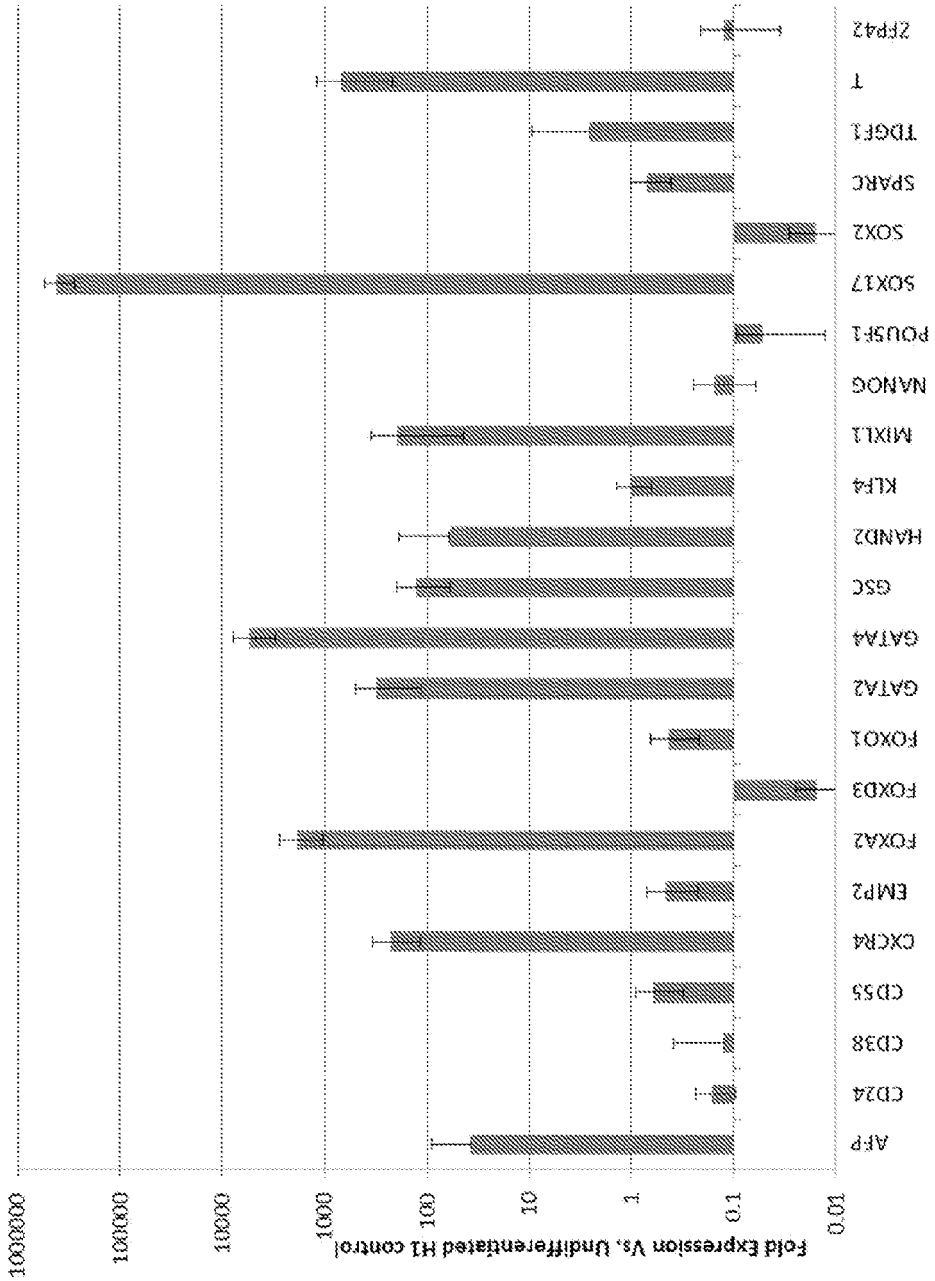


Figure 21: Stage 1 Day 3 expression (n=13, mean ± St. Dev.) by qRT-PCR DE Array

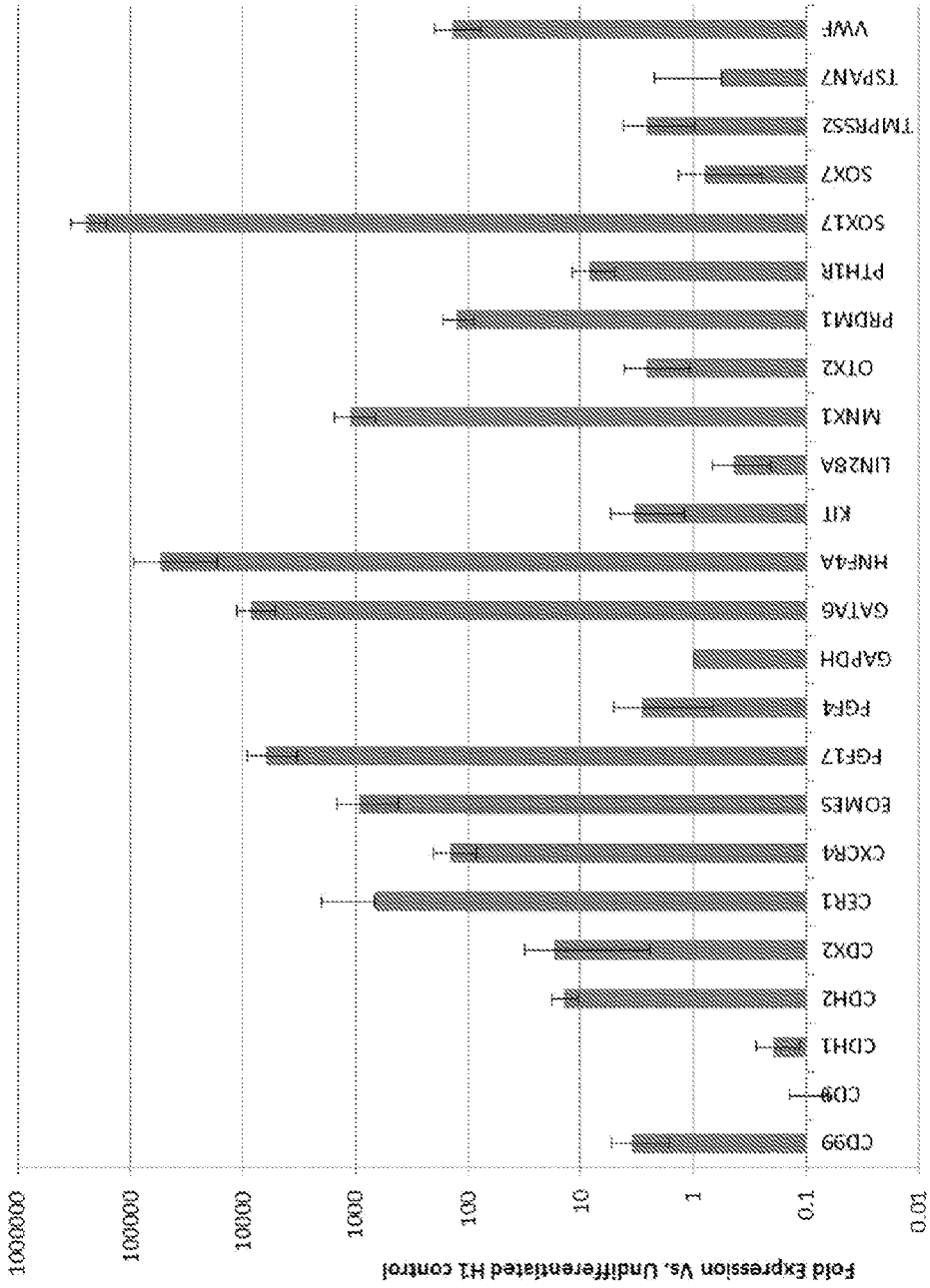


Figure 22: Average FACS results Stage 1 Day 3 (mean ± St. Dev.)

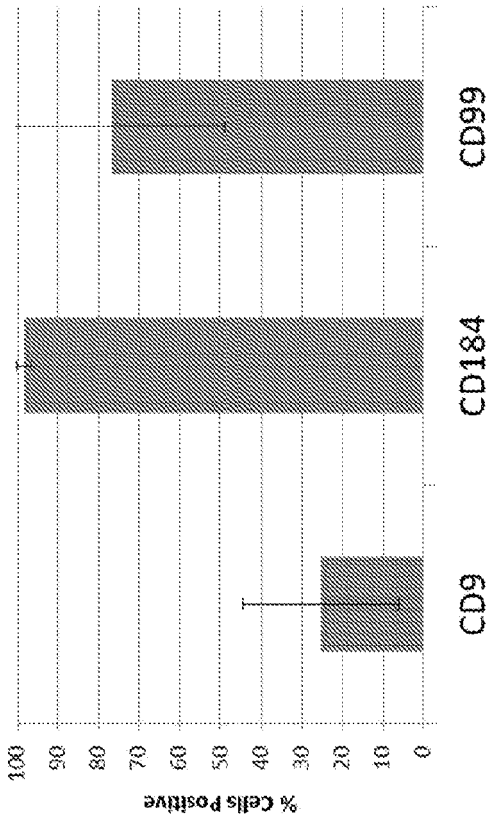


Figure 23: Stage 1 Day 3, Stage 2 Day 1, and Stage 2 Day 3 expression (n=14, mean ± St. Dev.) by qRT-PCR DE Array

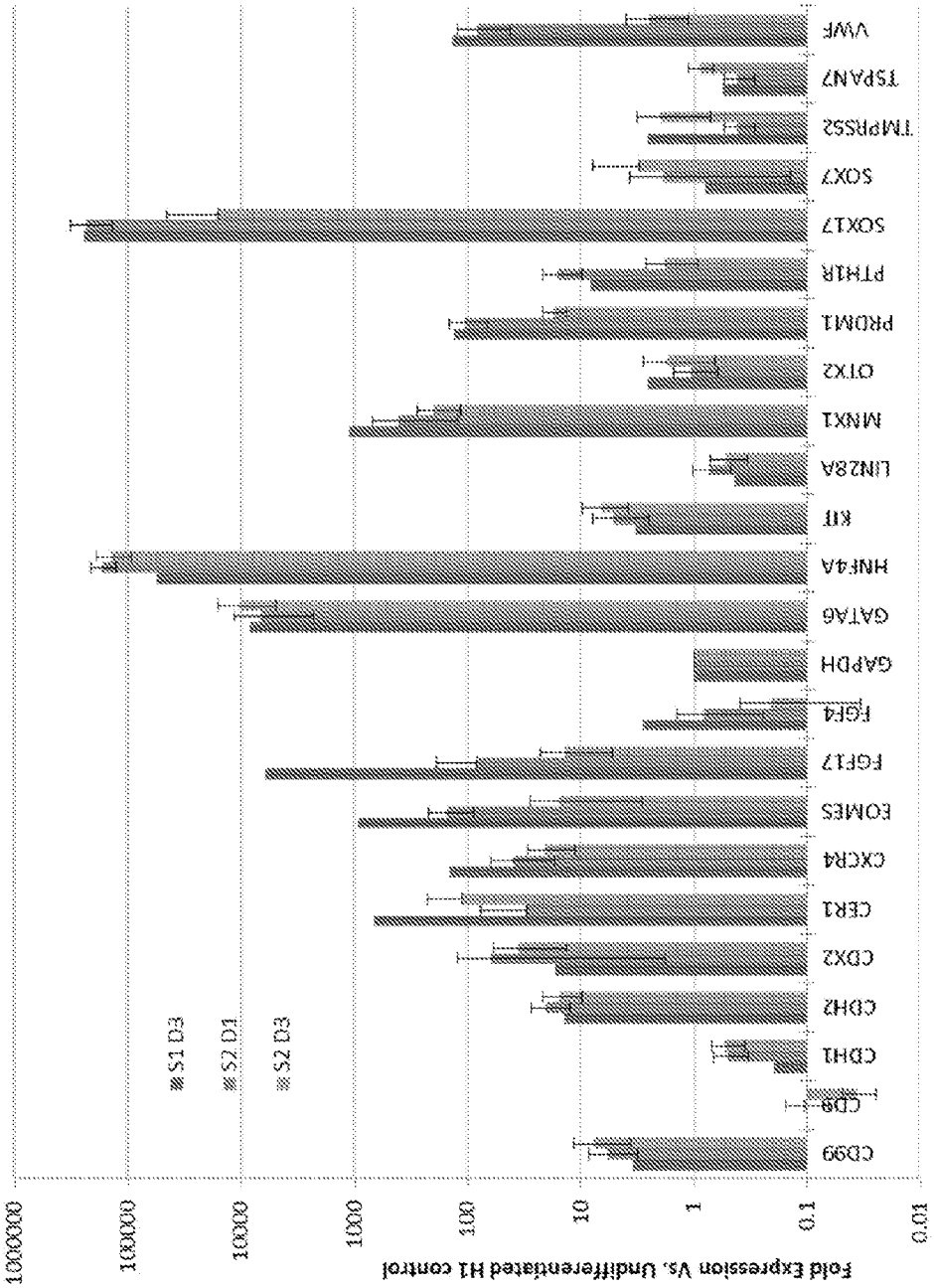


Figure 24: Stage 2 Day 1 and 3 expression (n=12, mean ± St. Dev.) by qRT-PCR GT Array

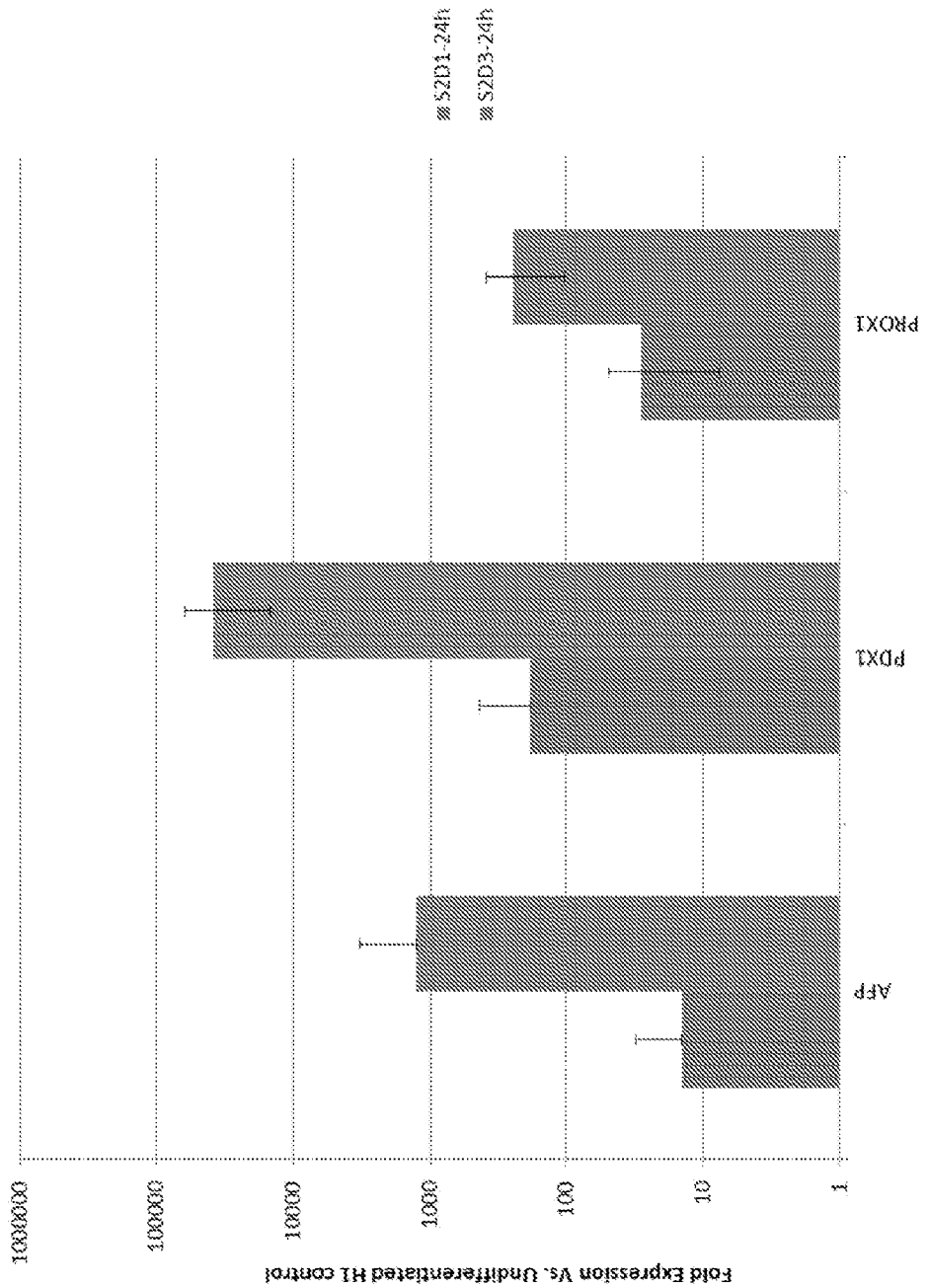
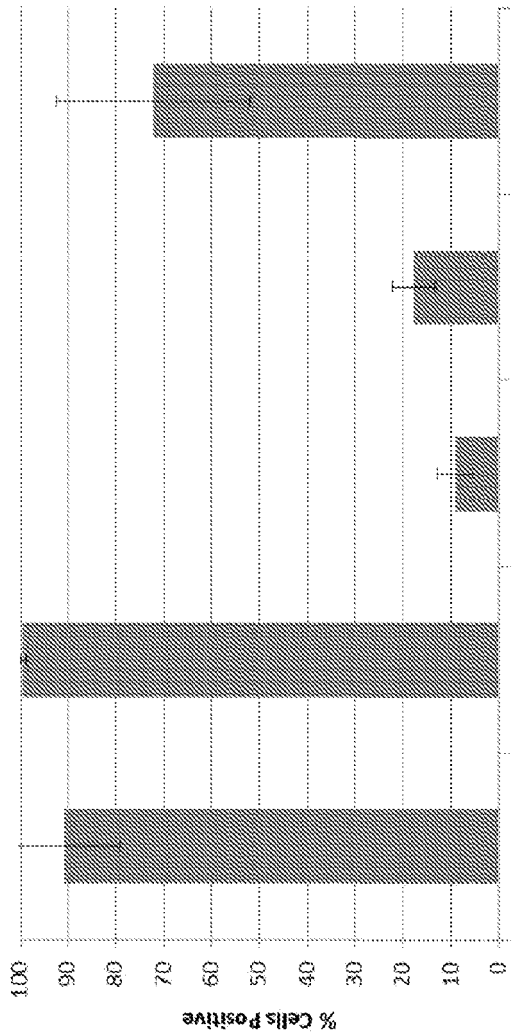


Figure 25: Average FACS results Stage 3 Day 3 (mean ± St. Dev.)



Pdx1	FoxA2	Chromogranin	Nkx 2.2	SOX 2
90.9	99.2	9.1	17.8	72.3
11.9	0.6	3.6	4.4	20.2

Figure 26: Stage 3 Day 1 and 3 expression (n=10, mean ± St. Dev.) by qRT-PCR S4 Array

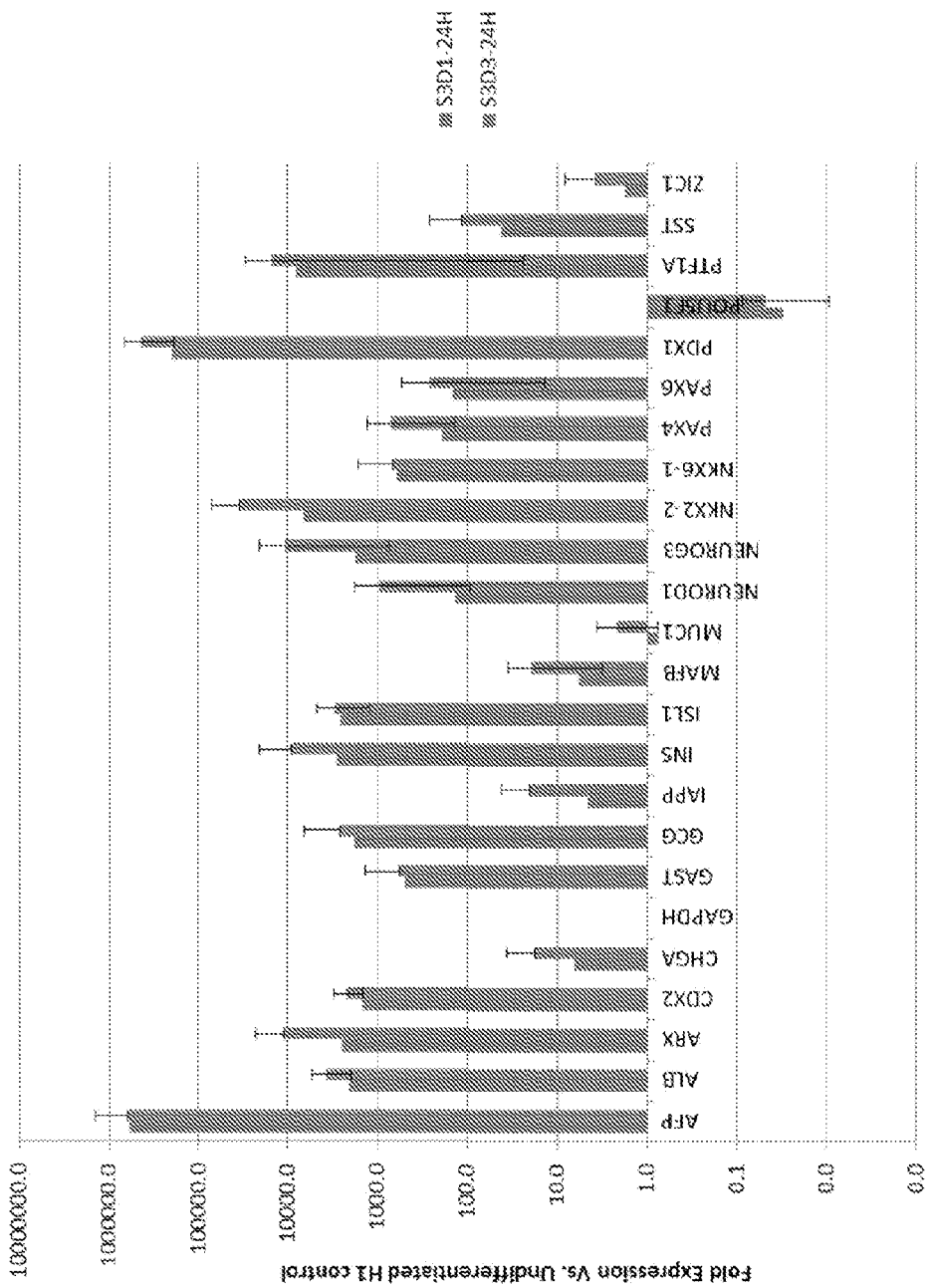
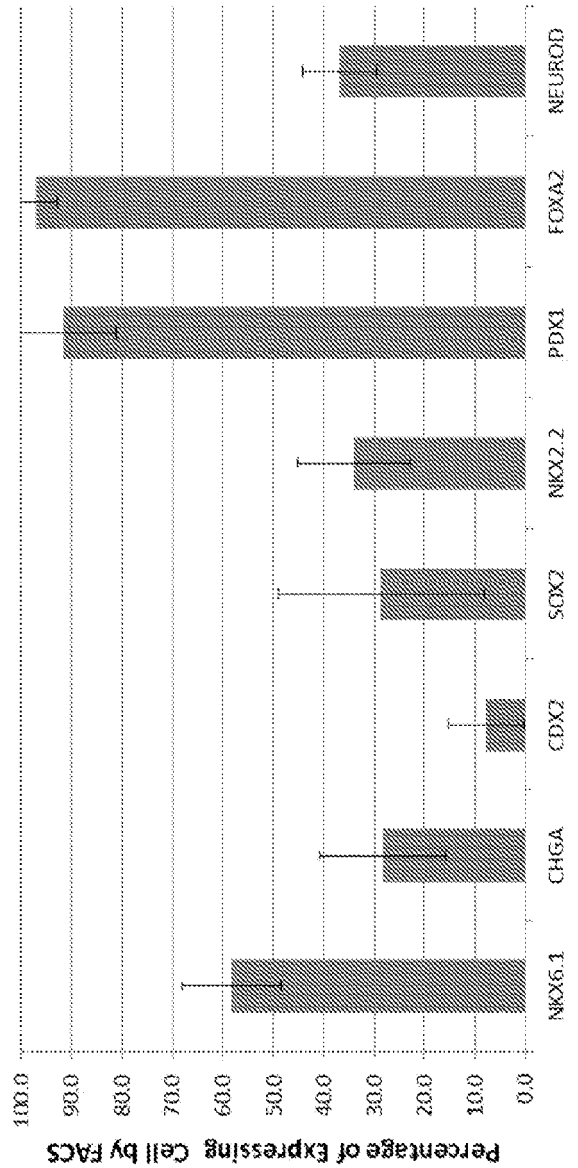


Figure 27: Average FACS results Stage 4 Day 3 (mean ± St. Dev.)



N=13	NKX6.1	CHGA	CDX2	SOX2	NKX2.2	PDX1	FOXA2	NEUROD
Overall Average	58.3	28.1	7.7	28.6	34.0	91.7	97.2	36.9
Overall Stdev	9.7	12.5	7.5	20.4	11.1	10.4	4.3	7.4

Figure 28: Stage 3 Day 3 and Stage 4 Days 1 and 3 expression (n=14, mean ± St. Dev.) by qRT-PCR S4 Array

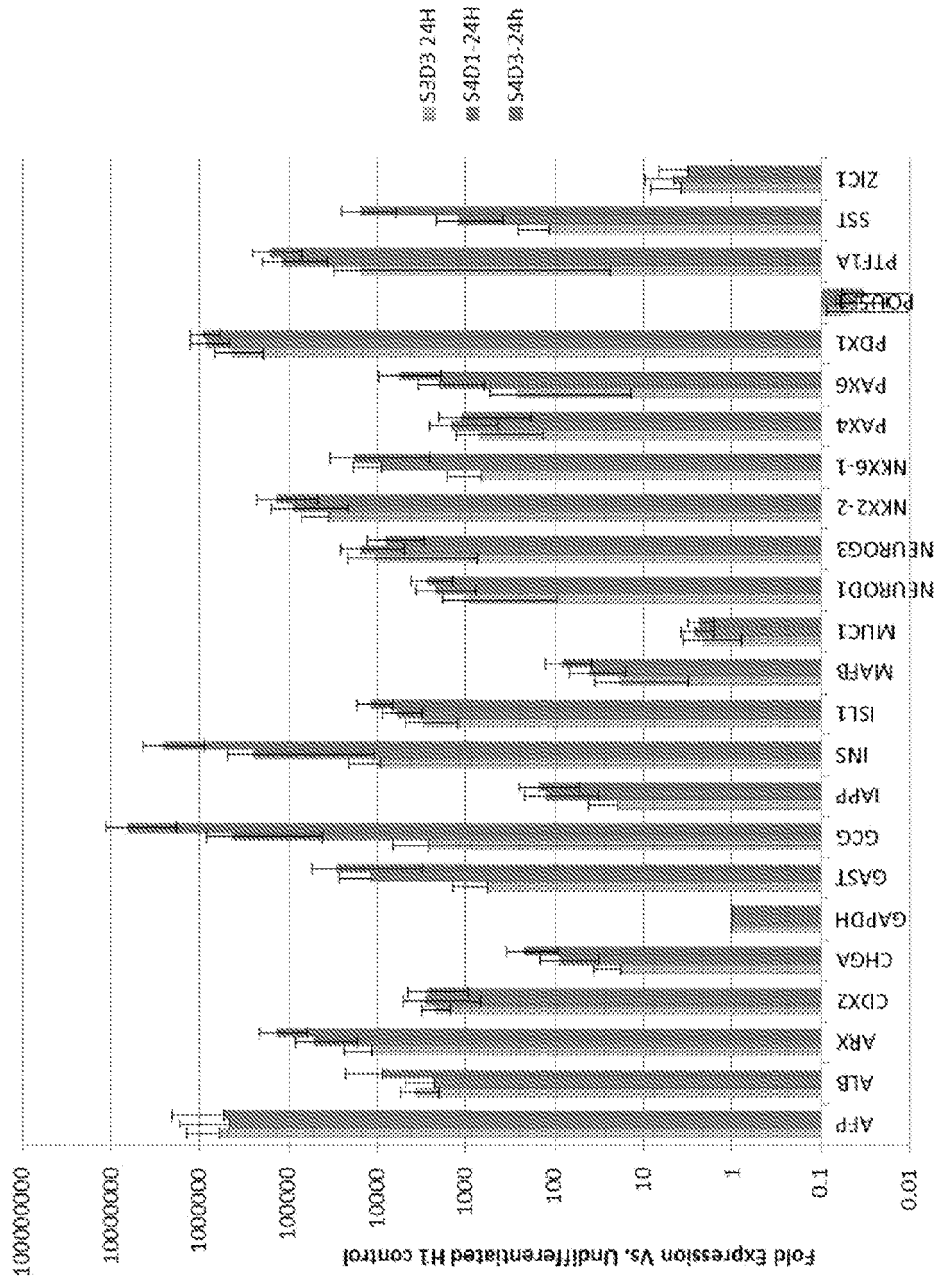


Figure 29: Average FACS results Stage 4 Day 3 (mean ± St. Dev.)

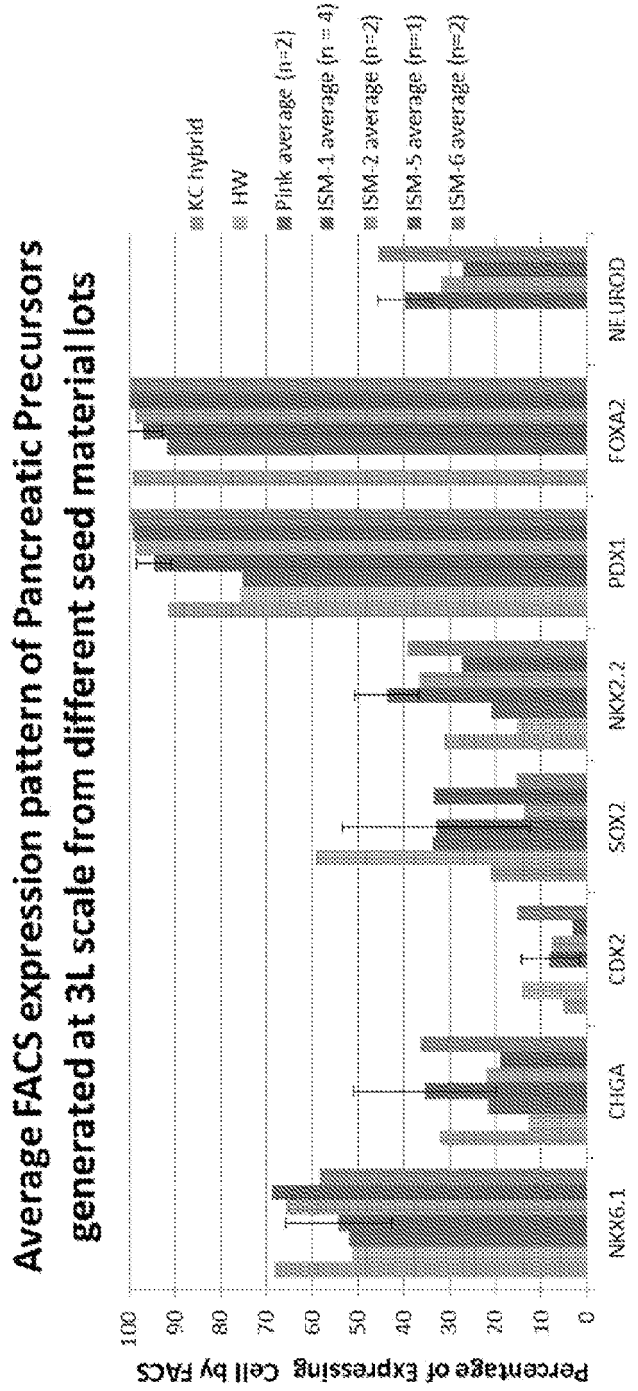


Figure 30: Average FACS results Stage 4 Day 3 (mean ± St. Dev.)

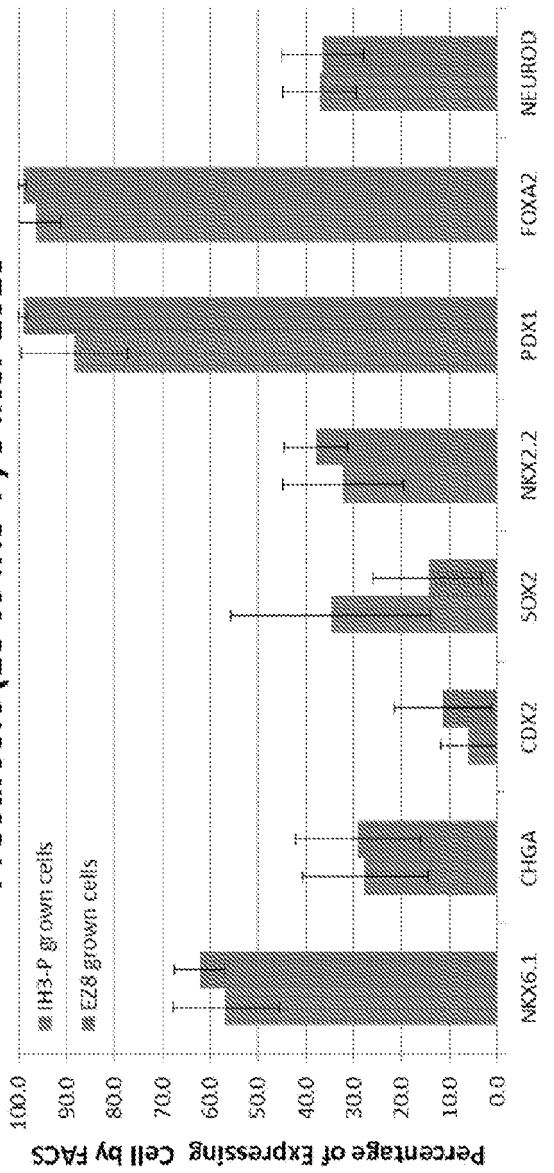


Figure 31: Average FACS results Stage 4 Day 3 (mean ± St. Dev.)

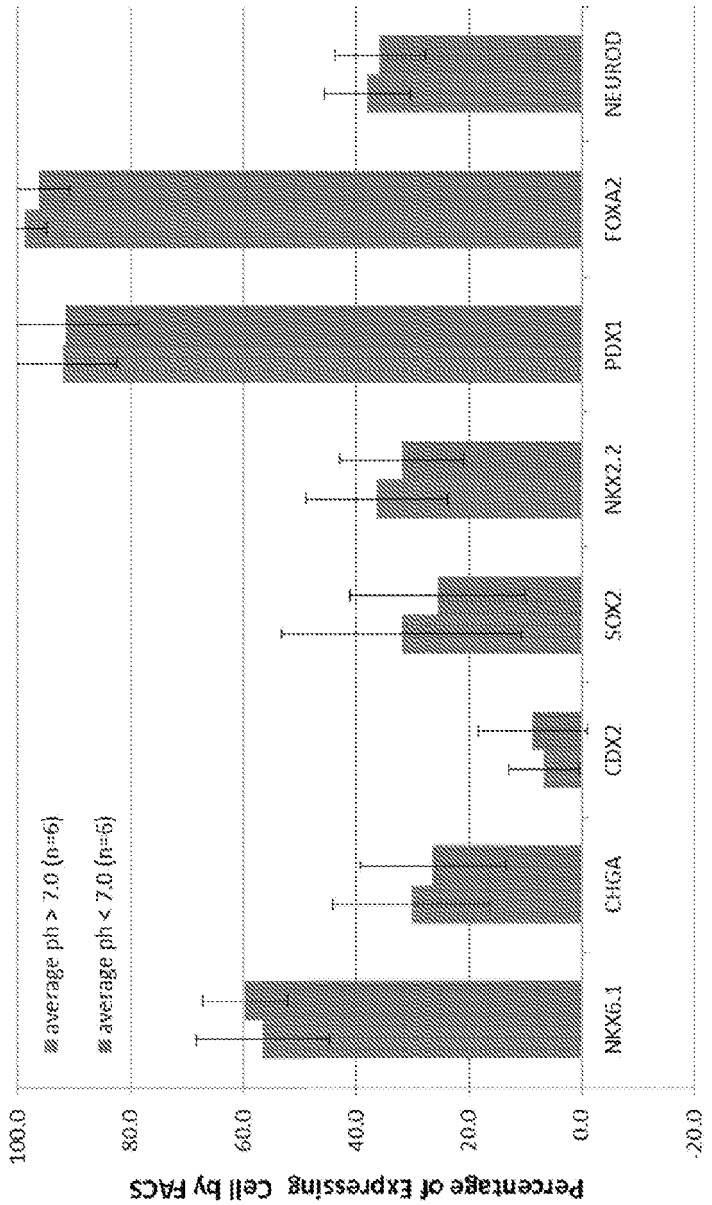


Figure 32: Average FACS results Stage 4 Day 3 (mean ± St. Dev.) vs. Run using Anti-Foam C

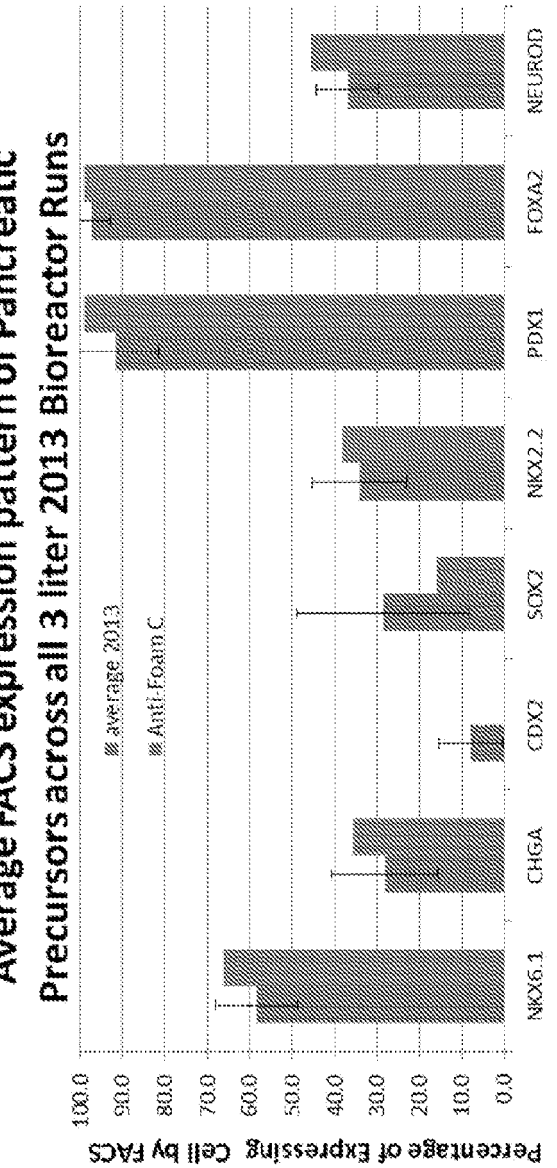


Figure 33: qRT-PCR Expression levels 24 hours prior to start of differentiation

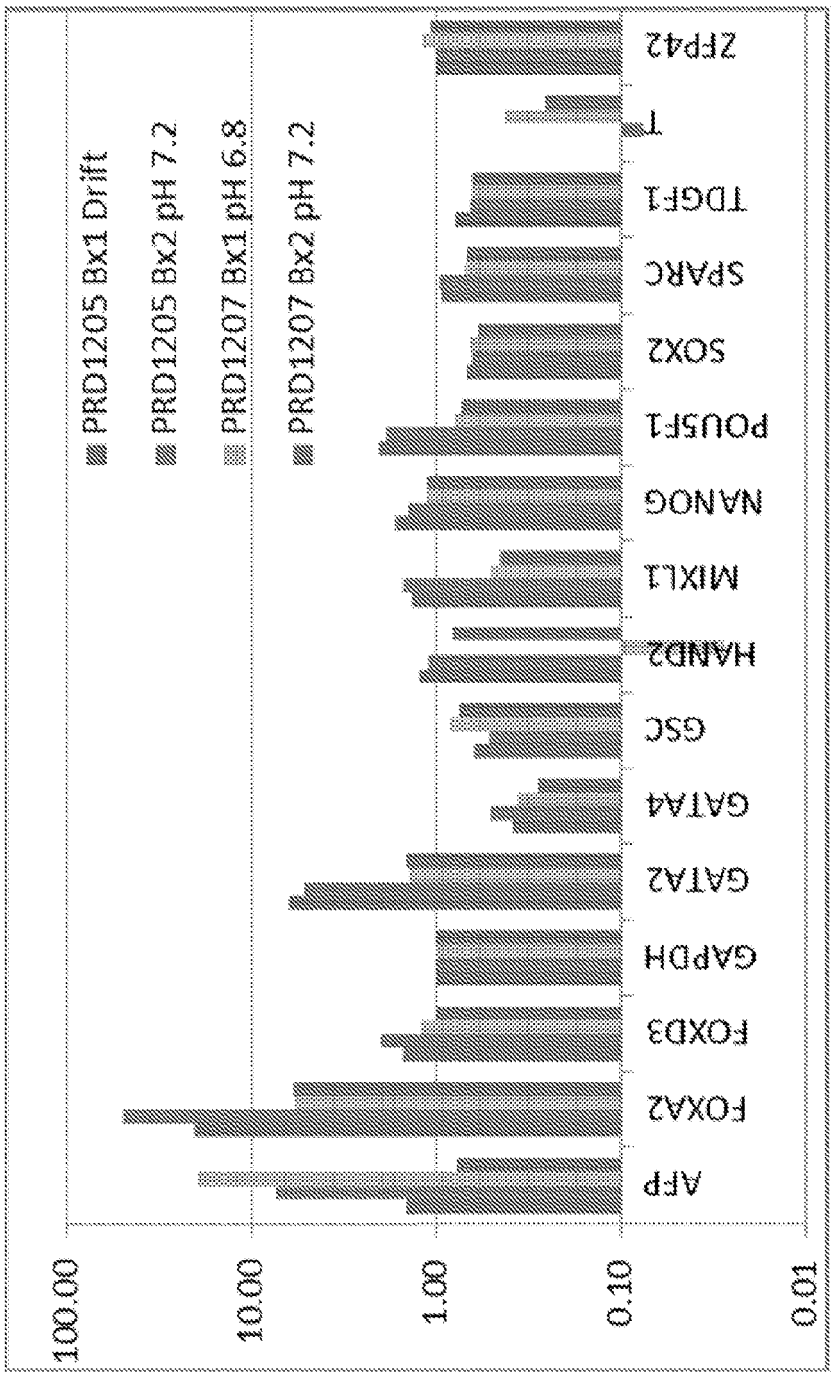


Figure 34: qRT-PCR Expression levels 24 hours after the start of differentiation

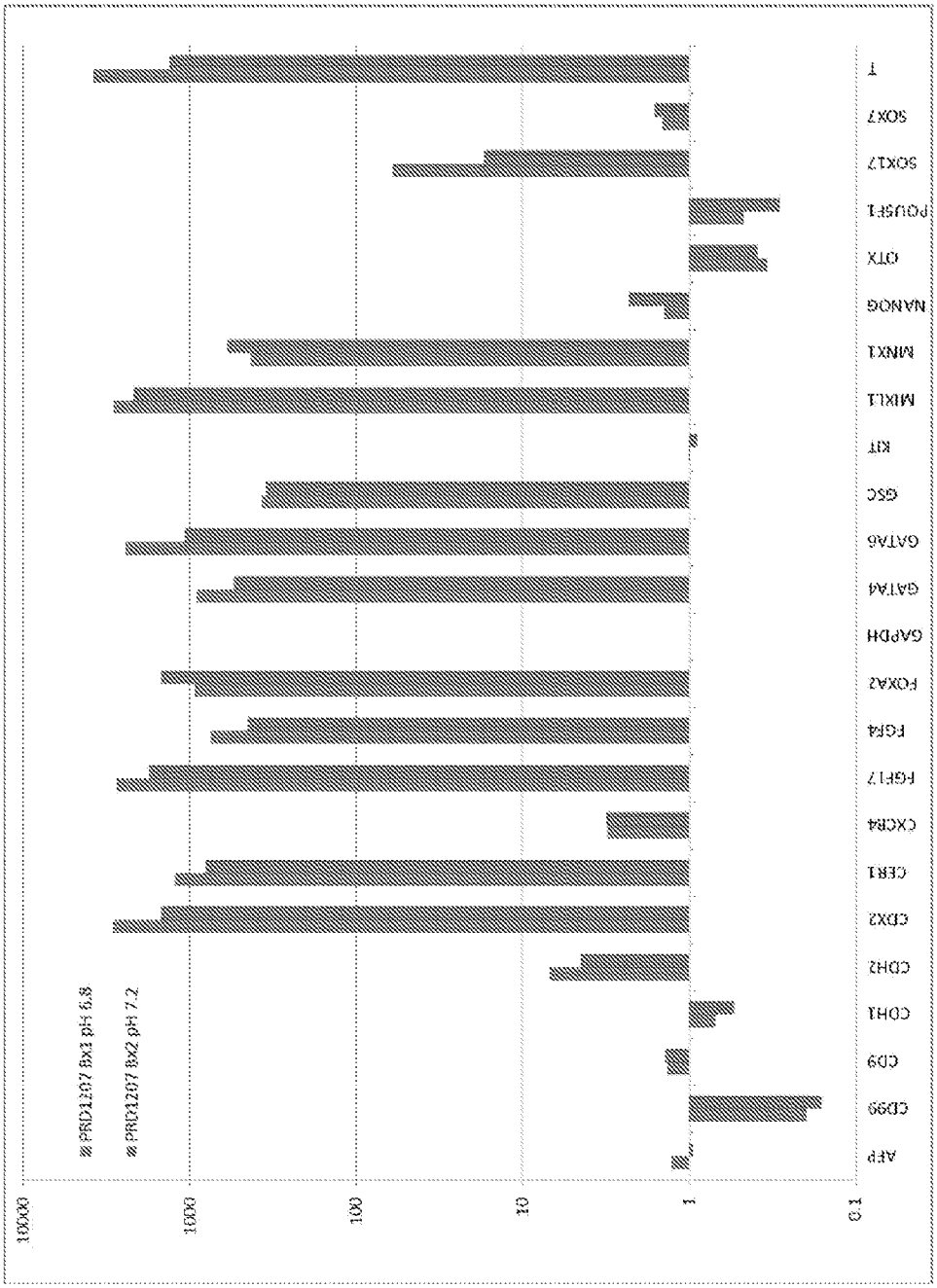


Figure 35: qRT-PCR Expression levels 72 hours after the start of differentiation

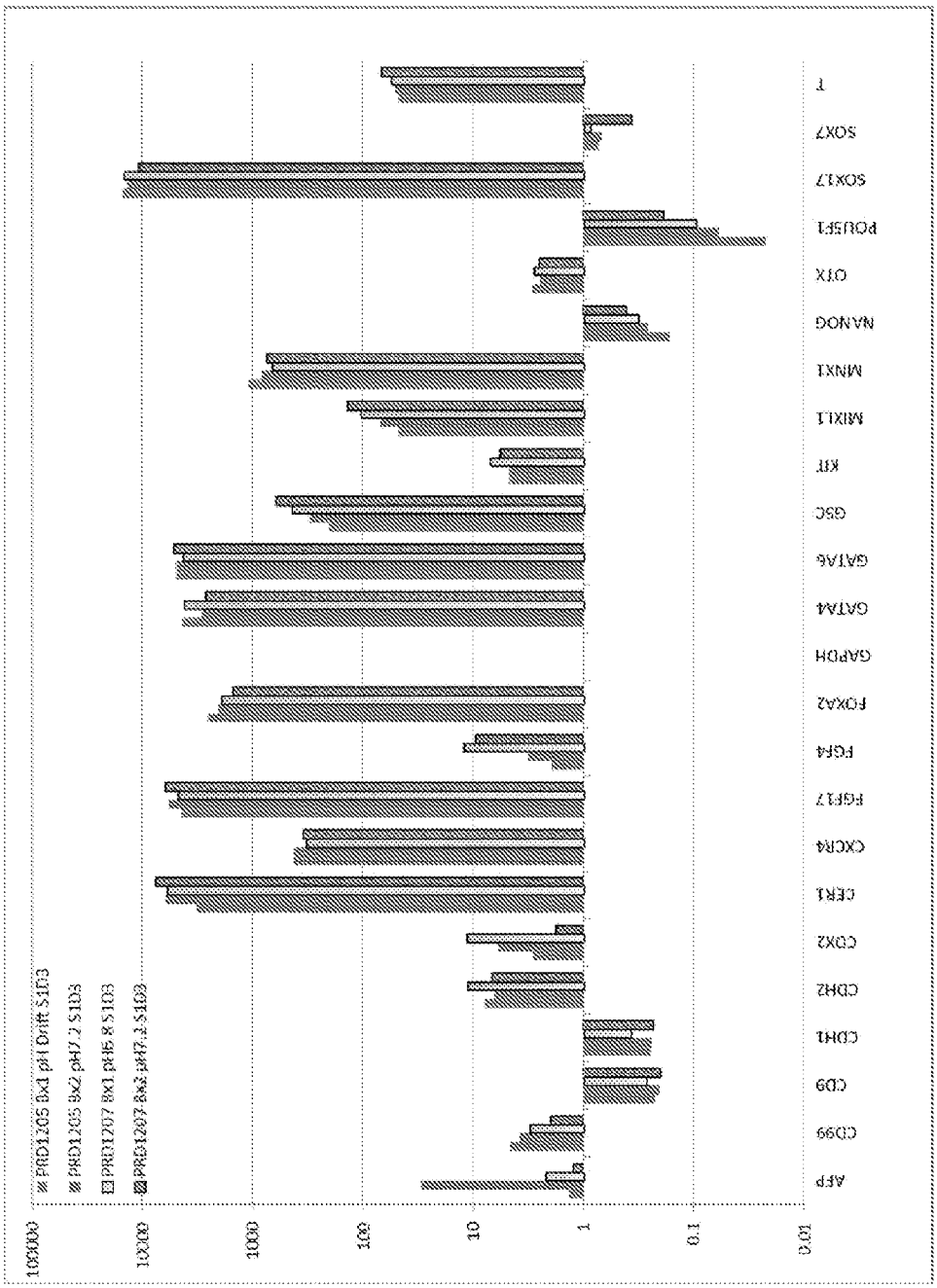


Figure 36(a): qRT-PCR Expression levels from Stage 2 to Stage 3 and 4 of differentiation

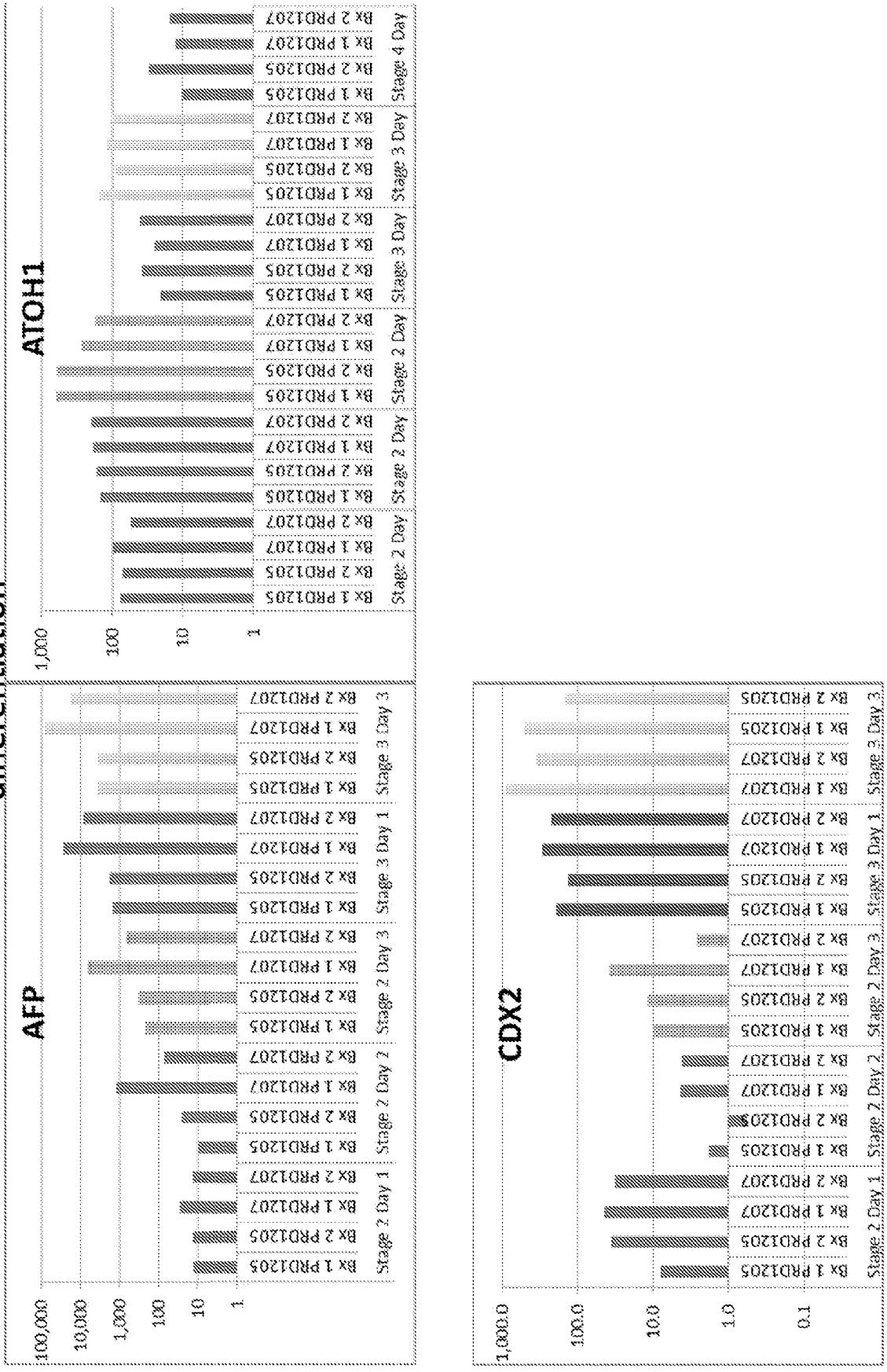


Figure 36(b) cont.: qRT-PCR Expression levels from Stage 2 to Stage 3 and 4 of differentiation

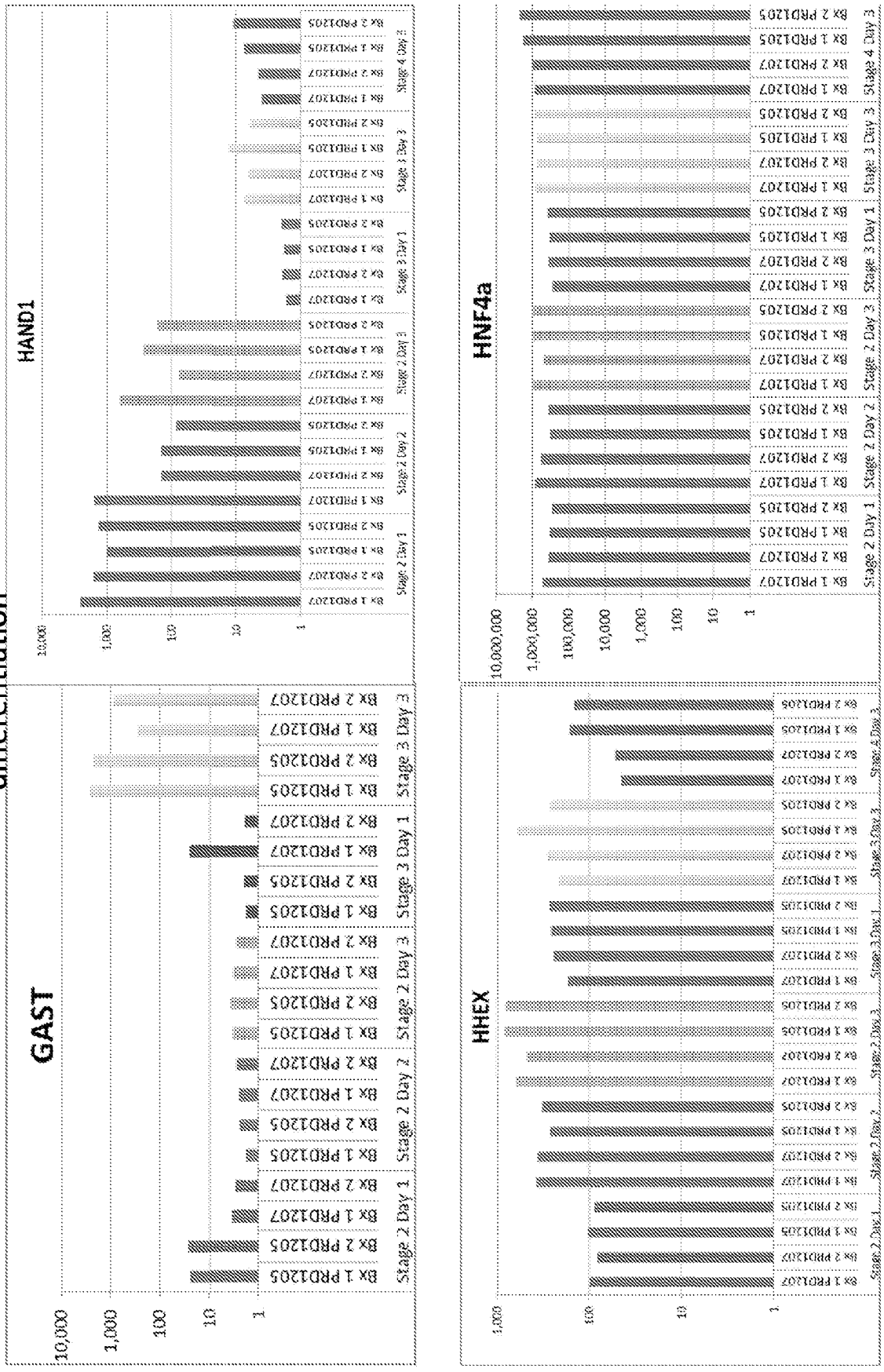


Figure 36(c) cont.: qRT-PCR Expression levels from Stage 2 to Stage 3 and 4 of differentiation

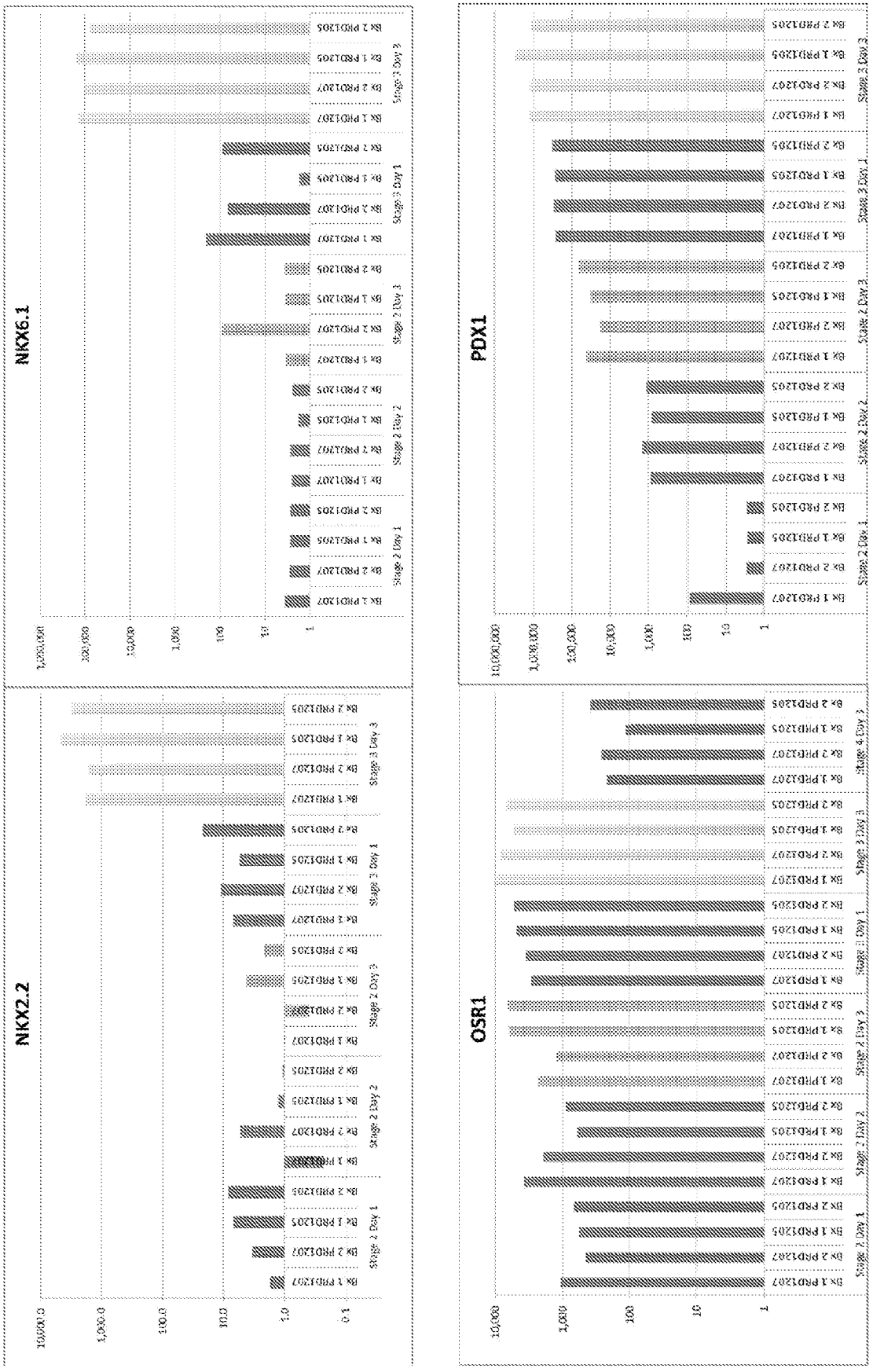


Figure 36(d) cont.: qRT-PCR Expression levels from Stage 2 to Stage 3 and 4 of differentiation

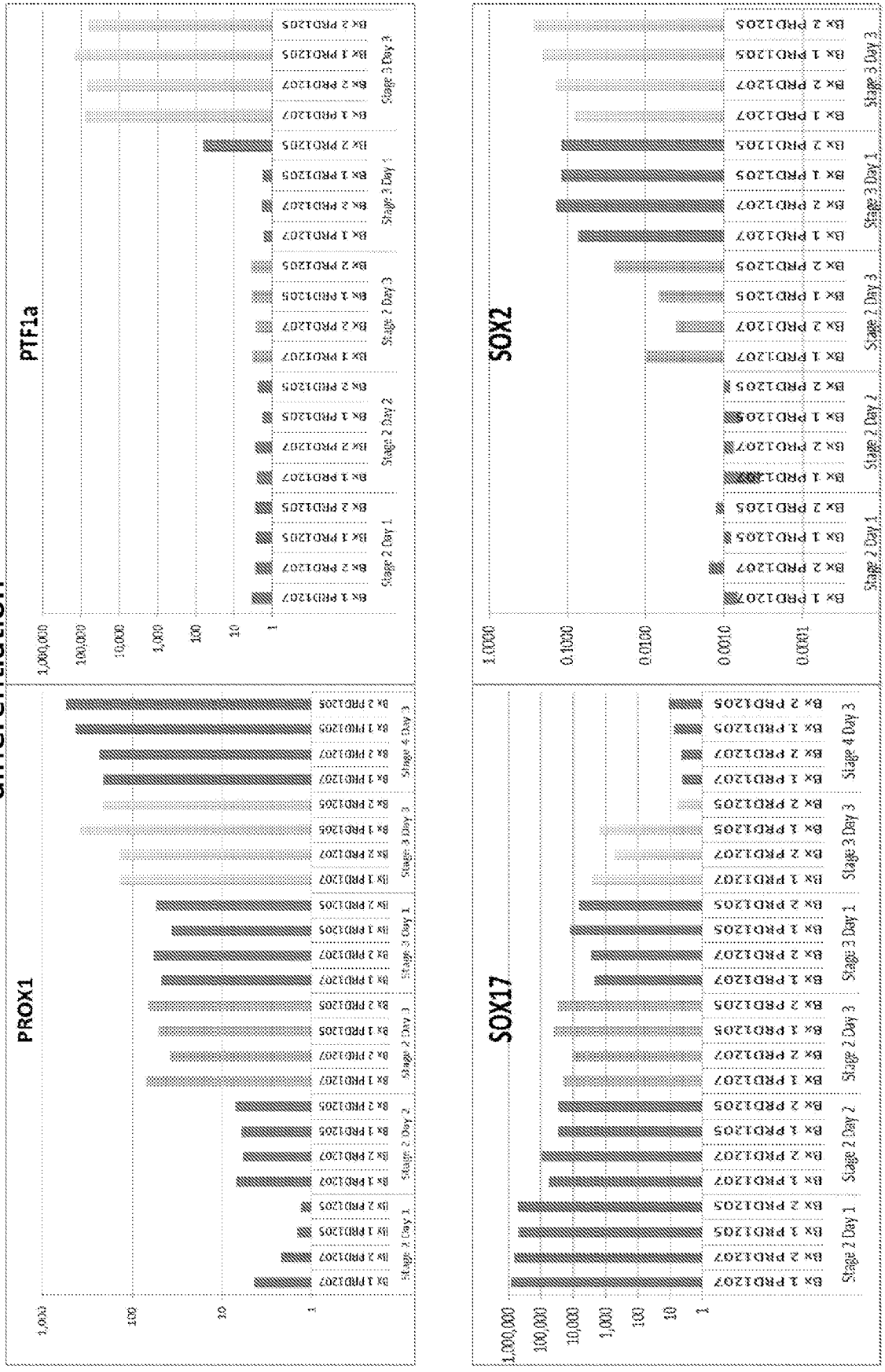


Figure 36(e) cont.: qRT-PCR Expression levels from Stage 2 to Stage 3 and 4 of differentiation

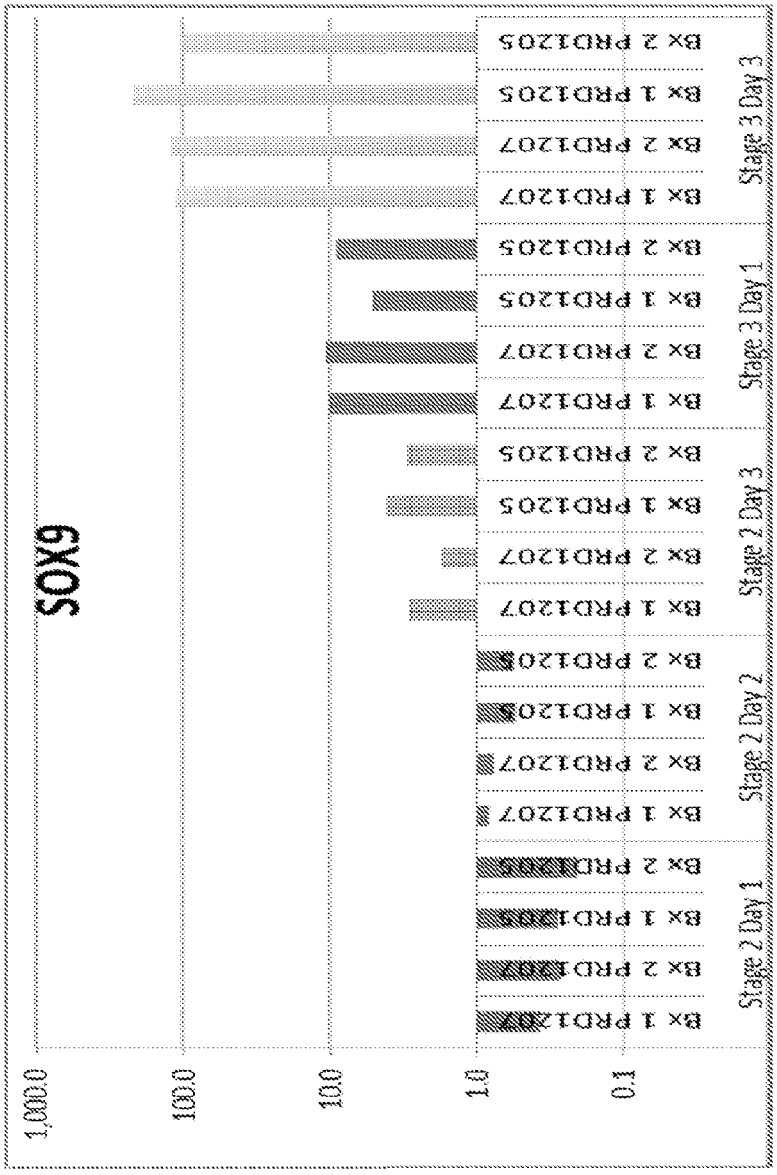


Figure 37: qRT-PCR Expression levels at Stage 4 Day 3 of differentiation

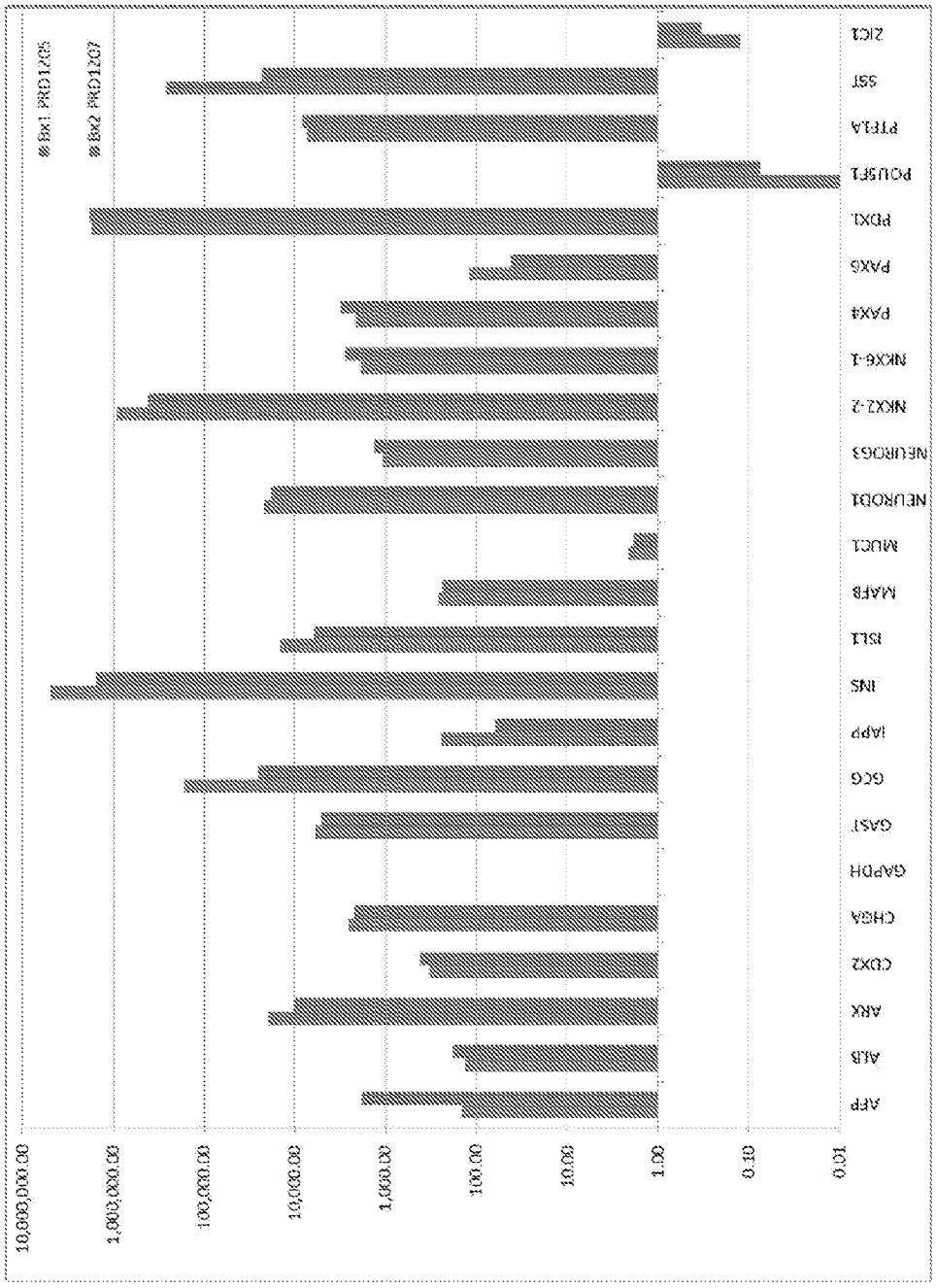


Figure 38: Cell Density in the bioreactor

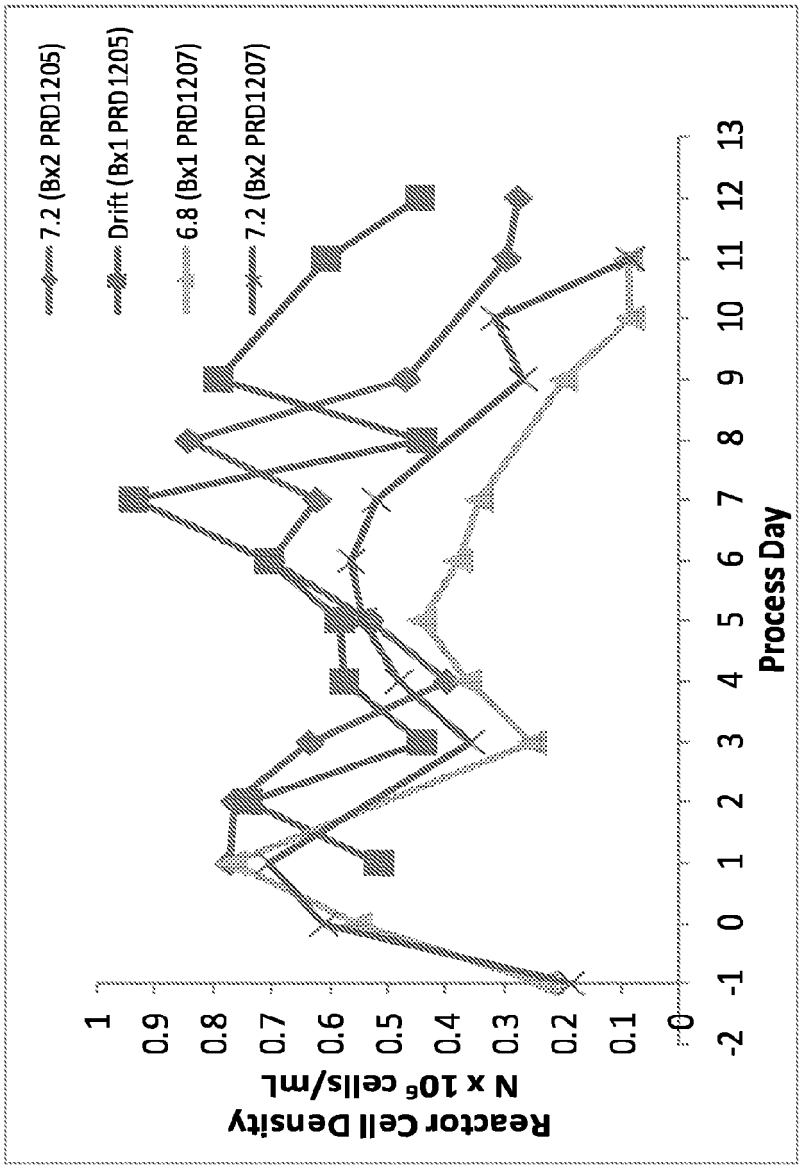


Figure 39(a): Stage 4 Day 3 bioreactor product function *in vivo*

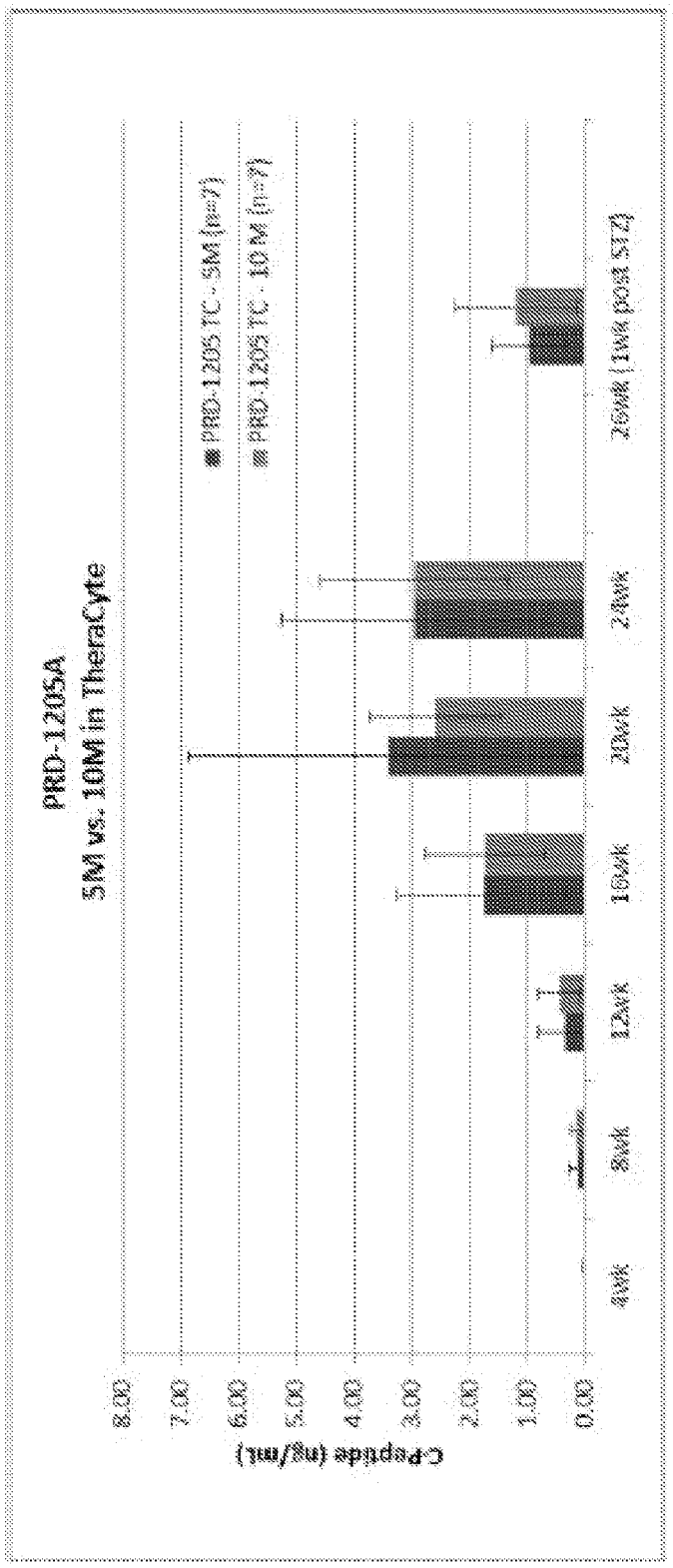


Figure 39(b): Stage 4 Day 3 bioreactor product function *in vivo*

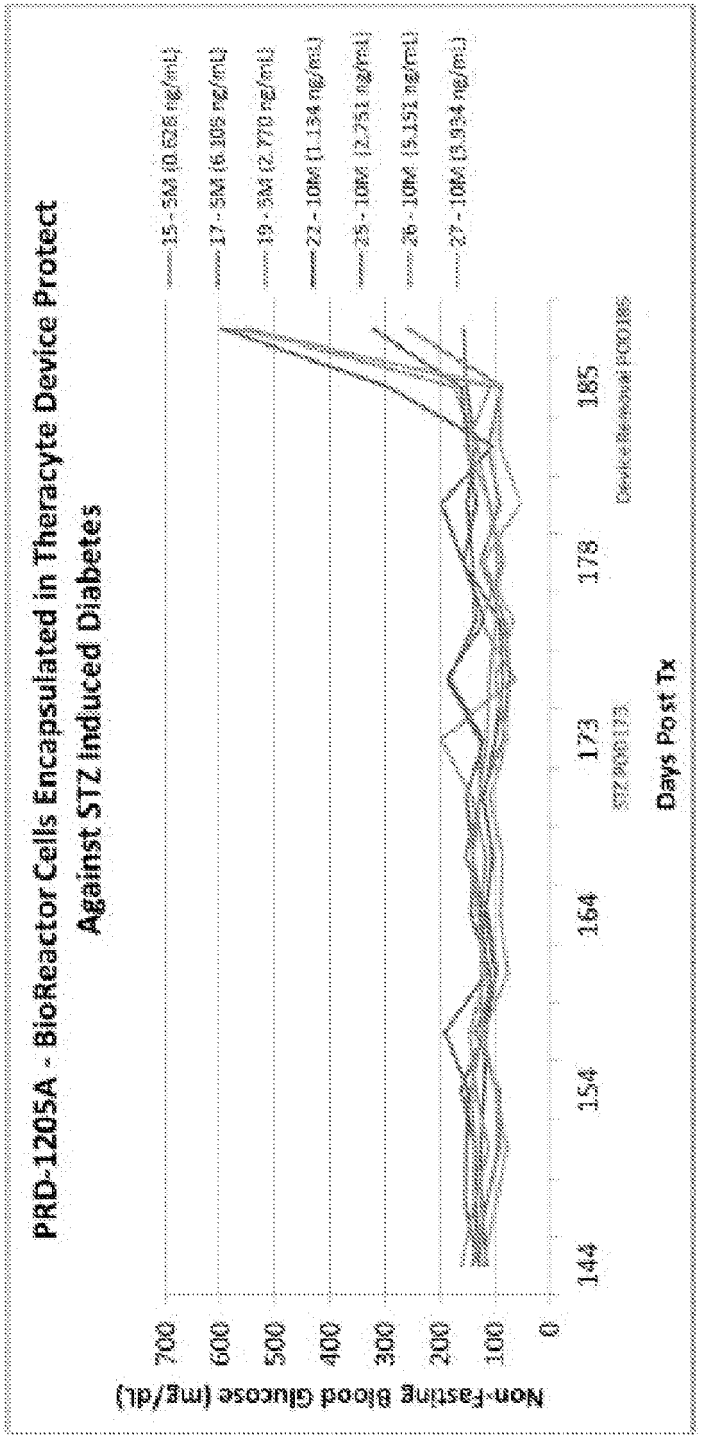


Figure 39(c): Stage 4 Day 3 bioreactor product function *in vivo*

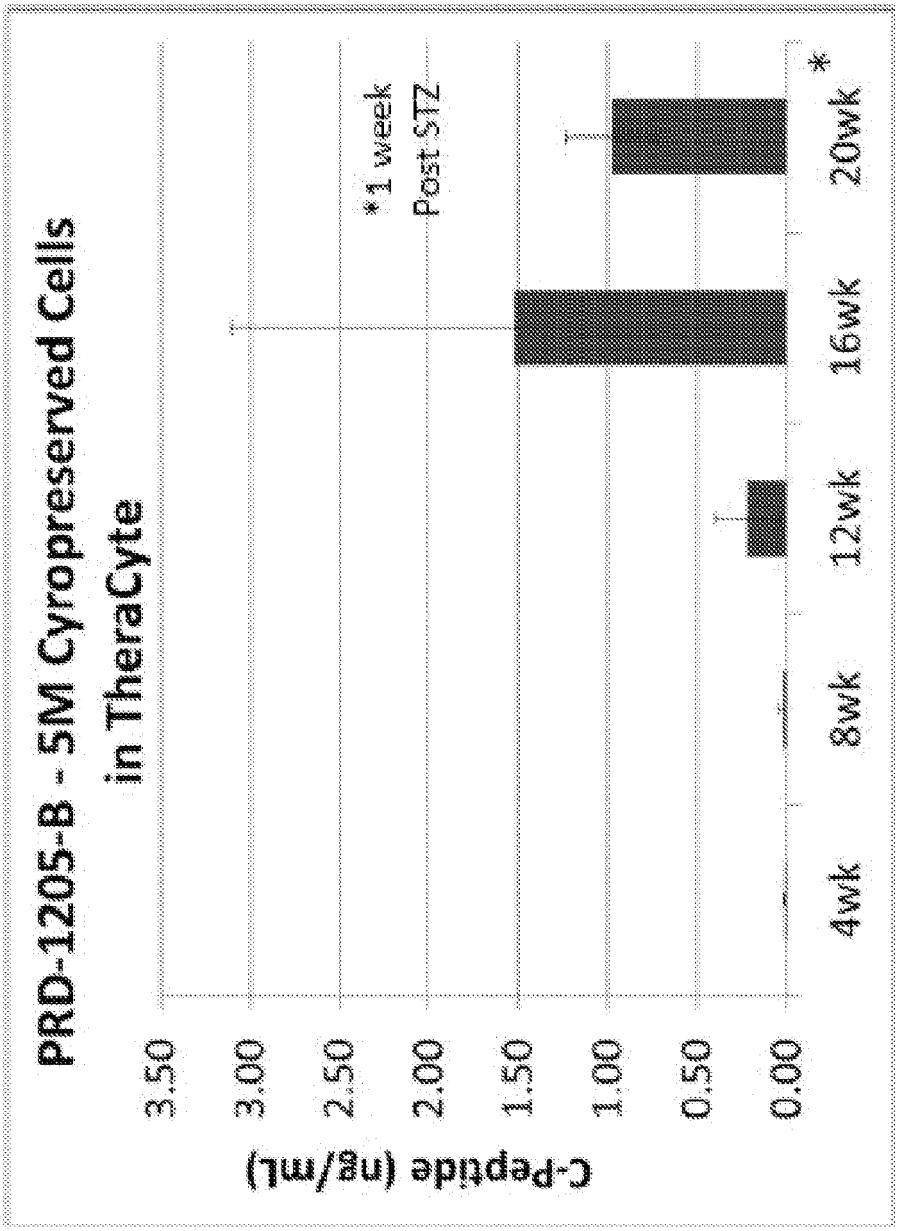


Figure 39(d): Stage 4 Day 3 bioreactor product function *in vivo*

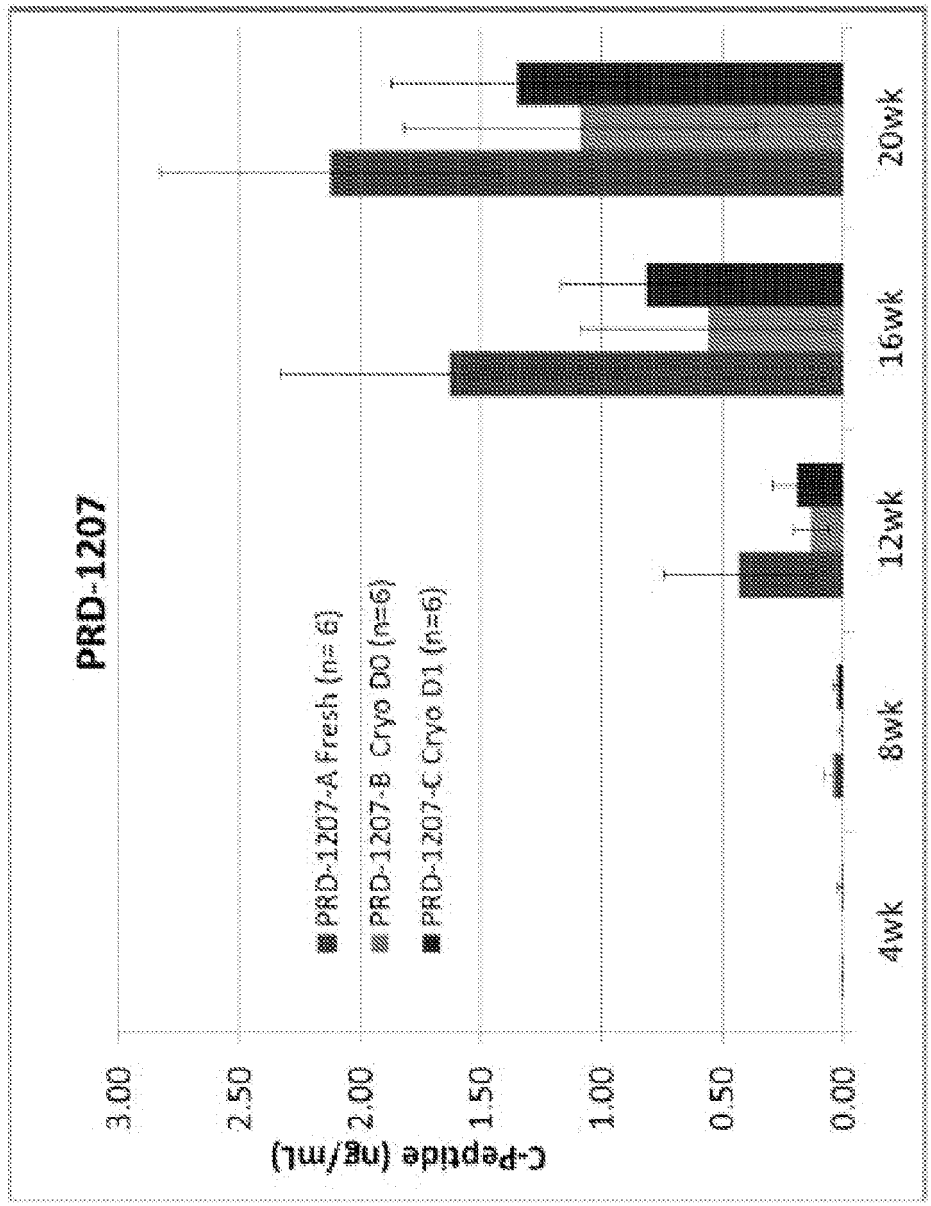


Figure 40A

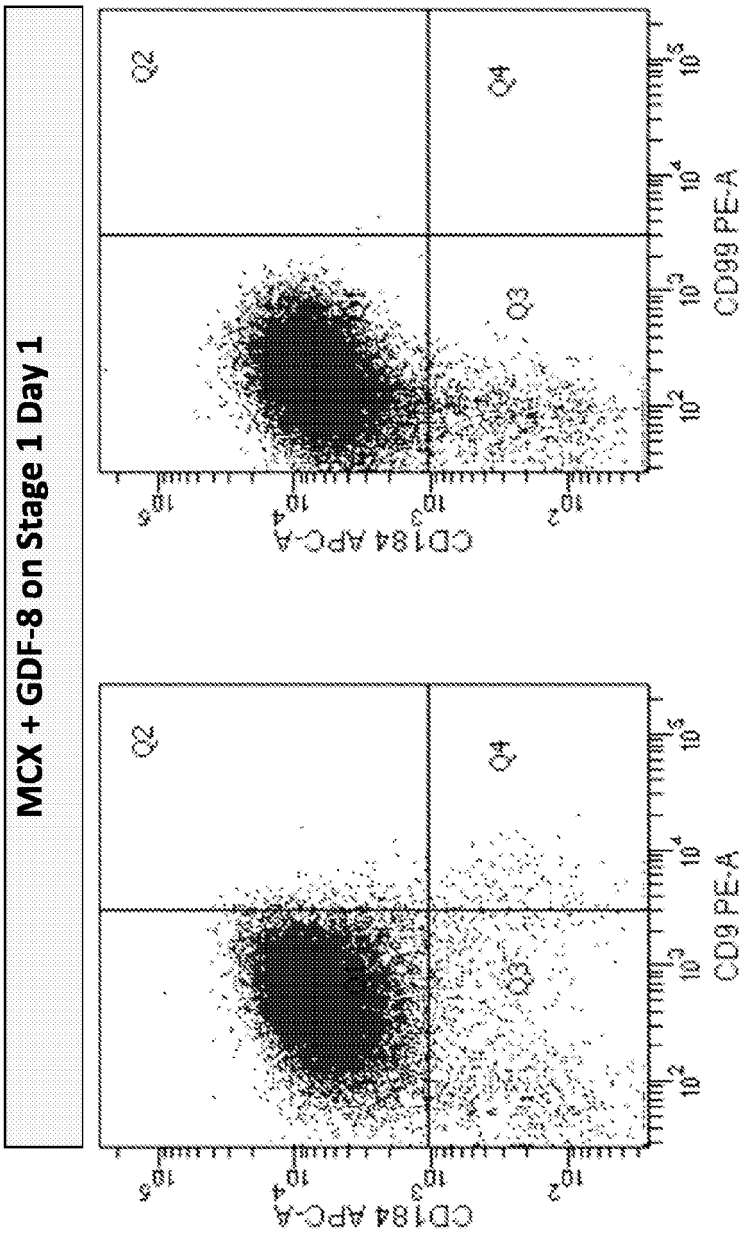

MCX + GDF-8 on Stage 1 Day 1
Q2
Q4
Q3
CD99 PE-A
CD184 APC-A
Q2
Q4
Q3
CD99 PE-A
CD184 APC-A

Figure 40B

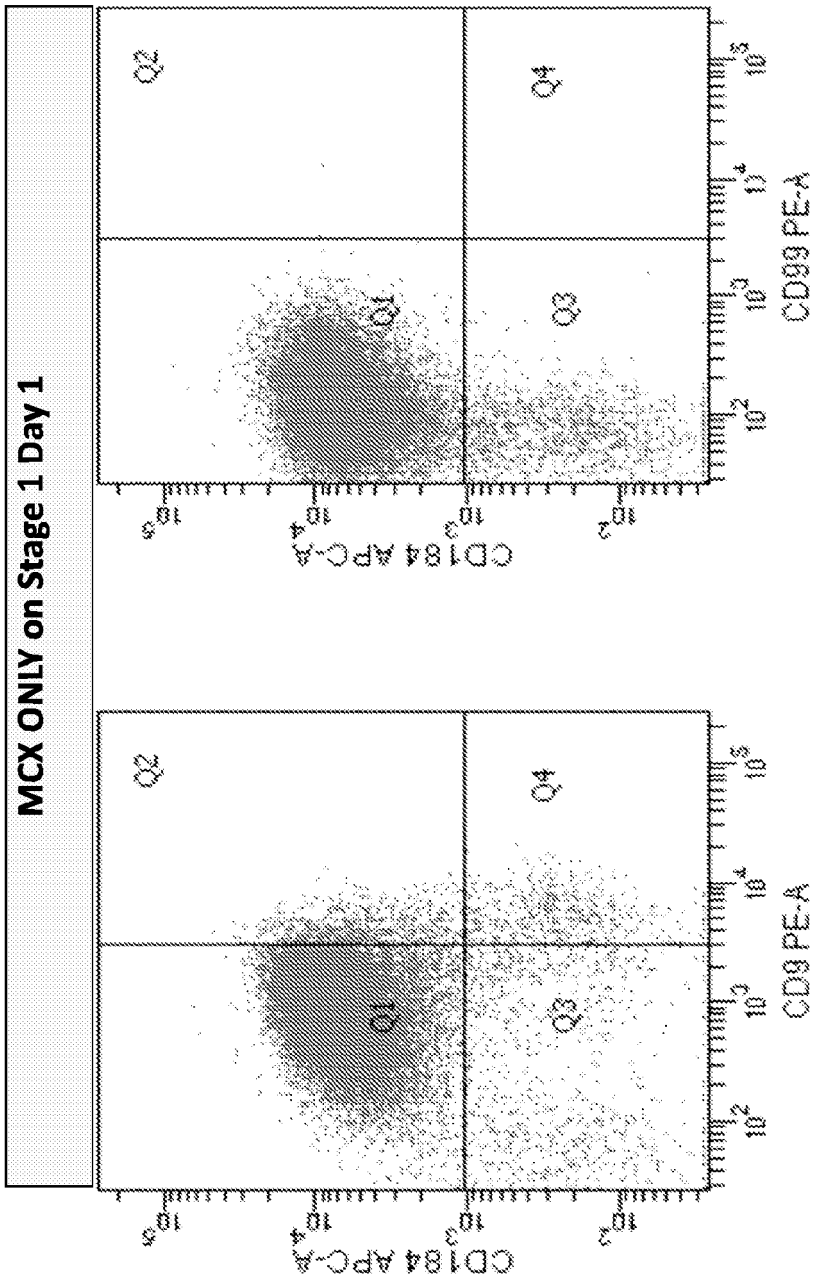

MCX ONLY on Stage 1 Day 1
Q2
Q4
Q1
Q3
CD184 APC-A
CD9 PE-A
Q2
Q4
Q1
Q3
CD184 APC-A
CD9 PE-A

Figure 40C

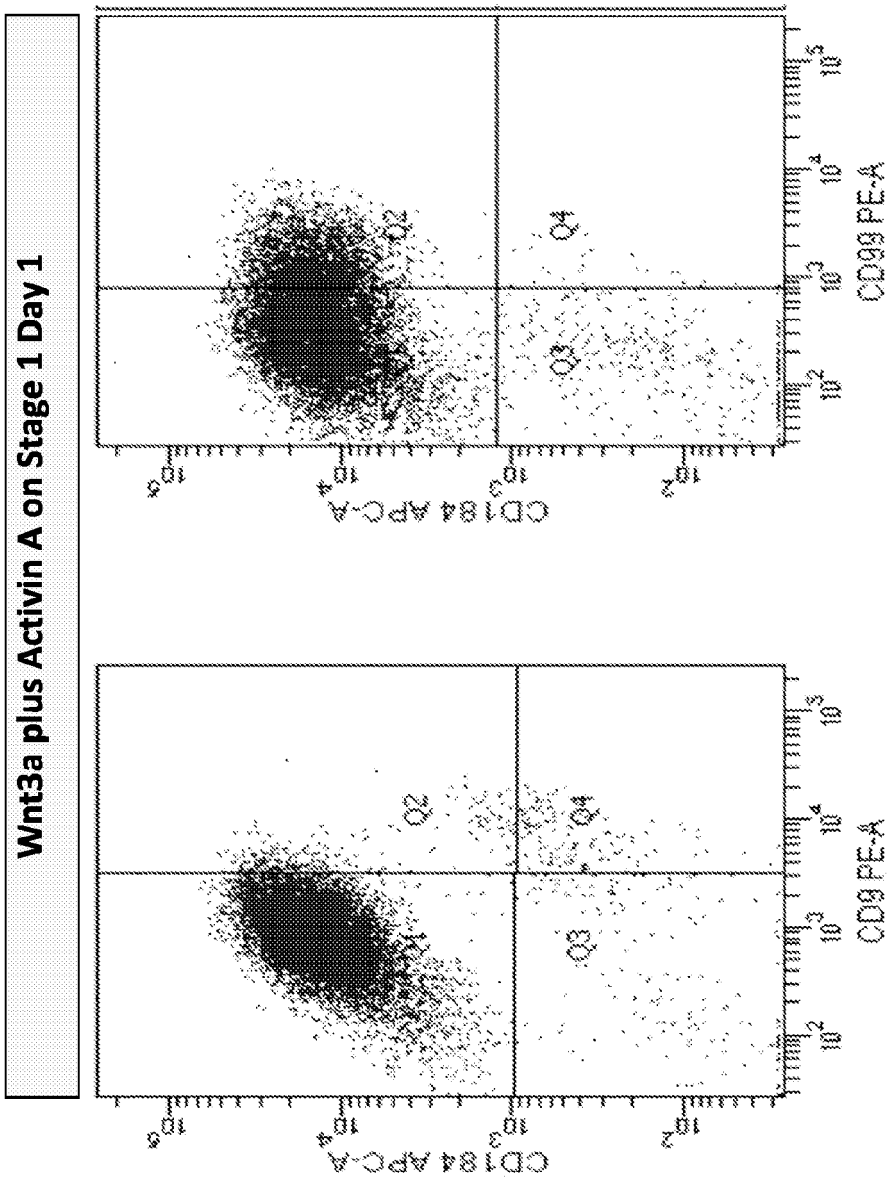
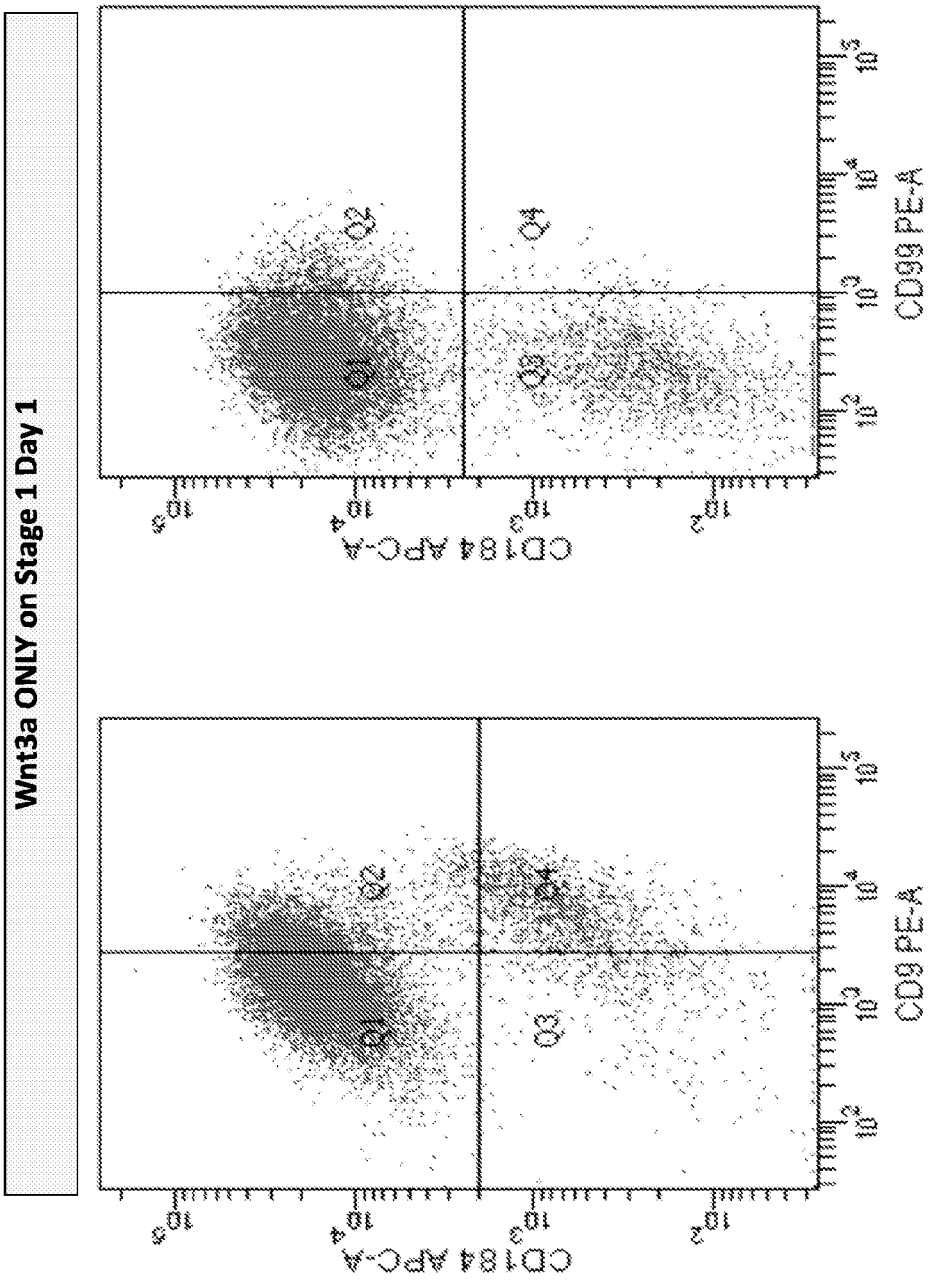

Wnt3a plus Activin A on Stage 1 Day 1
CD184 APC-A
CD99 PE-A
Q1
Q2
Q3
Q4

Figure 40D



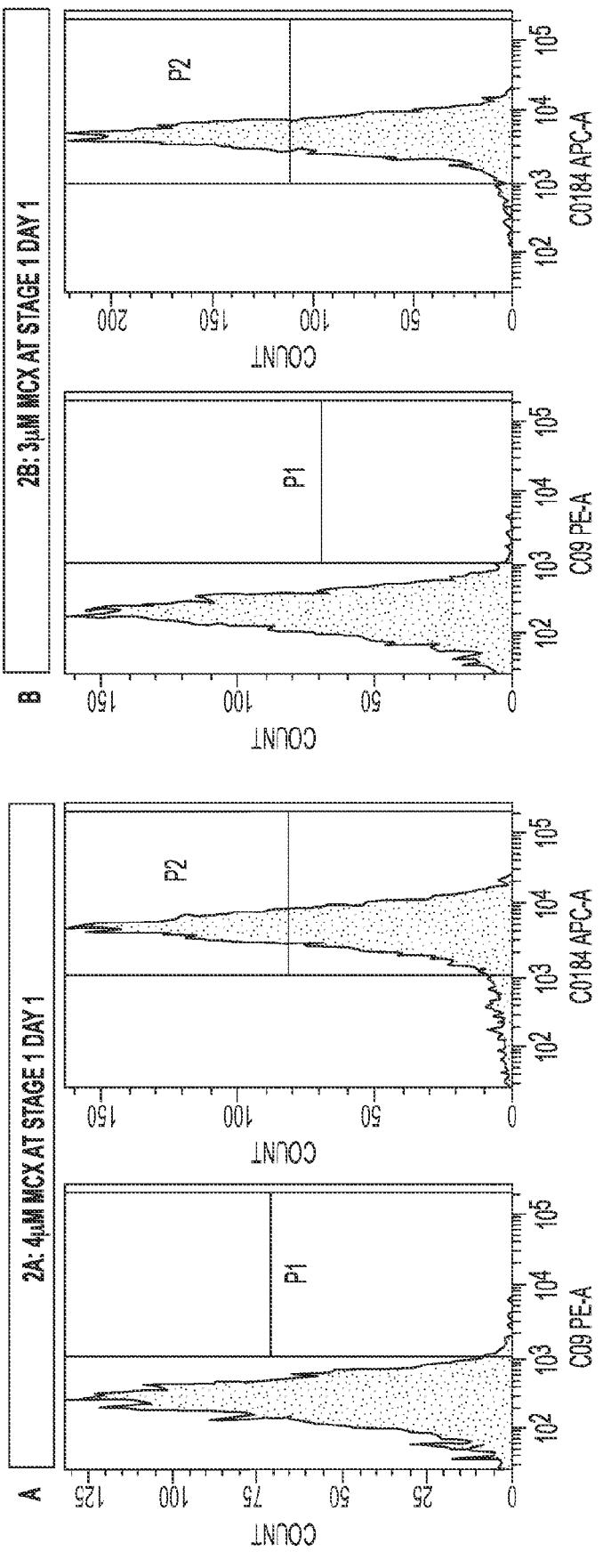

A
2A: 4 µM MCX AT STAGE 1 DAY 1
COUNT
C09 PE-A
C0184 APC-A
P1
P2
B
2B: 3 µM MCX AT STAGE 1 DAY 1
COUNT
C09 PE-A
C0184 APC-A
P1
P2

FIG. 41

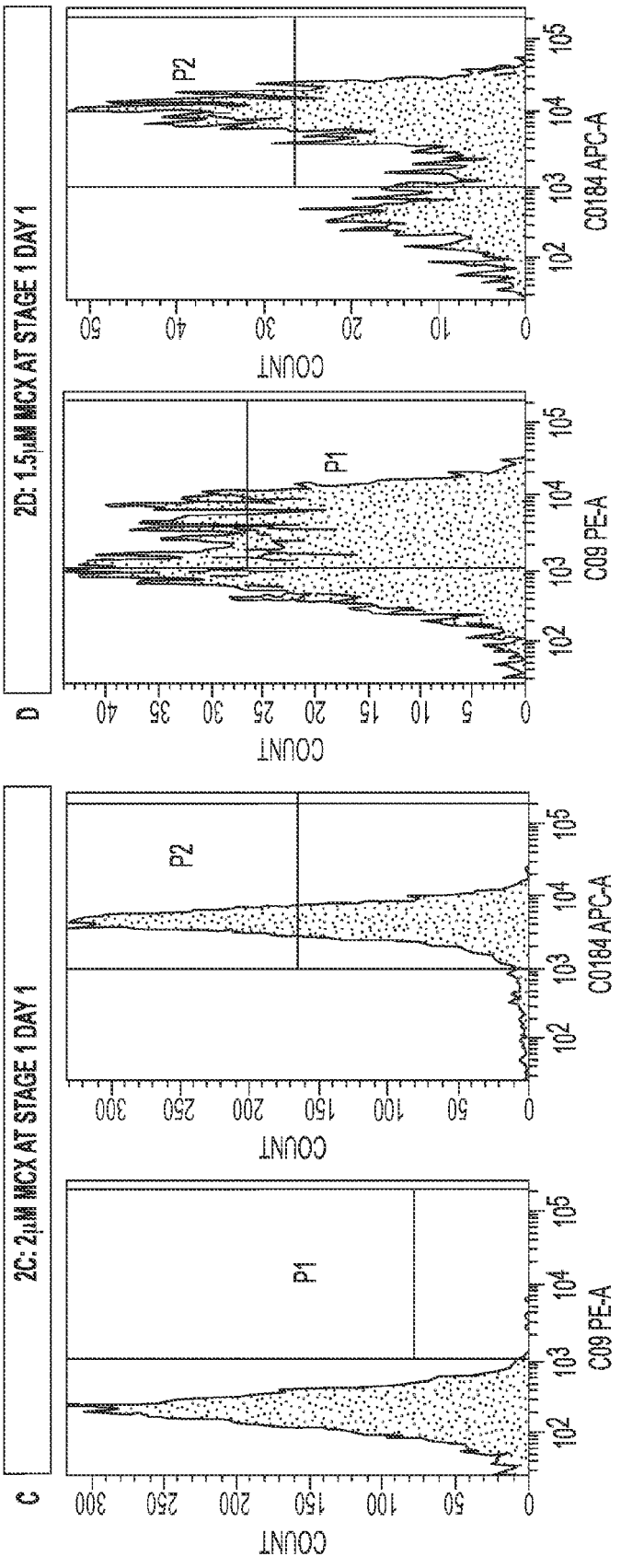


FIG. 41 (Continued)

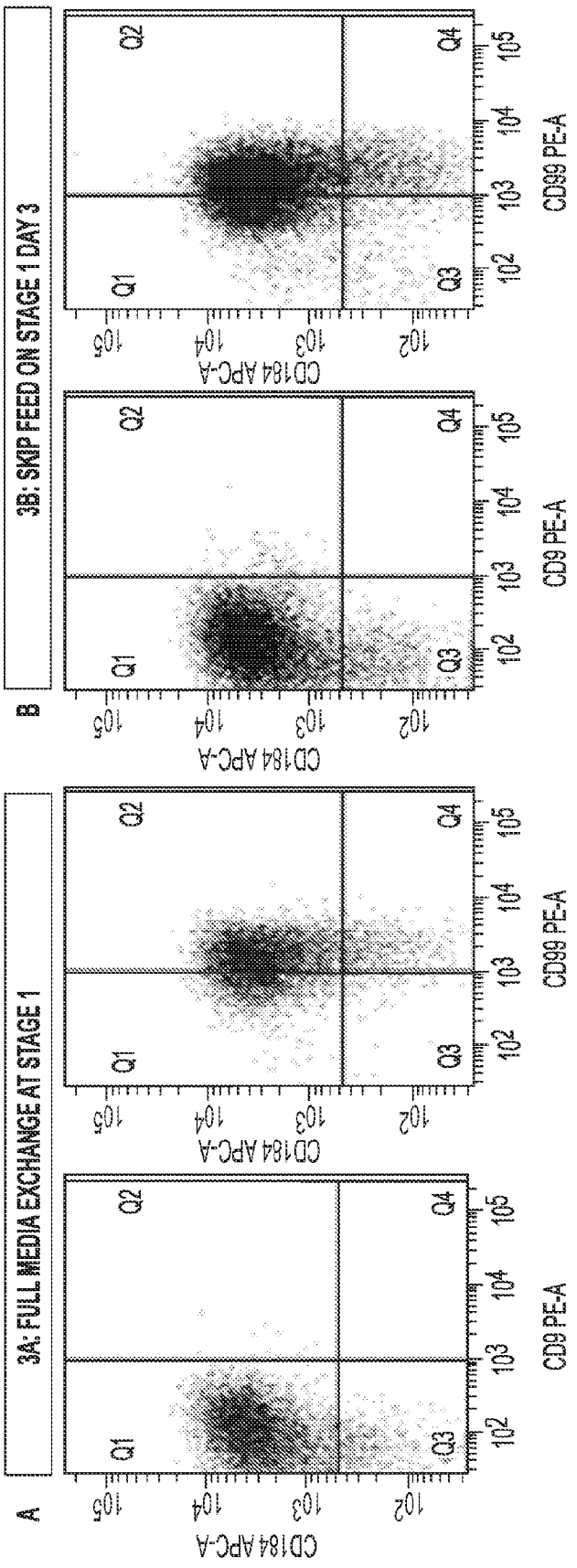

A
3A: FULL MEDIA EXCHANGE AT STAGE 1
B
3B: SKIP FEED ON STAGE 1 DAY 3
CD184 APC-A
CD9 PE-A
Q1
Q2
Q3
Q4
10^2
10^3
10^4
10^5

FIG. 42

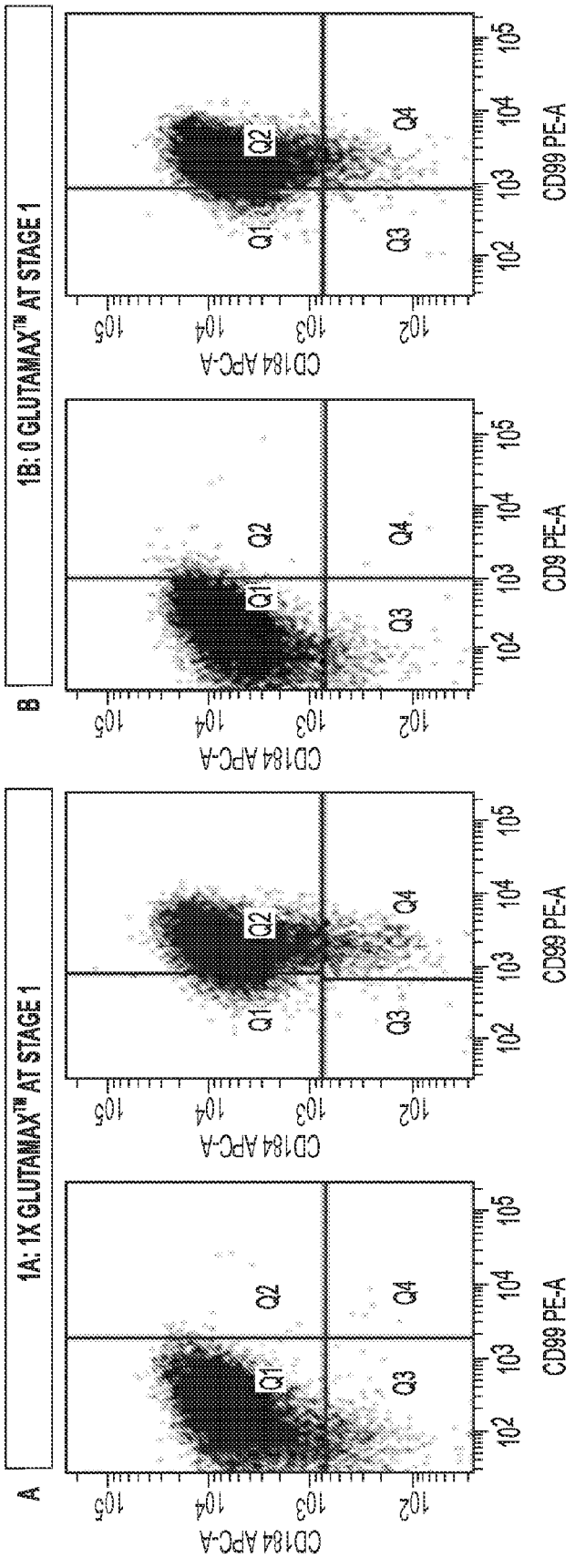

A
1A: 1X GLUTAMAX™ AT STAGE 1
B
1B: 0 GLUTAMAX™ AT STAGE 1
CD184 APC-A
CD99 PE-A
CD9 PE-A
Q1
Q2
Q3
Q4
10²
10³
10⁴
10⁵

FIG. 43

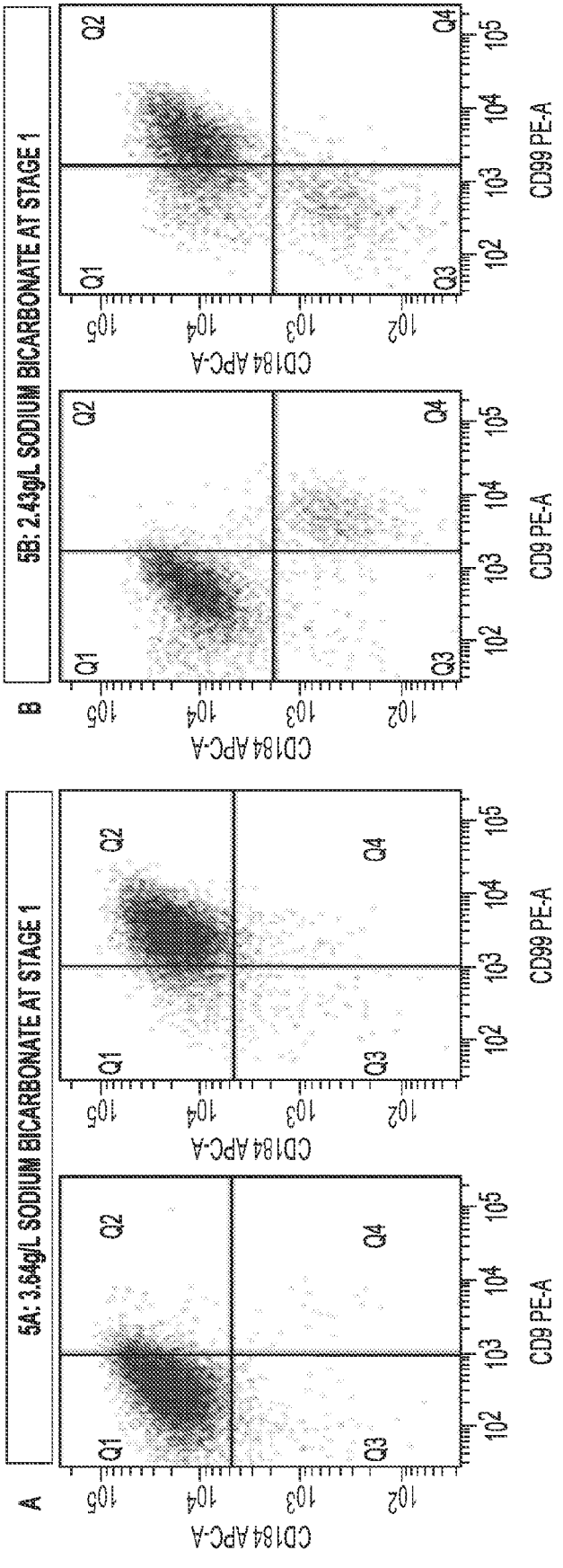
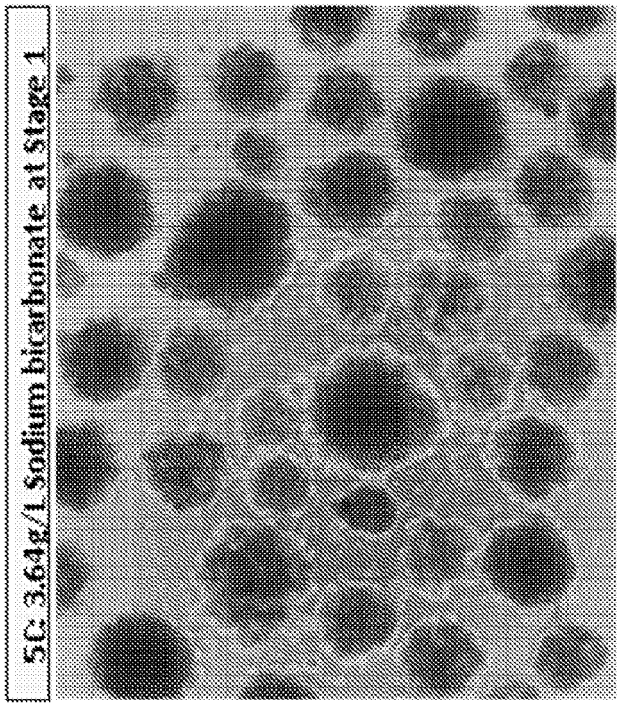

A
5A: 3.64g/L SODIUM BICARBONATE AT STAGE 1
B
5B: 2.43g/L SODIUM BICARBONATE AT STAGE 1
CD184 APC-A
CD9 PE-A
Q1
Q2
Q3
Q4
10^2
10^3
10^4
10^5

FIG. 44

Figure 44 (continued)

C



D

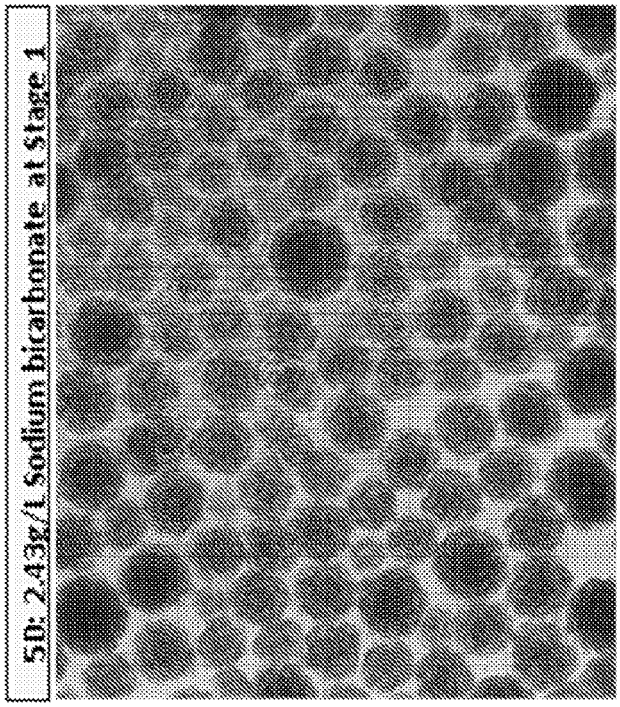


Figure 45: Daily Counts for Cell Density

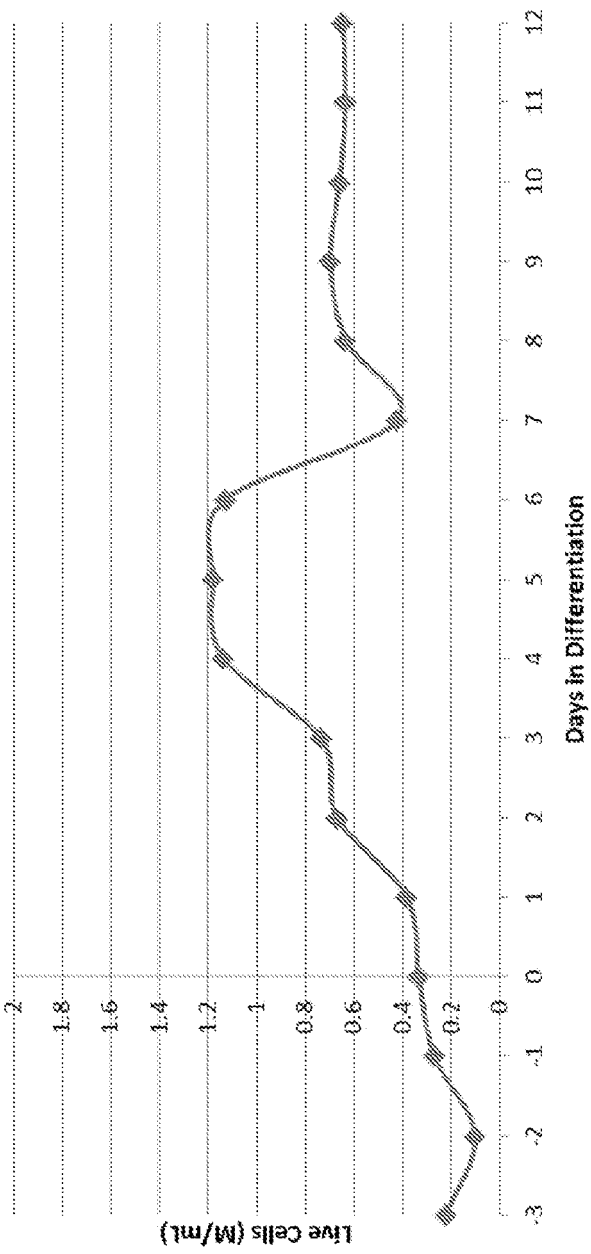


Figure 46: Daily Media Sampling for pH

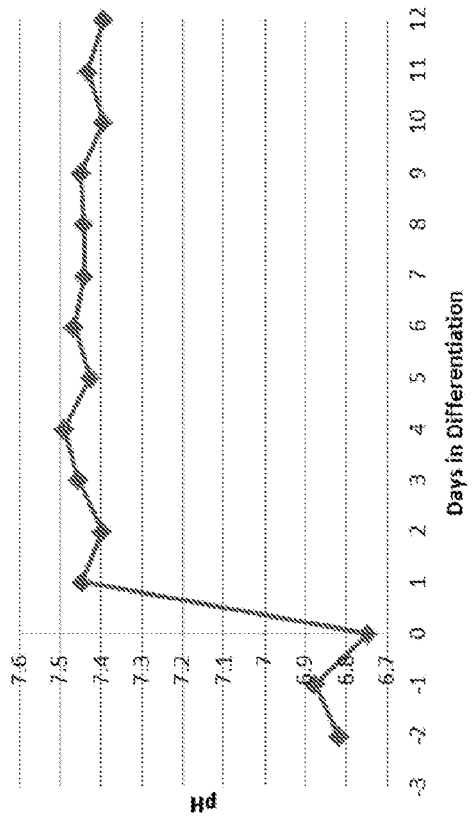


Figure 47: Daily Media Sampling for glucose (g/L)

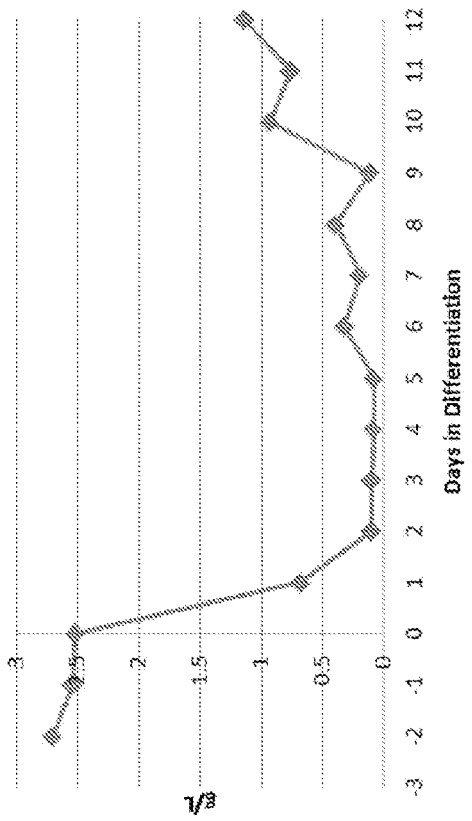


Figure 48: Daily Media Sampling for lactate (g/L)

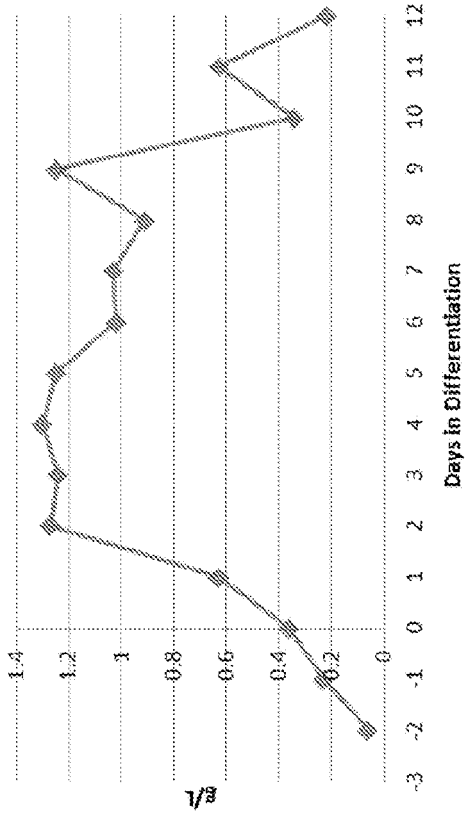


Figure 49: Daily Stage 0 and 1 Expression by qRT-PCR, Pluripotency Array

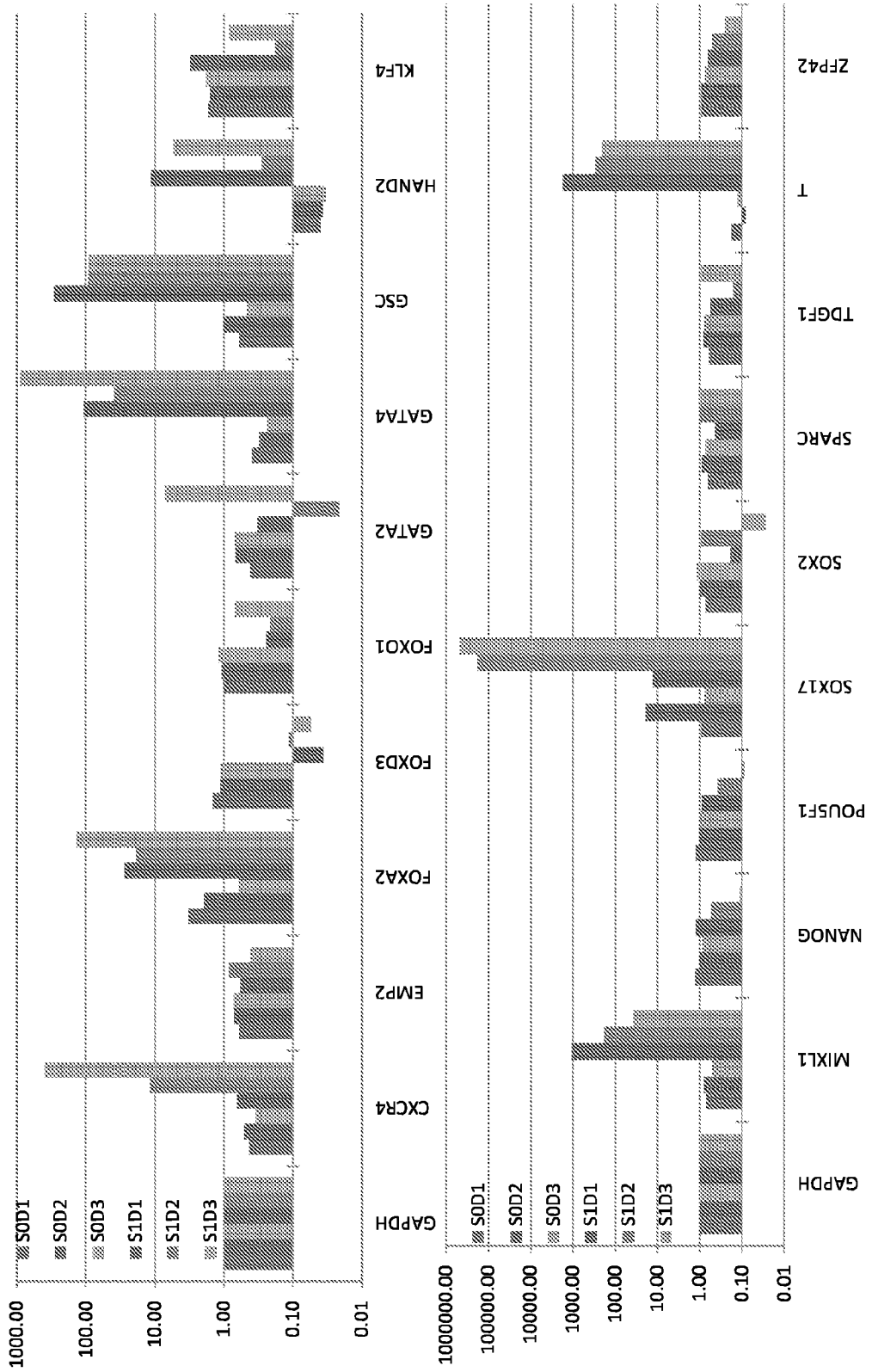


Figure 50: Daily Stage 0, 1, and 2 Expression by qRT-PCR, DE Array

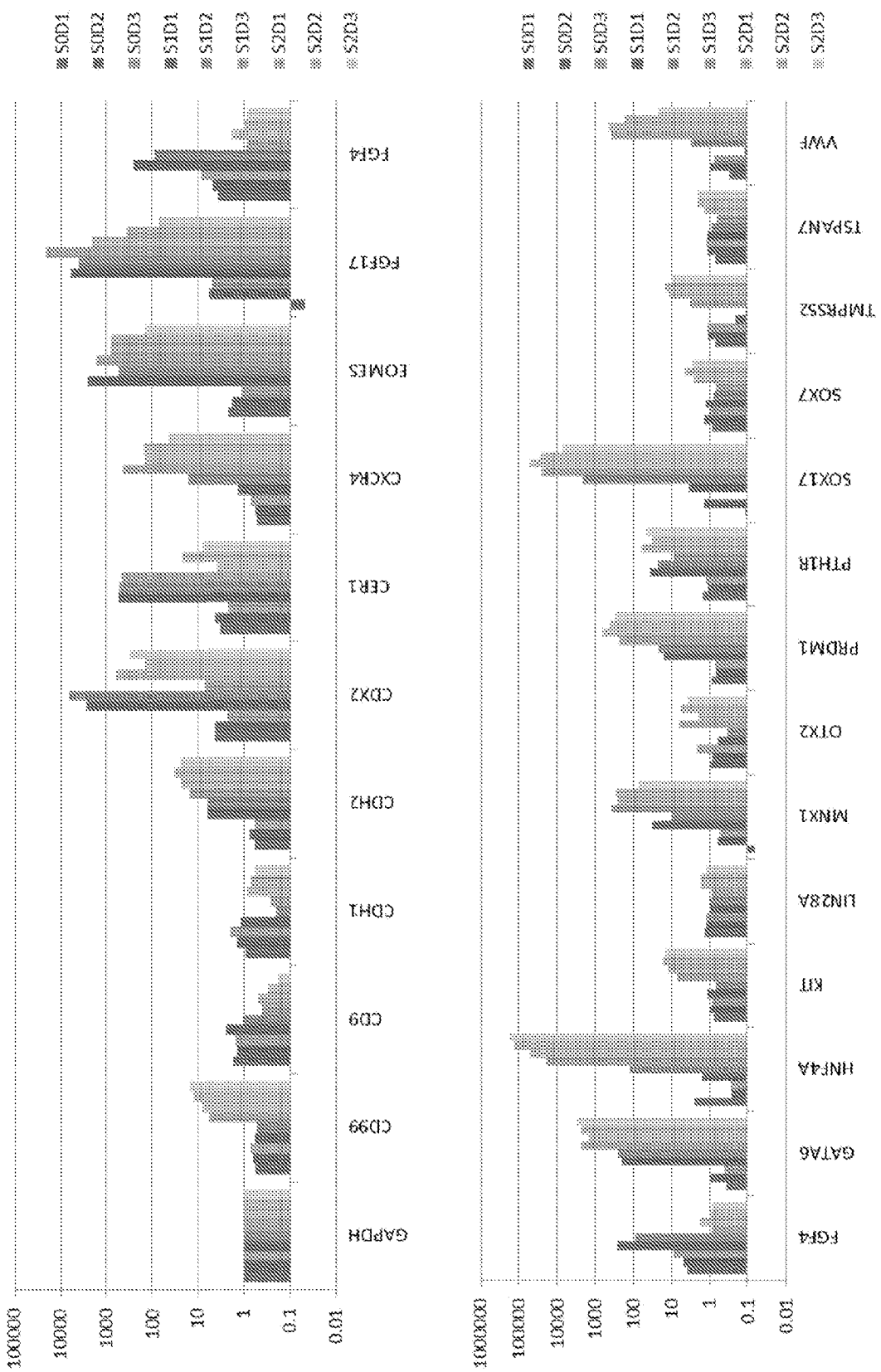


Figure 51: Pluripotent Cell Expression by FACS

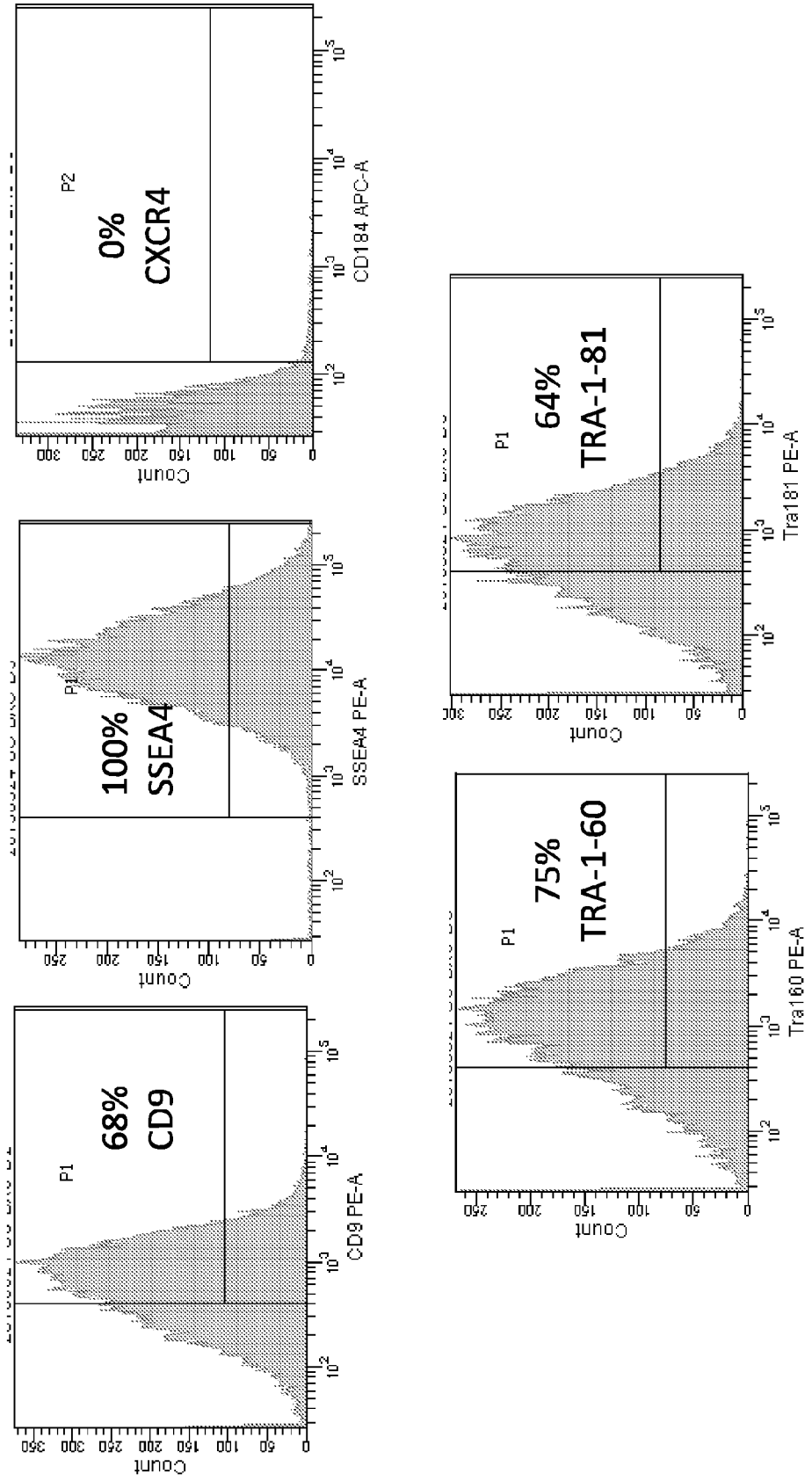


Figure 52: Definitive Endoderm Cell Expression by FACS

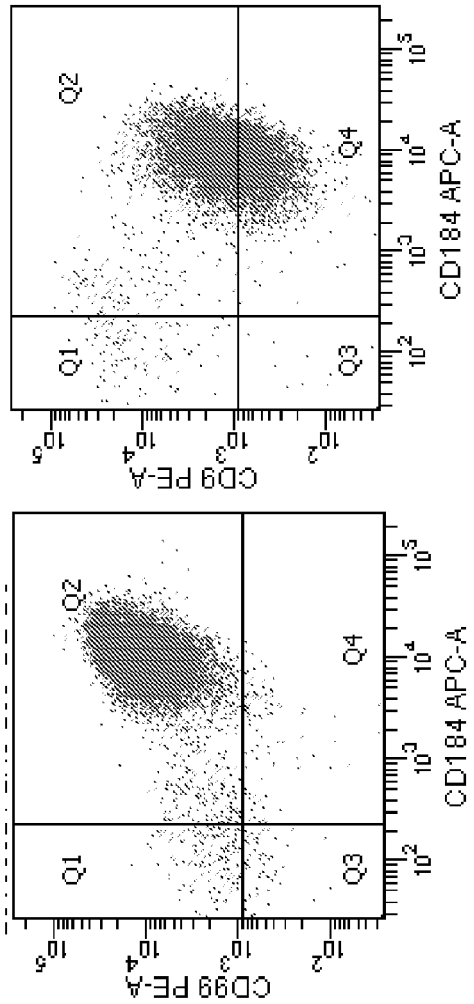


Figure 53: Daily Stage 2 Expression by qRT-PCR

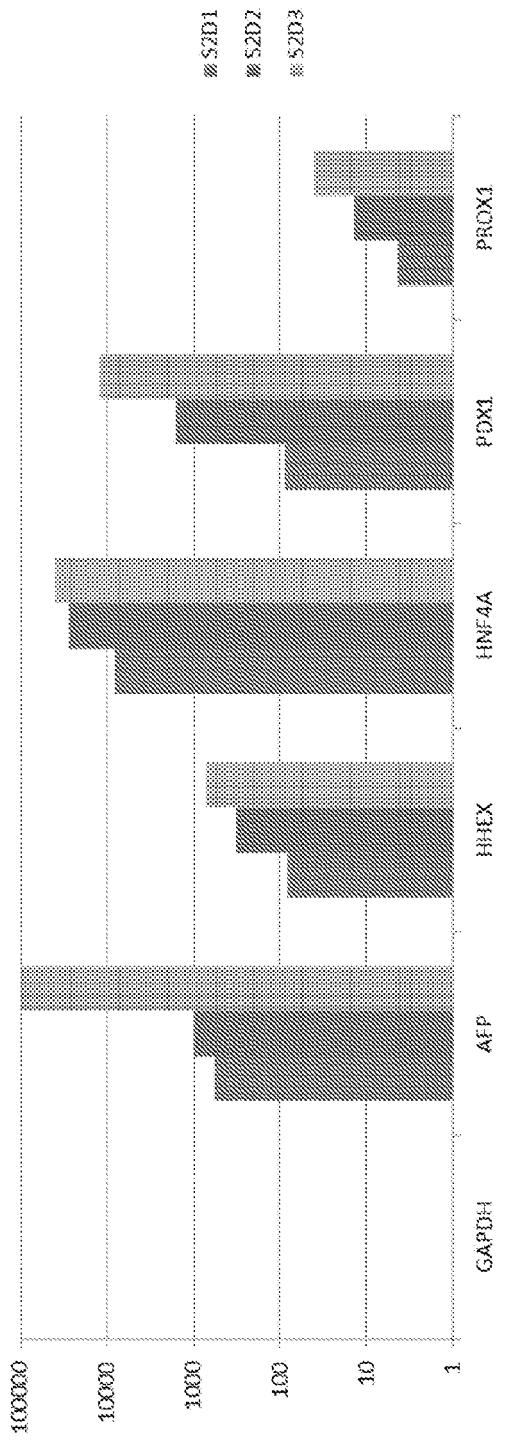


Figure 54: Daily Stage 2 and 3 Expression by qRT-PCR,

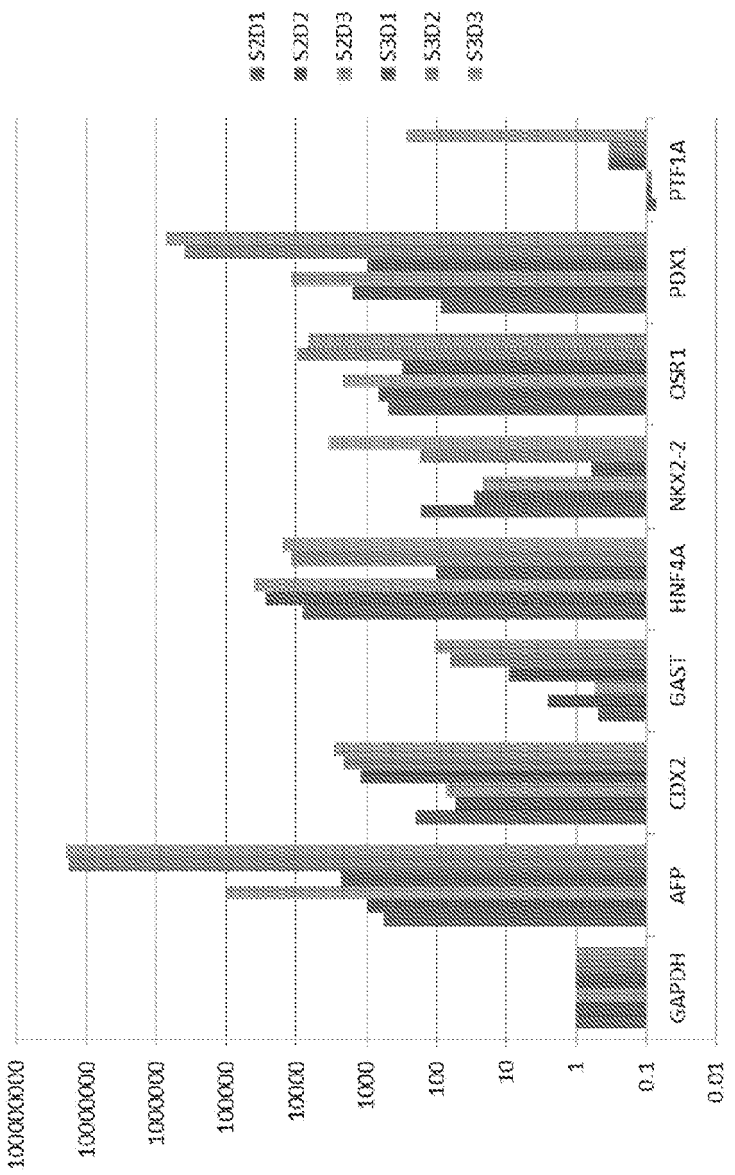


Figure 55: Daily Stage 3 and 4 Expression by qRT-PCR

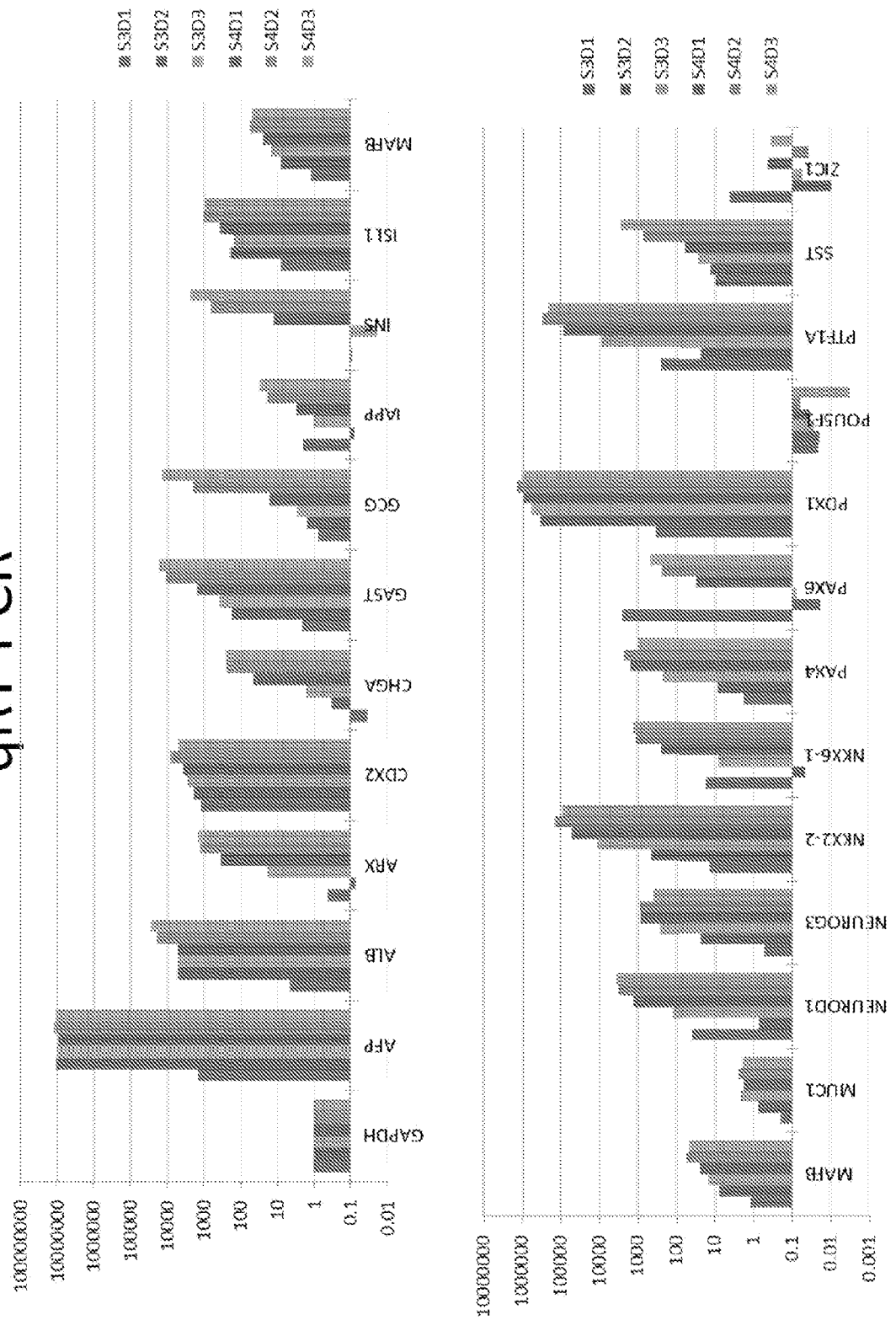


Figure 56: End of Stage Micrographs of Clusters (4x)

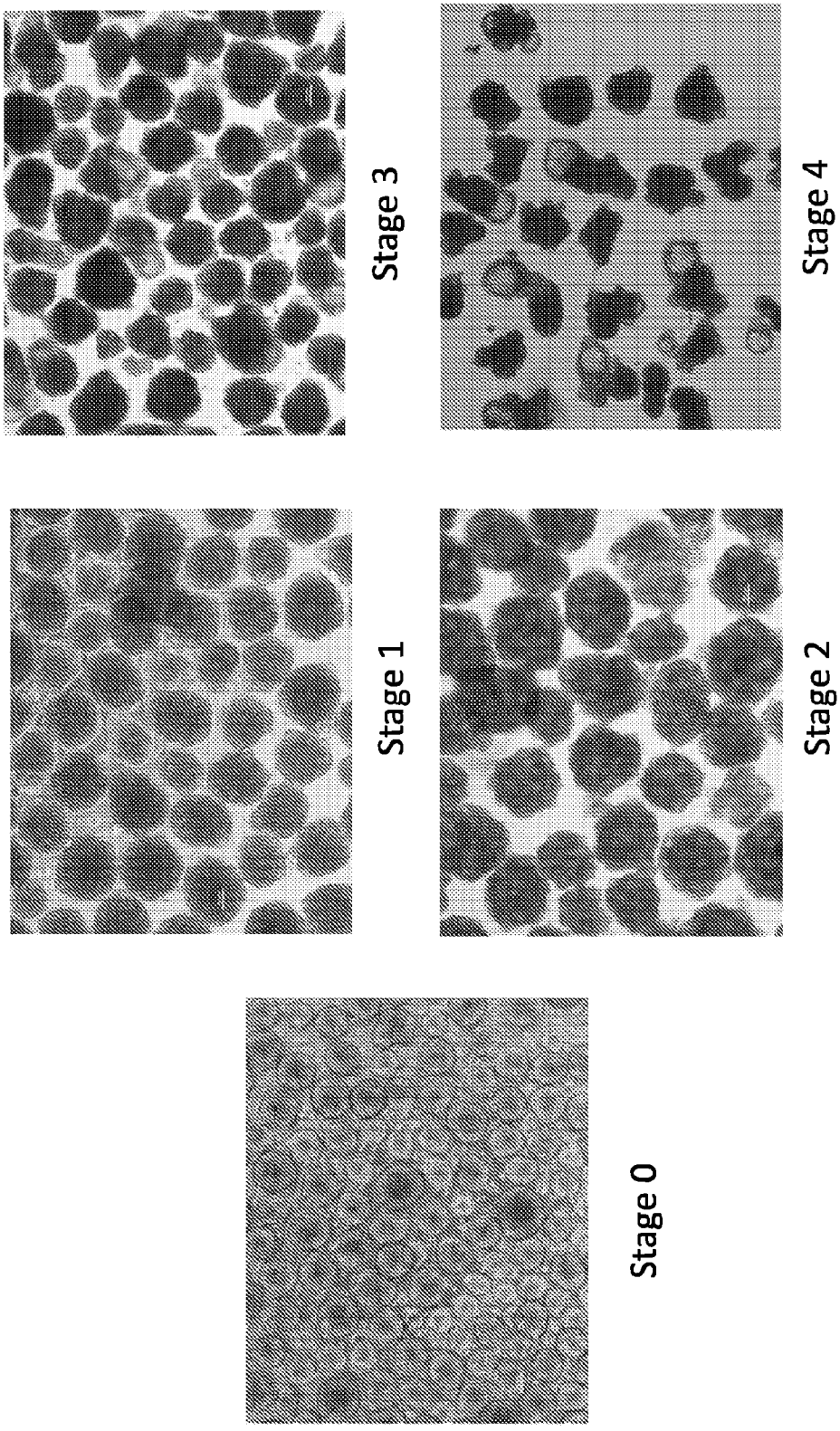
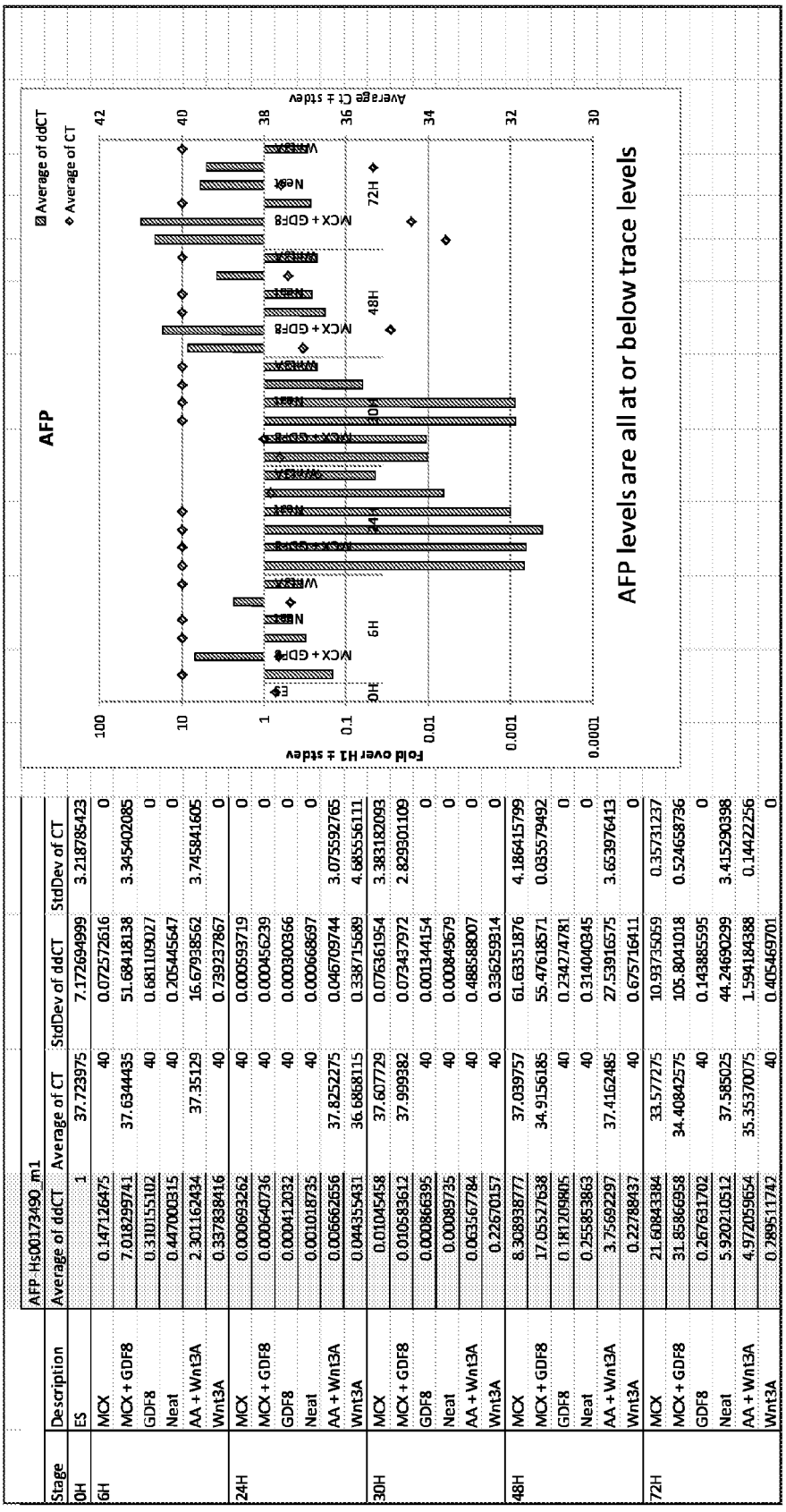
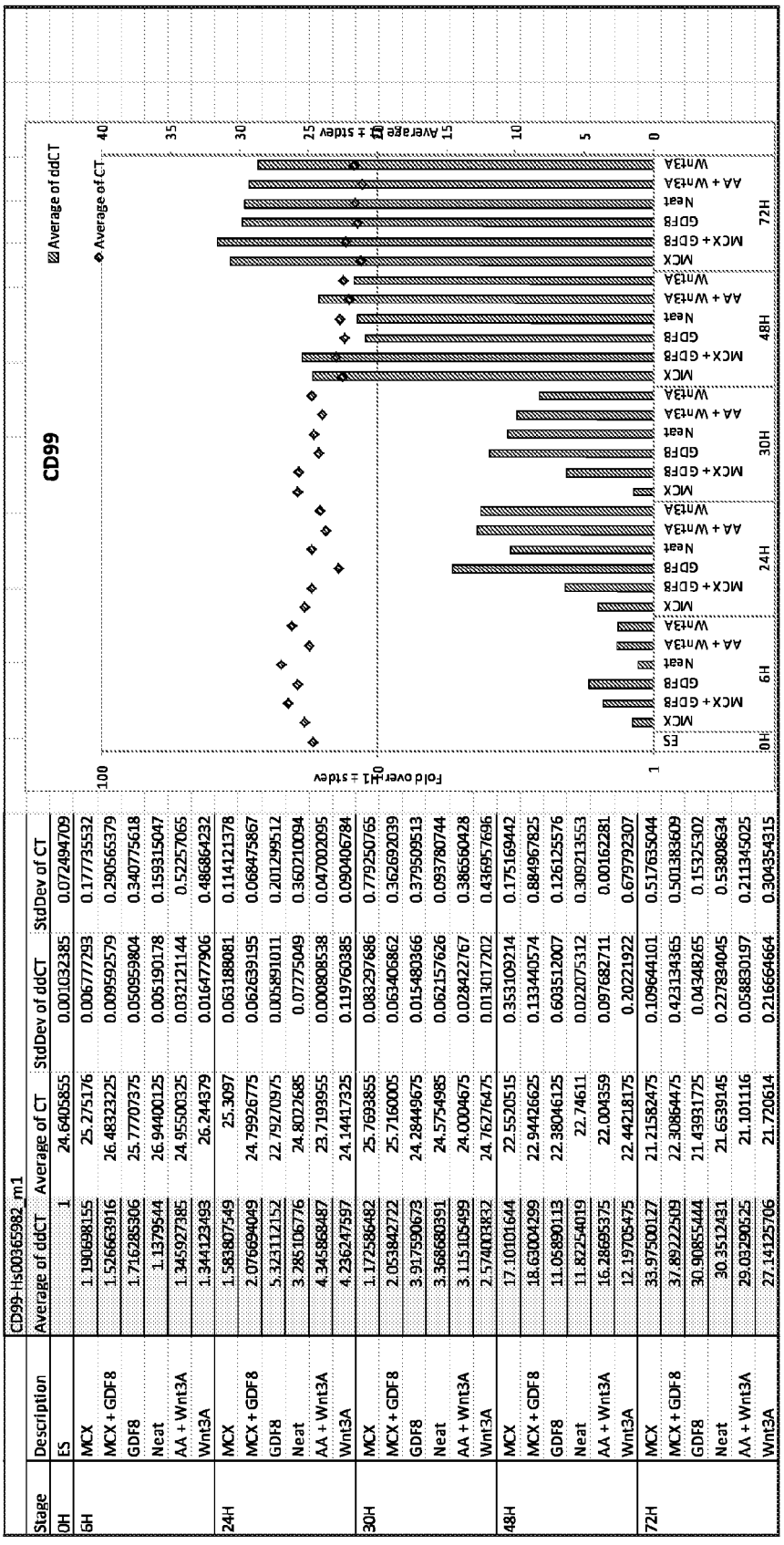


Figure 57



		AFP-Hs00173490_m1			
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1	37.723975	7.172694999	3.218785423
6H	MCX	0.147126475	40	0.072572616	0
	MCX + GDF8	7.018299741	37.6344435	51.68418138	3.345402085
	GDF8	0.310155102	40	0.681109027	0
	Neat	0.447000315	40	0.205445647	0
	AA + Wnt3A	2.301162434	37.35129	16.67938562	3.745841605
	Wnt3A	0.337838416	40	0.739237867	0
24H	MCX	0.000693262	40	0.000593719	0
	MCX + GDF8	0.000640736	40	0.000456239	0
	GDF8	0.000412032	40	0.000300366	0
	Neat	0.001018735	40	0.000668697	0
	AA + Wnt3A	0.006662656	37.8252275	0.046709744	3.075592765
	Wnt3A	0.044355431	36.6868115	0.338715689	4.685556111
30H	MCX	0.01045458	37.607729	0.076361954	3.383182093
	MCX + GDF8	0.010583612	37.999382	0.073437972	2.829301109
	GDF8	0.000866395	40	0.001344154	0
	Neat	0.00089735	40	0.000849679	0
	AA + Wnt3A	0.063567784	40	0.488588007	0
	Wnt3A	0.22670157	40	0.336259314	0
48H	MCX	8.308938777	37.039757	61.63351876	4.186415799
	MCX + GDF8	17.05527638	34.9156185	55.47618571	0.035579492
	GDF8	0.181209805	40	0.234274781	0
	Neat	0.255853863	40	0.314040345	0
	AA + Wnt3A	3.75692297	37.4162485	27.53916575	3.653976413
	Wnt3A	0.22788437	40	0.675716411	0
72H	MCX	21.60843394	33.577275	10.93735059	0.35731237
	MCX + GDF8	31.85866958	34.40842575	105.8041018	0.524658736
	GDF8	0.267631702	40	0.143885595	0
	Neat	5.920210512	37.585025	44.24690299	3.415290398
	AA + Wnt3A	4.972059654	35.35370075	1.594184388	0.14422256
	Wnt3A	0.289511742	40	0.405469701	0

Figure 58



	CD99-Hs00365982_m1				
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1	24.6405855	0.001032385	0.072494709
6H	MCX	1.190698155	25.275176	0.006777293	0.177735532
	MCX + GDF8	1.526663916	26.48323225	0.009592579	0.290565379
	GDF8	1.716285306	25.77707375	0.050959804	0.340775618
	Neat	1.1379544	26.94400125	0.005190178	0.159315047
	AA + Wnt3A	1.345927385	24.95500325	0.032121144	0.52257065
	Wnt3A	1.344123493	26.244379	0.016477906	0.486864232
24H	MCX	1.583807549	25.3097	0.063188081	0.114121378
	MCX + GDF8	2.076694049	24.79926775	0.062639195	0.068475867
	GDF8	5.323112152	22.79270975	0.005891011	0.201299512
	Neat	3.285106776	24.8022685	0.07275049	0.360210094
	AA + Wnt3A	4.345868487	23.7193955	0.000808538	0.047002095
	Wnt3A	4.236247597	24.14417325	0.119760385	0.090406784
30H	MCX	1.172586482	25.7693855	0.083297686	0.779250765
	MCX + GDF8	2.053842722	25.7160005	0.063406862	0.362692039
	GDF8	3.917590673	24.28449675	0.015480366	0.379509513
	Neat	3.368680391	24.5754985	0.062157626	0.093780744
	AA + Wnt3A	3.115105499	24.0004675	0.028422767	0.386560428
	Wnt3A	2.574003832	24.76276475	0.013017202	0.436957696
48H	MCX	17.10101644	22.5520515	0.353109214	0.175169442
	MCX + GDF8	18.63004299	22.94426625	0.133440574	0.884967825
	GDF8	11.05890113	22.38046125	0.603512007	0.126125576
	Neat	11.82254019	22.74611	0.022075312	0.309213553
	AA + Wnt3A	16.28695375	22.004359	0.097682711	0.00162281
	Wnt3A	12.19705475	22.44218175	0.20221922	0.679792307
72H	MCX	33.97500127	21.21582475	0.109644101	0.517635044
	MCX + GDF8	37.89222509	22.30864475	0.423134365	0.501383609
	GDF8	30.90855444	21.43931725	0.04348265	0.153253302
	Neat	30.3512431	21.6539145	0.227834045	0.53808634
	AA + Wnt3A	29.03290525	21.101116	0.058830197	0.211345025
	Wnt3A	27.14125706	21.720614	0.216664664	0.304354315

Figure 59

	CD9-Hs00233521_m1				
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1	19.594381	0.101170989	0.014779946
6H	MCX	1.251731097	20.1575115	0.177968065	0.019224819
	MCX + GDF8	1.267468439	21.7044385	0.089595847	0.398493562
	GDF8	1.054330784	21.42939	0.283443044	0.802069101
	Neat	0.840972255	22.3332655	0.056365539	0.068779569
	AA + Wnt3A	1.025647226	20.3008415	0.284911935	0.536861631
	Wnt3A	0.993062064	21.633114	0.10390955	0.671689924
24H	MCX	0.675867571	21.52784225	0.065179806	0.150883506
	MCX + GDF8	0.779476114	21.2145435	0.159305219	0.028532466
	GDF8	1.482663359	19.6477795	0.228937696	0.311936621
	Neat	1.575331529	20.86602625	0.157276853	0.250270192
	AA + Wnt3A	1.109767695	20.69733325	0.021289482	0.033683385
	Wnt3A	1.877982024	20.3205435	0.375721079	0.006247288
30H	MCX	0.334742082	22.5454675	0.159683465	0.213002836
	MCX + GDF8	0.259284869	23.70312275	0.055272811	0.266471423
	GDF8	0.763763065	21.6523685	0.066089843	0.480051965
	Neat	0.864514686	21.54218775	0.035022722	0.21839594
	AA + Wnt3A	0.595385525	21.376402	0.173819801	0.730578484
	Wnt3A	1.035516963	21.029337	0.070620035	0.341320443
48H	MCX	0.12188654	24.63806975	0.029554105	0.538619852
	MCX + GDF8	0.22866318	24.24954625	0.049515076	0.777003226
	GDF8	0.656253602	21.3704885	0.030179947	0.306918284
	Neat	0.808746484	21.568722	0.0360032	0.359529857
	AA + Wnt3A	0.476256508	22.2130755	0.031498698	0.008352345
	Wnt3A	0.505229105	21.98718125	0.073472205	0.706981977
72H	MCX	0.129166025	24.20753875	1.74166E-05	0.490496286
	MCX + GDF8	0.186823337	24.9239465	0.002604447	0.417873945
	GDF8	0.4532341	22.483891	0.022301431	0.10318385
	Neat	0.618075848	22.224103	0.034070721	0.644261252
	AA + Wnt3A	0.326738327	22.53255175	0.073748829	0.404063089
	Wnt3A	0.476249233	22.50759925	0.072246732	0.253896236

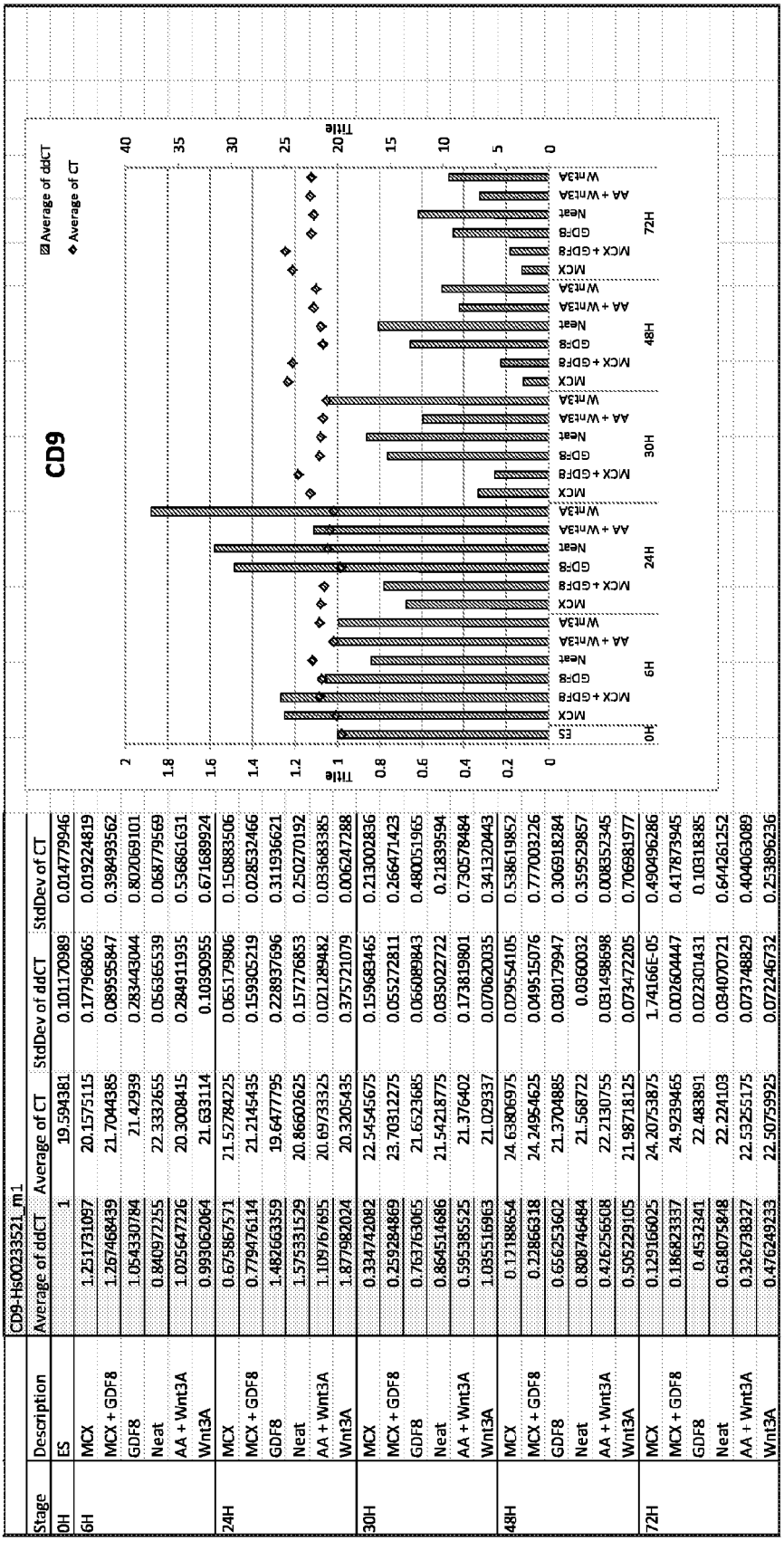


Figure 60

	CDH1-Hs00170423_m1				
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1	21.1220935	0.008590267	0.035093002
6H	MCX	1.438095716	21.48451125	0.027536667	0.193640838
	MCX + GDF8	1.734993882	22.78097675	0.046706648	0.253655012
	GDF8	1.630120987	22.326705	0.082042775	0.424242856
	Neat	1.26605922	23.27178	0.021534574	0.177622395
	AA + Wnt3A	1.53100786	21.244549	0.036772234	0.400701149
	Wnt3A	1.47969619	22.586277	0.033865632	0.666897861
24H	MCX	0.964874058	22.88988475	0.019845654	0.157057255
	MCX + GDF8	0.985690176	22.74761575	0.011837923	0.147364235
	GDF8	1.777098122	21.259763	0.004554467	0.200515684
	Neat	1.836418052	22.5200365	0.029369105	0.226162447
	AA + Wnt3A	0.857310228	22.94618	0.016551894	0.015919095
	Wnt3A	1.763008893	22.2833675	0.012924543	0.173810736
30H	MCX	0.779046766	23.18737325	0.052808477	0.388670788
	MCX + GDF8	0.823769224	23.90965525	0.033474453	0.236551613
	GDF8	1.826534397	22.2718515	0.064061416	0.29562296
	Neat	2.157183306	22.09958675	0.048082514	0.324303565
	AA + Wnt3A	0.869589508	22.56190025	0.121499287	0.273572896
	Wnt3A	1.103755052	22.46700925	0.031621172	0.489997776
48H	MCX	0.04991902	27.45092325	0.001794123	0.229741468
	MCX + GDF8	0.108297659	26.85248925	0.002454287	1.021158005
	GDF8	1.382460124	21.824997	0.031481756	0.26653683
	Neat	2.295436781	21.59299025	0.047996698	0.255125894
	AA + Wnt3A	0.488579559	23.54561175	0.012855646	0.03890254
	Wnt3A	0.661180509	23.1268085	0.01717797	0.731155181
72H	MCX	0.114716793	25.90844725	0.00276001	0.410009857
	MCX + GDF8	0.244306561	26.0796885	0.020797917	0.693187384
	GDF8	2.289133266	21.67665	0.047879177	0.071506688
	Neat	2.812772021	21.566462	0.026688238	0.569785937
	AA + Wnt3A	0.548550965	23.31460325	0.031105411	0.41834806
	Wnt3A	0.985826882	22.98636525	0.032864151	0.260334443

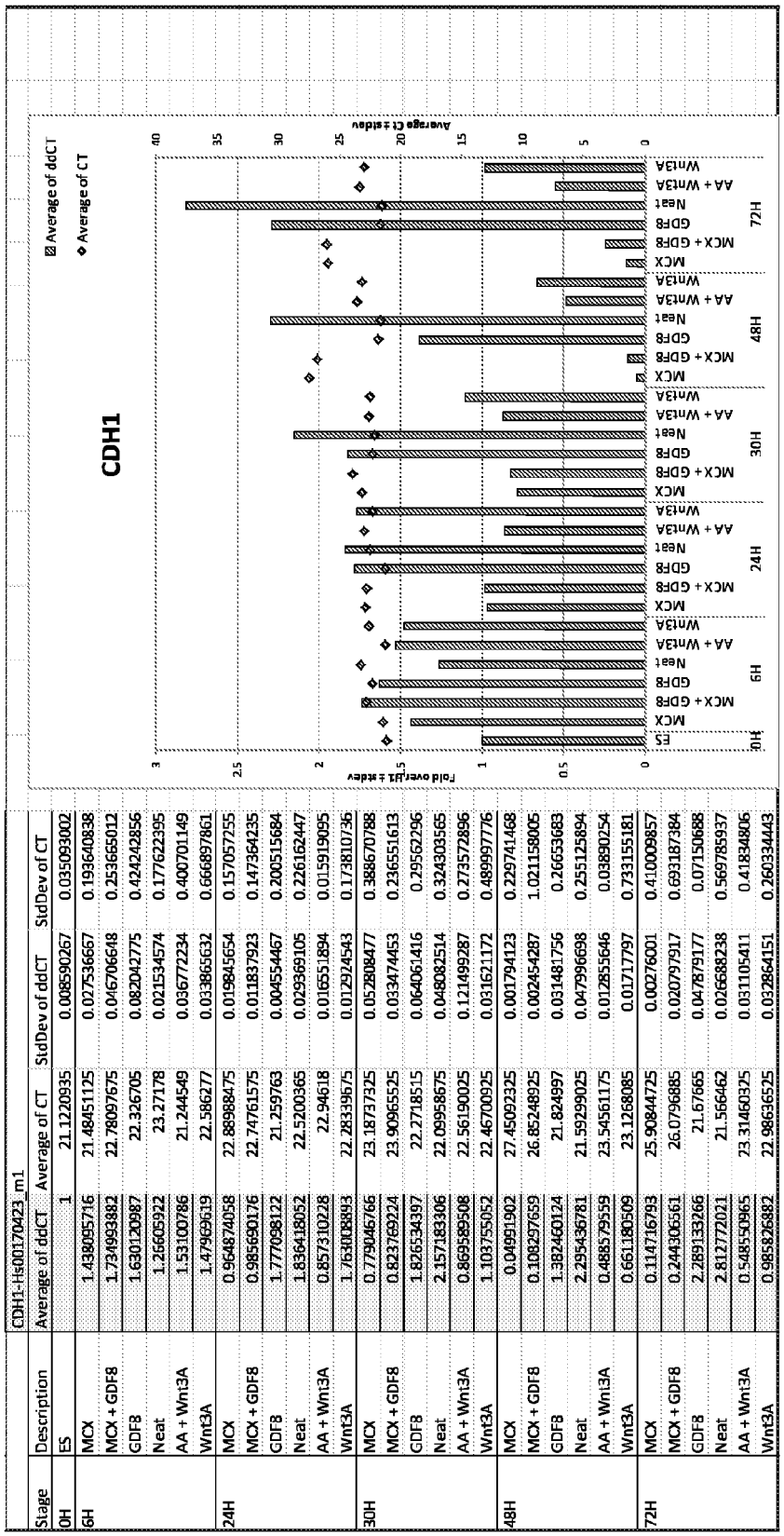
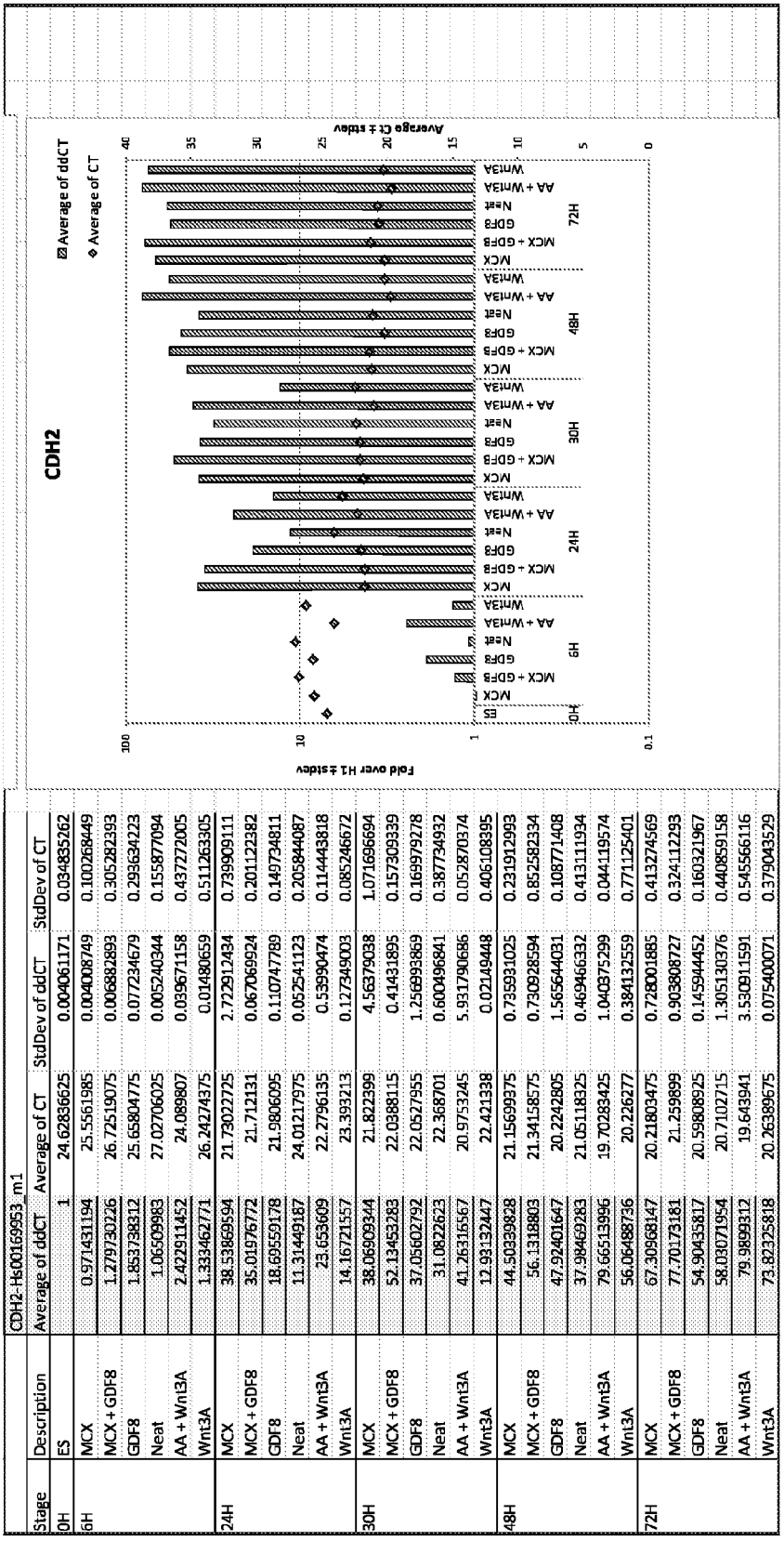
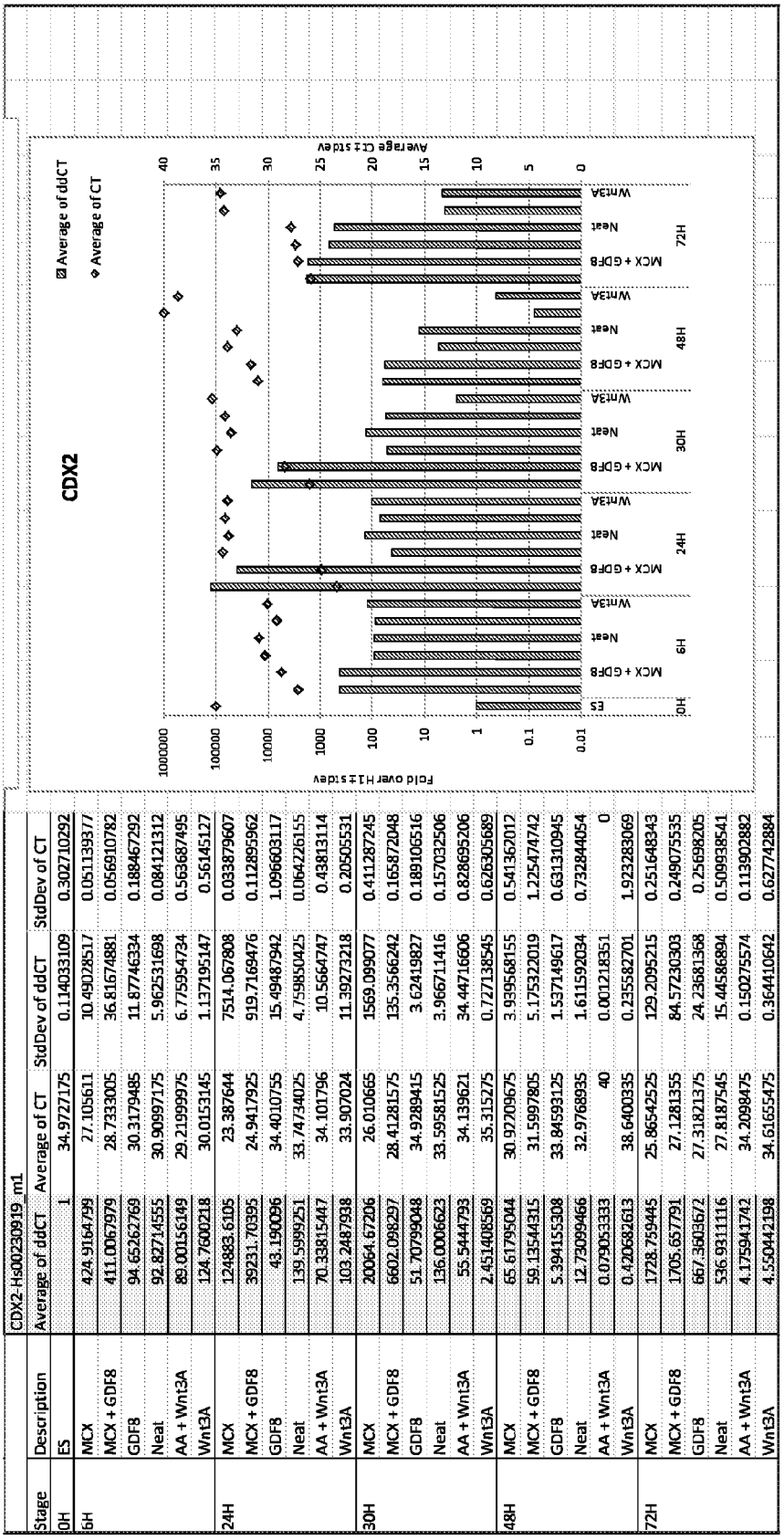


Figure 61



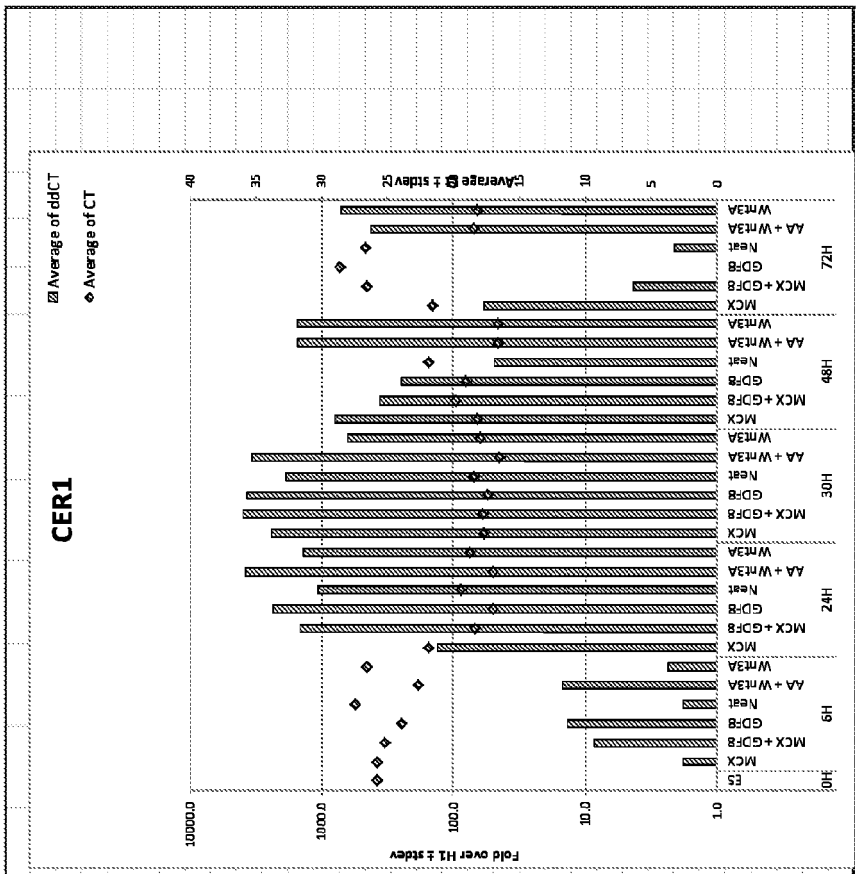
		CDH2-Hs00169953_m1			
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1	24.6283625	0.004061171	0.034835262
6H	MCX	0.971431194	25.5561985	0.004008749	0.100268449
	MCX + GDF8	1.279730226	26.72519075	0.006882893	0.305282393
	GDF8	1.8537388312	25.65804775	0.077234679	0.293634223
	Neat	1.06509983	27.02706025	0.005240344	0.155877094
	AA + Wnt3A	2.422911452	24.089807	0.039671158	0.437272005
	Wnt3A	1.333462771	26.24274375	0.01480659	0.511263305
24H	MCX	38.53869594	21.73022725	2.722912434	0.739909111
	MCX + GDF8	35.01976772	21.712131	0.067069924	0.201122382
	GDF8	18.69559178	21.9806095	0.110747789	0.149734811
	Neat	11.31449187	24.01217975	0.052541123	0.205844087
	AA + Wnt3A	23.653609	22.2796135	0.53990474	0.114443818
	Wnt3A	14.16721557	23.393213	0.127349003	0.085246672
30H	MCX	38.06909344	21.822399	4.56379038	1.071696694
	MCX + GDF8	52.13453283	22.0388115	0.41431895	0.157309339
	GDF8	37.05602792	22.0527955	1.256993869	0.169979278
	Neat	31.0822623	22.368701	0.600496841	0.387734932
	AA + Wnt3A	41.26316567	20.9753245	5.931790686	0.052870374
	Wnt3A	12.93132447	22.421338	0.02149448	0.406108395
48H	MCX	44.50339828	21.15699375	0.735931025	0.231912993
	MCX + GDF8	56.1318803	21.34158575	0.730928594	0.852582334
	GDF8	47.92401647	20.2242805	1.565644031	0.108771408
	Neat	37.98469283	21.05118325	0.469466332	0.413111934
	AA + Wnt3A	79.66513996	19.70283425	1.040375299	0.044119574
	Wnt3A	56.06488736	20.226277	0.384132559	0.771125401
72H	MCX	67.30968147	20.21803475	0.728001885	0.413274569
	MCX + GDF8	77.70173181	21.259899	0.903808727	0.324112293
	GDF8	54.90435817	20.59808925	0.145944452	0.160321967
	Neat	58.03071954	20.7102715	1.305130376	0.440859158
	AA + Wnt3A	79.9899312	19.643941	3.530911591	0.545566116
	Wnt3A	73.82325818	20.26389675	0.075400071	0.379043529

Figure 62



		CDX2-Hs00230919_m1			
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
	ES	1	34.9727175	0.114033109	0.302710292
0H	MCX	424.9164799	27.105611	10.49028517	0.051139377
6H	MCX + GDF8	411.0067979	28.7333005	36.81674881	0.056910782
	GDF8	94.65262769	30.3179485	11.87746334	0.188467292
	Neat	92.82714555	30.90997175	5.962531698	0.084121312
	AA + Wnt3A	89.00156149	29.21999975	6.775954734	0.563687495
	Wnt3A	124.7600218	30.0153145	1.137195147	0.56145127
24H	MCX	124883.6105	23.387644	7514.067808	0.033879607
	MCX + GDF8	39231.70395	24.9417925	919.7169476	0.112895962
	GDF8	43.190096	34.4010755	15.49487942	1.096603117
	Neat	139.5999251	33.74734025	4.759850425	0.064226155
	AA + Wnt3A	70.33815447	34.101796	10.5664747	0.43813114
	Wnt3A	103.2487938	33.907024	11.39273218	0.20505531
30H	MCX	20064.67206	26.010665	1569.099077	0.411287245
	MCX + GDF8	6602.098297	28.41281575	135.3566242	0.165872048
	GDF8	51.70799048	34.9289415	3.62419827	0.189106516
	Neat	136.0006623	33.59581525	3.966711416	0.157032506
	AA + Wnt3A	55.5444793	34.139621	34.44716606	0.828695206
	Wnt3A	2.451408569	35.315275	0.727138545	0.626305689
48H	MCX	65.61795044	30.97209675	3.939568155	0.541362012
	MCX + GDF8	59.13544315	31.5997805	5.175322019	1.225474742
	GDF8	5.394155308	33.84593125	1.537149617	0.631310945
	Neat	12.73099466	32.9768935	1.611592034	0.732844054
	AA + Wnt3A	0.079053333	40	0.001218351	0
	Wnt3A	0.420682613	38.6400335	0.235582701	1.923283069
72H	MCX	1728.759445	25.86542525	129.2095215	0.251648343
	MCX + GDF8	1705.657791	27.1281355	84.57230303	0.249075535
	GDF8	667.3603672	27.31821375	24.23681368	0.25698205
	Neat	536.9311116	27.8187545	15.44586894	0.509938541
	AA + Wnt3A	4.175941742	34.2098475	0.150275574	0.113902882
	Wnt3A	4.550442198	34.61655475	0.364410642	0.627742884

Figure 63



		CER1 Hs00193796_m1			
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1.0	25.82490975	2.225325853	0.057402575
6H	MCX	1.8	25.8442625	0.101799113	0.126637875
	MCX + GDF8	8.4	25.20215125	26.13147073	0.174880588
	GDF8	13.7	23.952255	45.28817796	0.412968745
	Neat	1.8	27.45667625	5.748141881	0.051802996
	AA + Wnt3A	15.0	22.667056	80.73085109	0.615356141
	Wnt3A	2.4	26.605481	6.111979111	0.730538886
24H	MCX	132.1	21.93651825	547.4610551	0.000518663
	MCX + GDF8	1450.5	18.36031425	452.9297624	0.170488041
	GDF8	2336.5	17.03518975	365.6945591	0.183444359
	Neat	1065.6	19.477802	2498.374987	0.300436236
	AA + Wnt3A	3770.5	16.97943475	4059.825707	0.01000945
	Wnt3A	1378.0	18.8095685	1504.327682	0.089936204
30H	MCX	2405.4	17.7356745	12282.19083	0.440845016
	MCX + GDF8	3962.1	17.813284	8802.804899	0.221645449
	GDF8	3672.6	17.4329545	4897.354884	0.340305745
	Neat	1856.0	18.4859845	1061.532214	0.218728634
	AA + Wnt3A	3395.1	16.49808475	89263.36499	0.009547709
	Wnt3A	632.4	18.00392625	528.2899774	0.348816836
48H	MCX	789.8	18.20619575	2912.152051	0.148695717
	MCX + GDF8	363.2	19.84078575	239.6540916	0.909548978
	GDF8	245.8	19.09911625	2352.780293	0.189873374
	Neat	49.2	21.8763095	168.5997053	0.138124117
	AA + Wnt3A	1538.9	16.62768625	4293.822576	0.103031468
	Wnt3A	1547.9	16.635193	3240.197809	0.705986724
72H	MCX	58.2	21.62558375	183.483344	0.318563979
	MCX + GDF8	4.3	26.616556	6.858225374	0.321036378
	GDF8	0.5	28.651082	0.870767465	0.041286551
	Neat	2.1	26.7078345	9.083182841	0.839402217
	AA + Wnt3A	420.9	18.426176	629.4701306	0.309832271
	Wnt3A	710.0	18.1925825	521.4133912	0.411712923

Figure 64

		CXCR4 Hs00237052_m1			
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1	28.65826975	0.136642929	0.065752799
6H	MCX	1.596400191	28.869144	0.206009983	0.007365931
	MCX + GDF8	3.245062743	29.41176	0.375945868	0.233835263
	GDF8	2.328481516	29.34328125	0.294257323	0.472912662
	Neat	1.544941488	30.59817825	1.083563099	0.568217221
	AA + Wnt3A	2.730187135	27.9661455	1.060395895	0.692209456
	Wnt3A	1.205789756	30.41699125	0.167167836	0.459008114
24H	MCX	38.17997308	24.8774685	1.475084397	0.189185712
	MCX + GDF8	20.21067093	25.684268	0.85484098	0.227520092
	GDF8	40.14824785	24.0566865	1.388217915	0.224694493
	Neat	7.865280958	27.71618625	0.548484076	0.238787485
	AA + Wnt3A	110.9636532	23.22417	4.647311621	0.008918738
	Wnt3A	12.74661417	26.7251895	1.212552646	0.059214536
30H	MCX	5.866289962	27.79714925	6.688971451	1.362813617
	MCX + GDF8	15.8685687	26.9421005	3.795231553	0.328011987
	GDF8	90.2457701	23.938839	9.023909186	0.318137947
	Neat	32.5398198	25.478137	0.169002538	0.254757138
	AA + Wnt3A	136.8871138	22.70002	84.23581132	0.019629284
	Wnt3A	28.78538781	25.29555625	2.889020584	0.299179354
48H	MCX	71.0657076	24.51007275	10.78343977	0.206006722
	MCX + GDF8	159.5267041	23.870551	40.78179642	0.702287848
	GDF8	129.353477	22.80957525	3.360997838	0.318015264
	Neat	79.19208167	24.01719525	2.482335017	0.354652588
	AA + Wnt3A	357.4065728	21.56292925	0.393892015	0.047971892
	Wnt3A	289.0418914	21.89349725	59.44776014	0.624661312
72H	MCX	149.129321	23.09646975	0.174545019	0.489283598
	MCX + GDF8	259.7389657	23.55116125	52.4249168	0.215414778
	GDF8	103.8237094	23.70760175	10.44965854	0.046025227
	Neat	115.8024312	23.7364165	4.592648103	0.563922608
	AA + Wnt3A	427.5376435	21.244809	103.9648531	0.459643449
	Wnt3A	351.788754	22.03877425	15.60436028	0.413763179

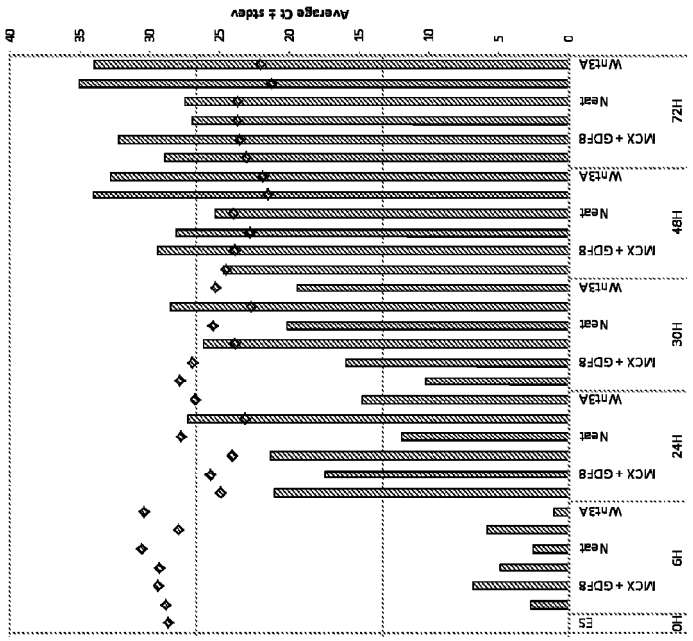
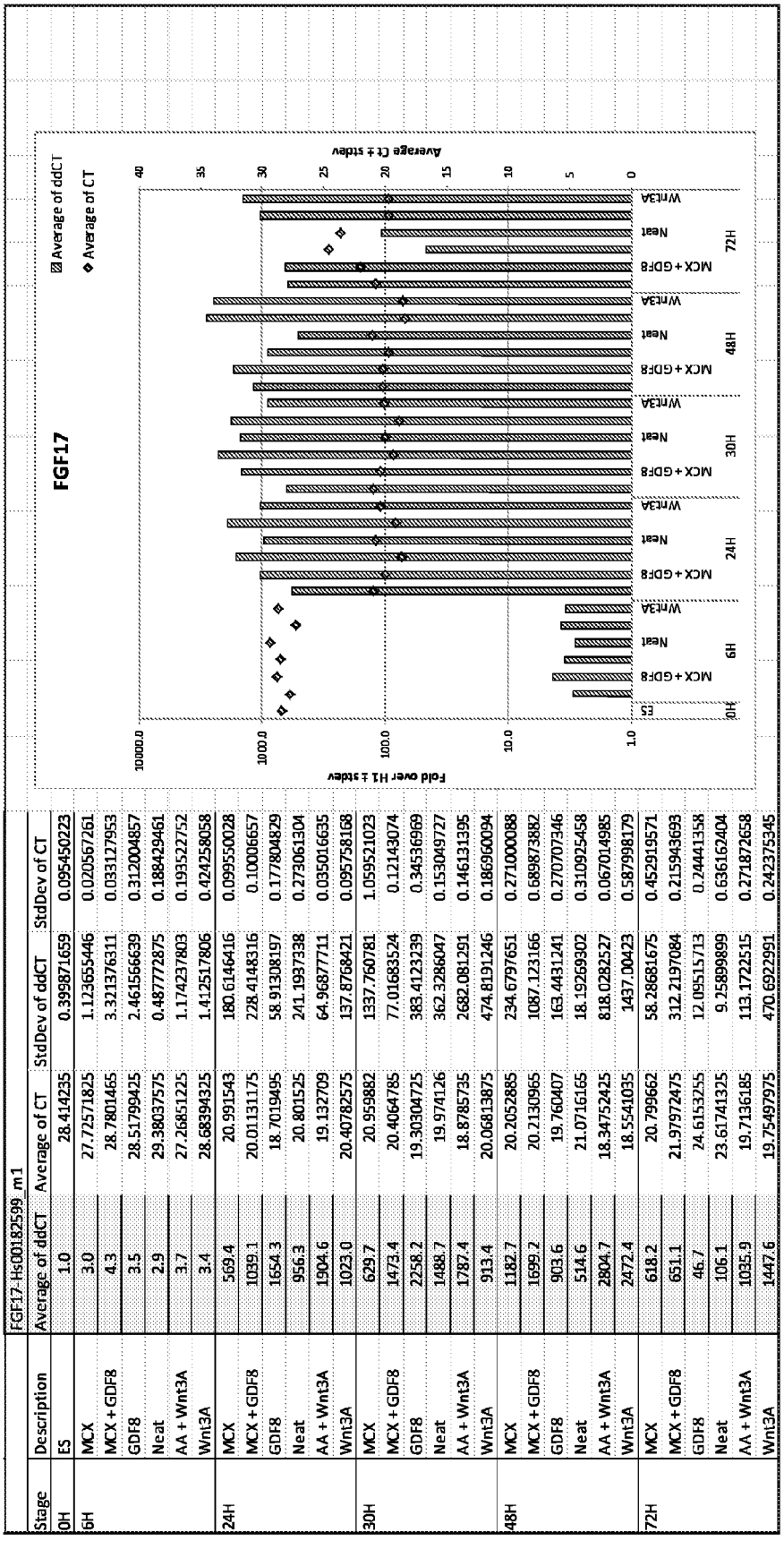
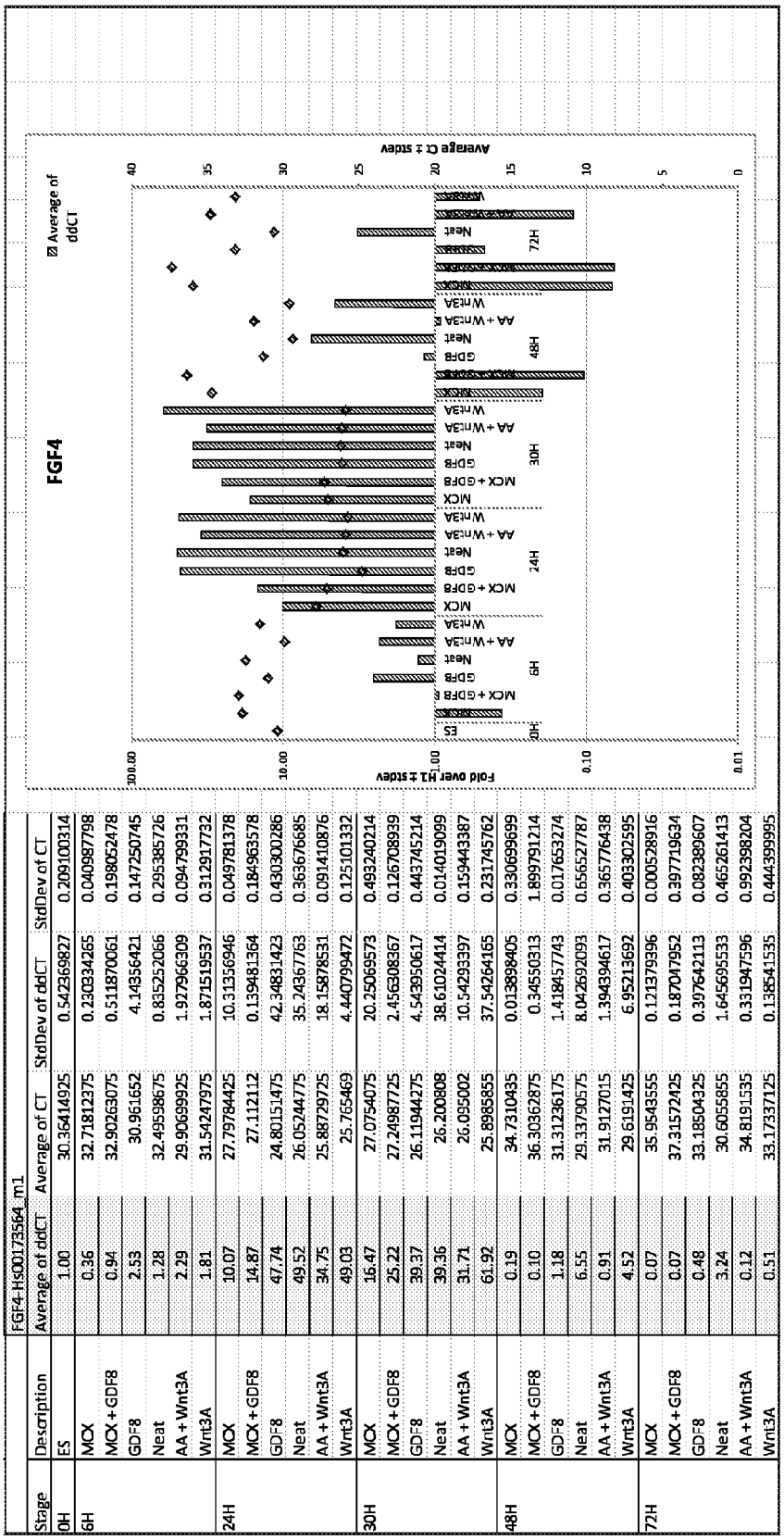


Figure 65



		FGF17-Hs00182599_m1			
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1.0	28.414235	0.399871659	0.095450223
6H	MCX	3.0	27.72571825	1.123655446	0.020567261
	MCX + GDF8	4.3	28.7801465	3.321376311	0.033127953
	GDF8	3.5	28.51799425	2.461566639	0.312004857
	Neat	2.9	29.38037575	0.487772875	0.188429461
	AA + Wnt3A	3.7	27.26851225	1.174237803	0.193522752
	Wnt3A	3.4	28.68394325	1.412517806	0.424258058
24H	MCX	569.4	20.991543	180.6146416	0.099550028
	MCX + GDF8	1039.1	20.01131175	228.4148316	0.10006657
	GDF8	1654.3	18.7019495	58.91308197	0.177804829
	Neat	956.3	20.801525	241.1937338	0.273061304
	AA + Wnt3A	1904.6	19.132709	64.96877711	0.035016635
	Wnt3A	1023.0	20.40782575	137.8768421	0.095758168
30H	MCX	629.7	20.959882	1337.760781	1.059521023
	MCX + GDF8	1473.4	20.4064785	77.01683524	0.12143074
	GDF8	2258.2	19.30304725	383.4123239	0.34536969
	Neat	1498.7	19.974126	362.3286047	0.153049727
	AA + Wnt3A	1787.4	18.8785735	2682.081291	0.146131395
	Wnt3A	913.4	20.06813875	474.8191246	0.186960094
48H	MCX	1182.7	20.2052885	234.6797651	0.271000088
	MCX + GDF8	1699.2	20.2130965	1087.123166	0.689873882
	GDF8	903.6	19.760407	163.4431241	0.270707346
	Neat	514.6	21.0716165	18.19269302	0.310925458
	AA + Wnt3A	2804.7	18.34752425	818.0282527	0.067014985
	Wnt3A	2472.4	18.5541035	1437.00423	0.587998179
72H	MCX	618.2	20.799662	58.28681675	0.452919571
	MCX + GDF8	651.1	21.97972475	312.2197084	0.215943693
	GDF8	46.7	24.6153255	12.09515713	0.24441358
	Neat	106.1	23.61741325	9.25899899	0.636162404
	AA + Wnt3A	1035.9	19.7136185	113.1722515	0.271872658
	Wnt3A	1447.6	19.75497975	470.6922991	0.242375345

Figure 66



	FGF4-Hs00173564_m1			
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1.00	30.36414925	0.542369827	0.209100314
6H	MCX	0.36	32.71812375	0.230834265	0.040987798
	MCX + GDF8	0.94	32.90263075	0.511870061	0.198052478
	GDF8	2.53	30.961652	4.14356421	0.147250745
	Neat	1.28	32.49598675	0.835252066	0.295385726
	AA + Wnt3A	2.29	29.90699925	1.927966309	0.094799331
	Wnt3A	1.81	31.54247975	1.871519537	0.312917732
24H	MCX	10.07	27.79784425	10.31356946	0.049781378
	MCX + GDF8	14.87	27.122112	0.139481364	0.184963578
	GDF8	47.74	24.80151475	42.34831423	0.430300286
	Neat	49.52	26.05244775	35.24367763	0.363676685
	AA + Wnt3A	34.75	25.88729725	18.15878531	0.091410876
	Wnt3A	49.03	25.765469	4.440799472	0.125101332
30H	MCX	16.47	27.0754075	20.25069573	0.493240214
	MCX + GDF8	25.22	27.24987725	2.456308367	0.126708939
	GDF8	39.37	26.11944275	4.543950617	0.443745214
	Neat	39.36	26.200808	38.61024414	0.014019099
	AA + Wnt3A	31.71	26.095002	10.54293397	0.159443387
	Wnt3A	61.92	25.8985855	37.54264165	0.231745762
48H	MCX	0.19	34.7310435	0.013898405	0.330699699
	MCX + GDF8	0.10	36.30362875	0.34550313	1.899791214
	GDF8	1.18	31.31236175	1.418457743	0.017653274
	Neat	6.55	29.33790575	8.042692093	0.656527787
	AA + Wnt3A	0.91	31.9127015	1.394394617	0.365776438
	Wnt3A	4.52	29.6191425	6.95213692	0.403302595
72H	MCX	0.07	35.9543555	0.121379396	0.000528916
	MCX + GDF8	0.07	37.31572425	0.187047952	0.397719634
	GDF8	0.48	33.18504325	0.397642113	0.082389607
	Neat	3.24	30.6055855	1.645695533	0.465261413
	AA + Wnt3A	0.12	34.8191535	0.331947596	0.992398204
	Wnt3A	0.51	33.17337125	0.138541535	0.444399995

Figure 67

		FOXA2-Hs00232764_m1			
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1.0	28.6699145	0.671332086	0.032328215
6H	MCX	1.5	28.95037975	0.013308531	0.130932488
	MCX + GDF8	1.5	30.5468755	1.010502018	0.246546921
	GDF8	2.4	29.32810875	2.245056464	0.728086993
	Neat	2.3	29.969943	0.492423849	0.151727438
	AA + Wnt3A	2.1	28.304663	0.084994707	0.314782726
	Wnt3A	2.9	29.17382225	4.588912548	0.362503595
24H	MCX	10.5	28.71568825	42.68854986	0.374421172
	MCX + GDF8	35.1	26.79796125	26.11927124	0.081037619
	GDF8	1361.0	20.88415575	719.8845293	0.116258608
	Neat	1094.7	22.50445525	2.172602881	0.173030797
	AA + Wnt3A	862.0	22.17658825	288.1378043	0.000745644
	Wnt3A	1156.9	22.12988625	245.0123662	0.179629518
30H	MCX	21.1	27.6289175	18.24271973	0.037304125
	MCX + GDF8	57.7	26.982039	14.58712835	0.064459854
	GDF8	924.7	22.49437	1009.424606	0.256400454
	Neat	832.7	22.710474	29.58026144	0.254921894
	AA + Wnt3A	434.6	22.50915625	4595.375123	0.024896876
	Wnt3A	105.1	23.43967675	43.88360363	0.334494388
48H	MCX	73.6	24.4695235	13.82754587	0.323007792
	MCX + GDF8	140.4	24.059546	108.6542145	0.834639146
	GDF8	196.7	22.270529	747.3739298	0.214246991
	Neat	297.3	22.121592	12.89138473	0.331179118
	AA + Wnt3A	308.1	21.79031225	61.70439724	0.020360786
	Wnt3A	272.9	21.98688725	288.6272651	0.668370411
72H	MCX	319.7	22.00924525	4.415278952	0.488415978
	MCX + GDF8	504.8	22.599241	18.22938668	0.412220626
	GDF8	422.7	21.693642	67.9024603	0.118395131
	Neat	411.3	21.92087125	117.1230833	0.560730374
	AA + Wnt3A	274.1	21.93233425	931.8788669	0.267533497
	Wnt3A	213.1	22.7747295	74.82911792	0.32153206

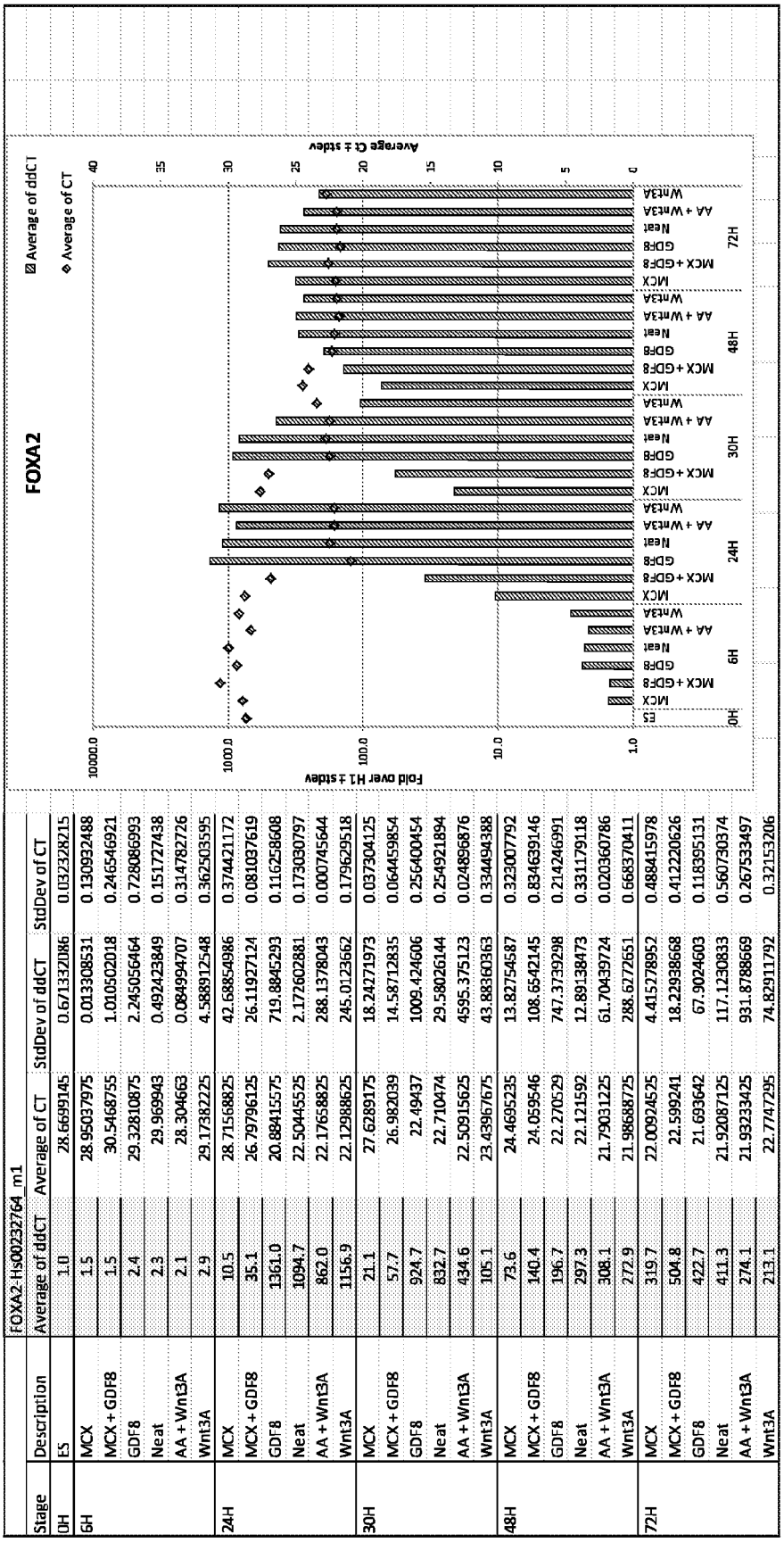
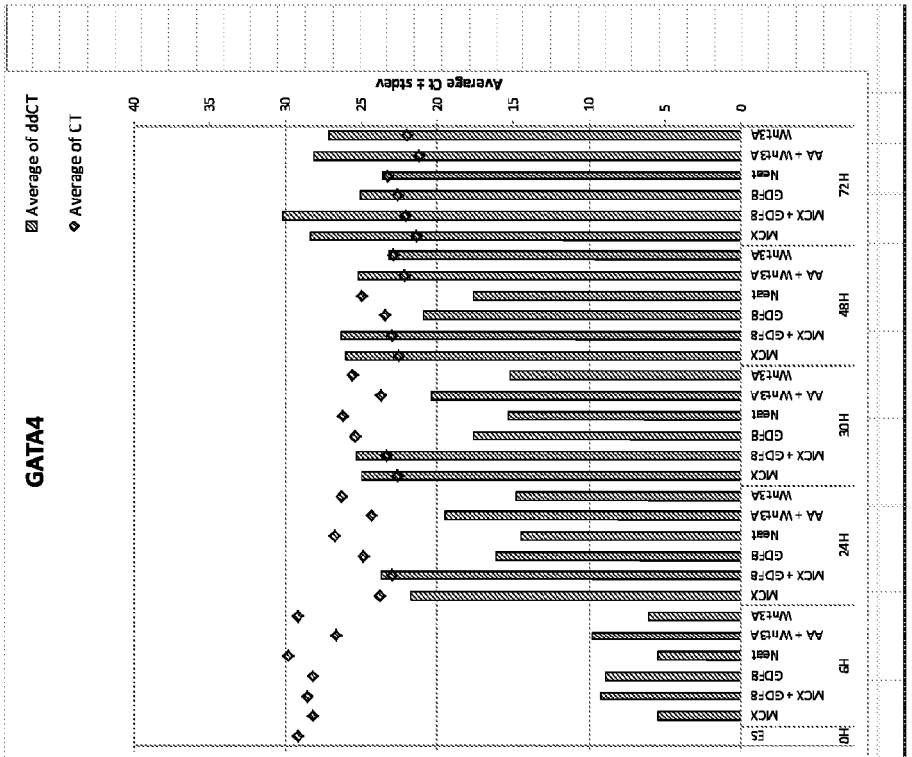


Figure 68

		GAPDH-Hs99999905_m1			
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1	16.28166375	0	0.063779971
6H	MCX	1	17.167675	0	0.129679848
	MCX + GDF8	1	18.7342185	0	0.343617126
	GDF8	1	18.18648575	0	0.592686651
	Neat	1	18.7712785	0	0.120809901
	AA + Wnt3A	1	17.017628	0	0.320456551
	Wnt3A	1	18.310278	0	0.590436991
24H	MCX	1	17.57825175	0	0.225765407
	MCX + GDF8	1	17.4673155	0	0.1874731
	GDF8	1	16.830046	0	0.191957571
	Neat	1	18.137209	0	0.172746894
	AA + Wnt3A	1	17.464121	0	0.048572579
	Wnt3A	1	17.842105	0	0.149329638
30H	MCX	1	17.55899375	0	0.161380506
	MCX + GDF8	1	18.367542	0	0.100658065
	GDF8	1	17.879352	0	0.412868336
	Neat	1	17.94854725	0	0.249840271
	AA + Wnt3A	1	17.27180625	0	0.452296256
	Wnt3A	1	17.7675545	0	0.394262235
48H	MCX	1	18.28386925	0	0.349895174
	MCX + GDF8	1	18.804283	0	0.945447728
	GDF8	1	17.450945	0	0.342614449
	Neat	1	17.9506265	0	0.32497567
	AA + Wnt3A	1	17.670651	0	0.049015228
	Wnt3A	1	17.688332	0	0.819963852
72H	MCX	1	17.94318925	0	0.490391634
	MCX + GDF8	1	19.19202475	0	0.40705415
	GDF8	1	18.0303185	0	0.141377516
	Neat	1	18.2179935	0	0.601472099
	AA + Wnt3A	1	17.60177375	0	0.228450291

Figure 69



		GATA4-Hs00171403_m1			
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1.0	29.19051175	1.54384802	0.299439569
6H	MCX	3.6	28.23114475	0.995231903	0.087313192
	MCX + GDF8	8.4	28.55975325	2.584465466	0.296971767
	GDF8	7.7	28.15902725	17.9852677	0.235064568
	Neat	3.5	29.851363	0.721931502	0.151899265
	AA + Wnt3A	9.6	26.66485725	11.16191662	0.498280117
	Wnt3A	4.1	29.168273	2.909513264	0.483063533
24H	MCX	147.9	23.76583725	93.26147224	0.12989092
	MCX + GDF8	234.7	22.9882375	102.0677234	0.12136003
	GDF8	41.5	24.85587875	45.43796788	0.021390334
	Neat	28.0	26.72386375	2.753870205	0.187684878
	AA + Wnt3A	89.5	24.375598	33.23284873	0.00786727
	Wnt3A	30.6	26.30271875	7.662354654	0.111245221
30H	MCX	311.1	22.6753045	263.9974053	0.29049785
	MCX + GDF8	342.6	23.34198825	19.7804571	0.09188393
	GDF8	57.6	25.4343875	78.46093296	0.205039046
	Neat	34.1	26.25329675	10.96345955	0.200930402
	AA + Wnt3A	108.6	23.74061275	483.6966067	0.098994596
	Wnt3A	32.8	25.6292	1.76652772	0.402435682
48H	MCX	398.3	22.55382925	575.7502945	0.129364125
	MCX + GDF8	431.9	22.95162825	344.6056556	0.824042797
	GDF8	122.7	23.4128555	90.59571158	0.230335791
	Neat	57.3	25.0108985	32.90517427	0.237642326
	AA + Wnt3A	333.7	22.190953	313.8933867	0.094159753
	Wnt3A	205.8	22.90623	203.4849041	0.66944981
72H	MCX	689.7	21.41324	279.8981529	0.552082105
	MCX + GDF8	1035.1	22.07600025	242.9463107	0.371380613
	GDF8	323.4	22.59249	34.10206694	0.125351648
	Neat	228.6	23.280558	56.47016516	0.563933921
	AA + Wnt3A	646.0	21.16902775	584.8236032	0.366247372
	Wnt3A	513.5	22.01849025	18.80927206	0.377331624

Figure 70

Stage	Description	GATA6-Hs00232018_m1 Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1.0	34.990152	0.057061641	0.225686564
6H	MCX	3.0	34.2791805	0.221155677	0.240395092
	MCX + GDF8	1.1	38.1029925	0.358817593	2.682773734
	GDF8	5.5	34.4965625	0.7464305	0.113732115
	Neat	7.6	34.716315	1.426024612	0.904439071
	AA + Wnt3A	24.3	31.24212125	4.084827815	0.579212731
	Wnt3A	5.5	34.55417525	0.111868054	0.487323498
24H	MCX	42020.6	21.97602825	2757.043347	0.559330303
	MCX + GDF8	81025.8	20.8994785	1135.915856	0.116800605
	GDF8	47752.5	21.024552	458.1026809	0.240308118
	Neat	18851.6	23.67589975	545.7775102	0.318885006
	AA + Wnt3A	85506.6	20.81782425	315.1045692	0.030002187
	Wnt3A	23413.2	23.06446325	13.74129091	0.146372164
30H	MCX	137406.7	20.23829	6527.346678	0.401865047
	MCX + GDF8	154594.0	20.8680945	2642.050663	0.186828925
	GDF8	63845.0	21.65445725	28.42233244	0.41062504
	Neat	40839.1	22.369737	743.951756	0.157982504
	AA + Wnt3A	78869.6	20.41690625	15596.3904	0.100642862
	Wnt3A	22700.5	21.991169	61.56361059	0.380595982
48H	MCX	49917.3	21.370738	243.4851419	0.325314374
	MCX + GDF8	42190.6	22.13505425	748.9194125	0.855941798
	GDF8	14353.8	22.33897925	384.407091	0.477763414
	Neat	8982.2	23.51260575	122.1090448	0.256445356
	AA + Wnt3A	50362.3	20.74960475	1693.762479	0.120849145
	Wnt3A	50544.4	20.75944275	1168.835184	0.70330785
72H	MCX	37437.5	21.45357775	1647.263502	0.712993092
	MCX + GDF8	43017.3	22.4935275	217.2488338	0.432504338
	GDF8	8516.1	23.66857975	61.35465369	0.177685681
	Neat	8041.7	23.93991275	131.8666403	0.684148085
	AA + Wnt3A	42297.7	20.93318775	1517.877827	0.047143163
	Wnt3A	40637.5	21.50727425	409.4563828	0.422548274

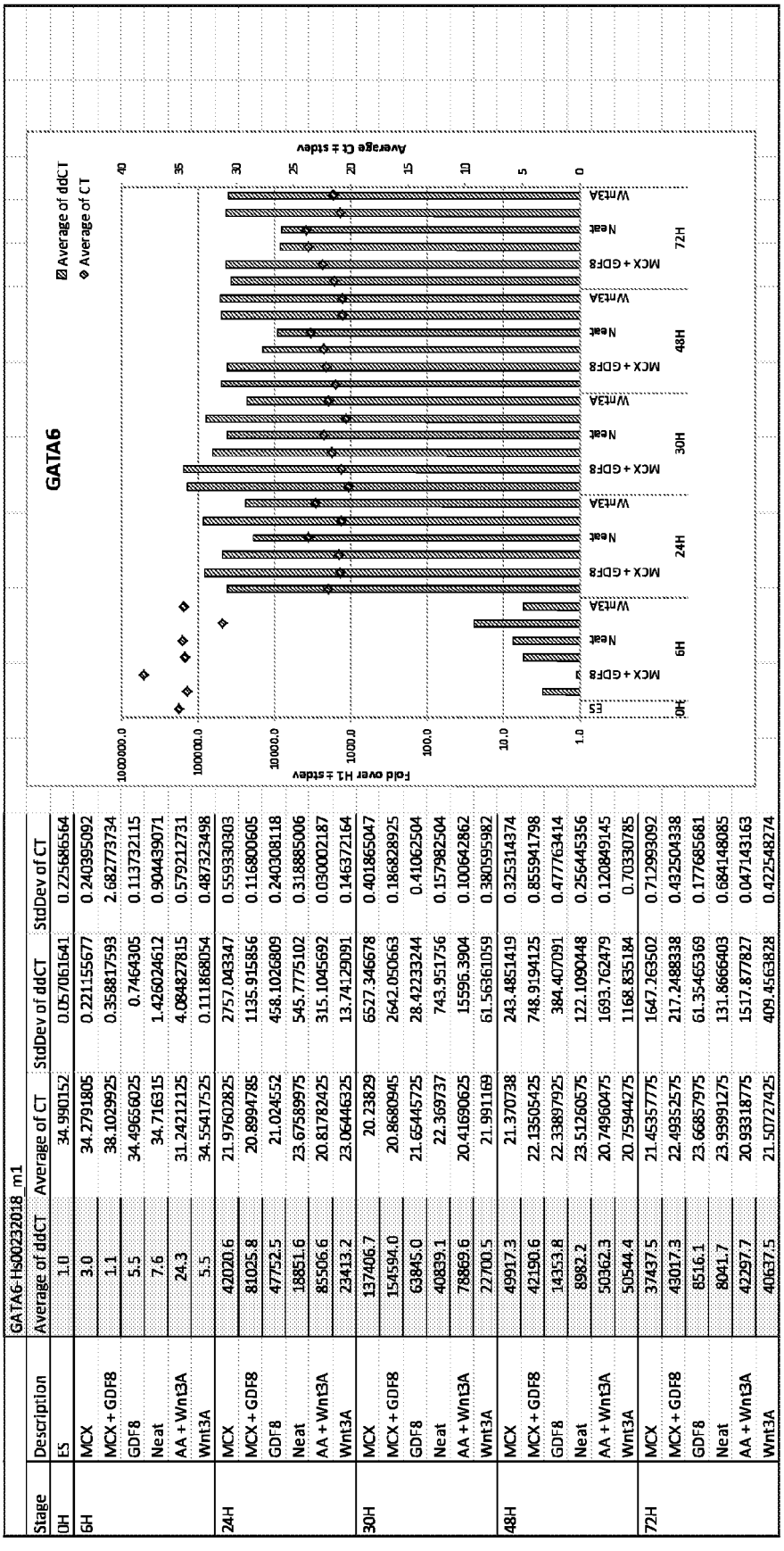
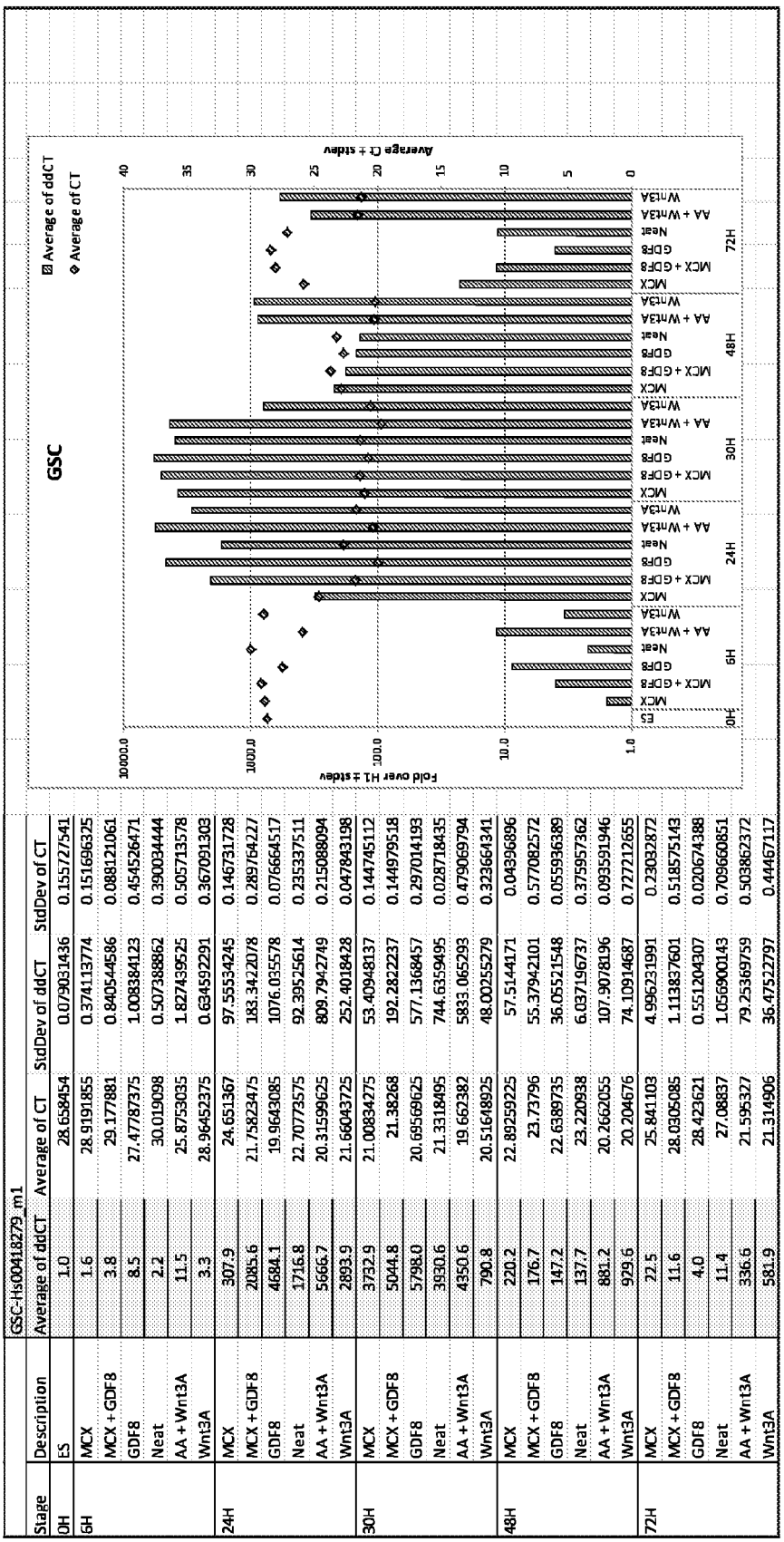


Figure 71



		GSC-Hs00418279_m1			
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1.0	28.658454	0.079031436	0.155727541
6H	MCX	1.6	28.9191855	0.374113774	0.151696325
	MCX + GDF8	3.8	29.177881	0.840544586	0.088121061
	GDF8	8.5	27.47787375	1.008384123	0.454526471
	Neat	2.2	30.019098	0.507388862	0.390034444
	AA + Wnt3A	11.5	25.8753035	1.827439525	0.505713578
	Wnt3A	3.3	28.96452375	0.634592291	0.367091303
24H	MCX	307.9	24.651367	97.55534245	0.146731728
	MCX + GDF8	2085.6	21.75823475	183.3422078	0.289764227
	GDF8	4684.1	19.9643085	1076.035578	0.076664517
	Neat	1716.8	22.70773575	92.39525614	0.235337511
	AA + Wnt3A	5666.7	20.31599625	809.7942749	0.215088094
	Wnt3A	2893.9	21.66043725	252.4018428	0.047843198
30H	MCX	3732.9	21.00834275	53.40948137	0.144745112
	MCX + GDF8	5044.8	21.38268	192.2822237	0.144979518
	GDF8	5798.0	20.69569625	577.1368457	0.297014193
	Neat	3930.6	21.3318495	744.6359495	0.028718435
	AA + Wnt3A	4350.6	19.662382	5833.065293	0.479069794
	Wnt3A	790.8	20.51648925	48.00255279	0.323664341
48H	MCX	220.2	22.89259225	57.5144171	0.04396896
	MCX + GDF8	176.7	23.73796	55.37942101	0.577082572
	GDF8	147.2	22.6389735	36.05521548	0.055936389
	Neat	137.7	23.220938	6.037196737	0.375957362
	AA + Wnt3A	881.2	20.2662055	107.9078196	0.093591946
	Wnt3A	929.6	20.204676	74.10914687	0.727212655
72H	MCX	22.5	25.841103	4.996231991	0.23032872
	MCX + GDF8	11.6	28.0305085	1.113837601	0.518575143
	GDF8	4.0	28.423621	0.551204307	0.020674388
	Neat	11.4	27.08837	1.056900143	0.709660851
	AA + Wnt3A	336.6	21.595327	79.25369759	0.503862372
	Wnt3A	581.9	21.314906	36.47522797	0.44467117

Figure 72

		KIT-Hs00174029_m1			
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1.0	25.45900275	0.01119805	0.001750443
6H	MCX	0.5	27.48555625	0.015986013	0.065277623
	MCX + GDF8	0.5	28.944547	0.012350551	0.203713221
	GDF8	0.7	27.79625775	0.001275474	0.583150609
	Neat	0.7	28.51821975	0.003037612	0.095834536
	AA + Wnt3A	0.9	26.38911475	0.020281097	0.4489177
	Wnt3A	0.9	27.59351175	0.017026407	0.4889654
24H	MCX	75.5	27.78537925	1.543924245	0.112373763
	MCX + GDF8	188.9	26.35009525	2.781140571	0.269059434
	GDF8	798.0	23.63346275	9.80086693	0.259994325
	Neat	512.0	25.58008925	1.338058036	0.187218895
	AA + Wnt3A	835.1	24.20456775	21.12682204	0.09173968
	Wnt3A	501.4	25.32131825	17.0313233	0.337965575
30H	MCX	276.4	25.892663	4.695999206	0.255522935
	MCX + GDF8	579.7	25.63128025	1.384757229	0.087429864
	GDF8	1628.6	23.65298125	8.687618953	0.442410904
	Neat	944.9	24.50741275	0.535222539	0.246703546
	AA + Wnt3A	948.5	23.19136	346.7301305	0.057602333
	Wnt3A	3.5	25.12221225	0.033928225	0.447393885
48H	MCX	6.5	24.760804	0.090700689	0.272604513
	MCX + GDF8	14.8	24.09185475	0.237821981	0.856588801
	GDF8	22.0	22.17045375	0.054689903	0.328826927
	Neat	19.8	22.8188965	0.158064169	0.280802002
	AA + Wnt3A	24.1	22.26088925	0.533532122	0.07388877
	Wnt3A	17.9	22.71163125	0.698797164	0.602911415
72H	MCX	4.3	25.01408975	0.049394164	0.426854554
	MCX + GDF8	7.3	25.504648	0.19481569	0.555101451
	GDF8	17.9	23.04807925	0.080247704	0.166253886
	Neat	19.1	23.1381575	0.036482486	0.590902267
	AA + Wnt3A	18.7	22.5550095	0.192381952	0.28547315
	Wnt3A	22.2	22.82813125	0.148435269	0.334724905

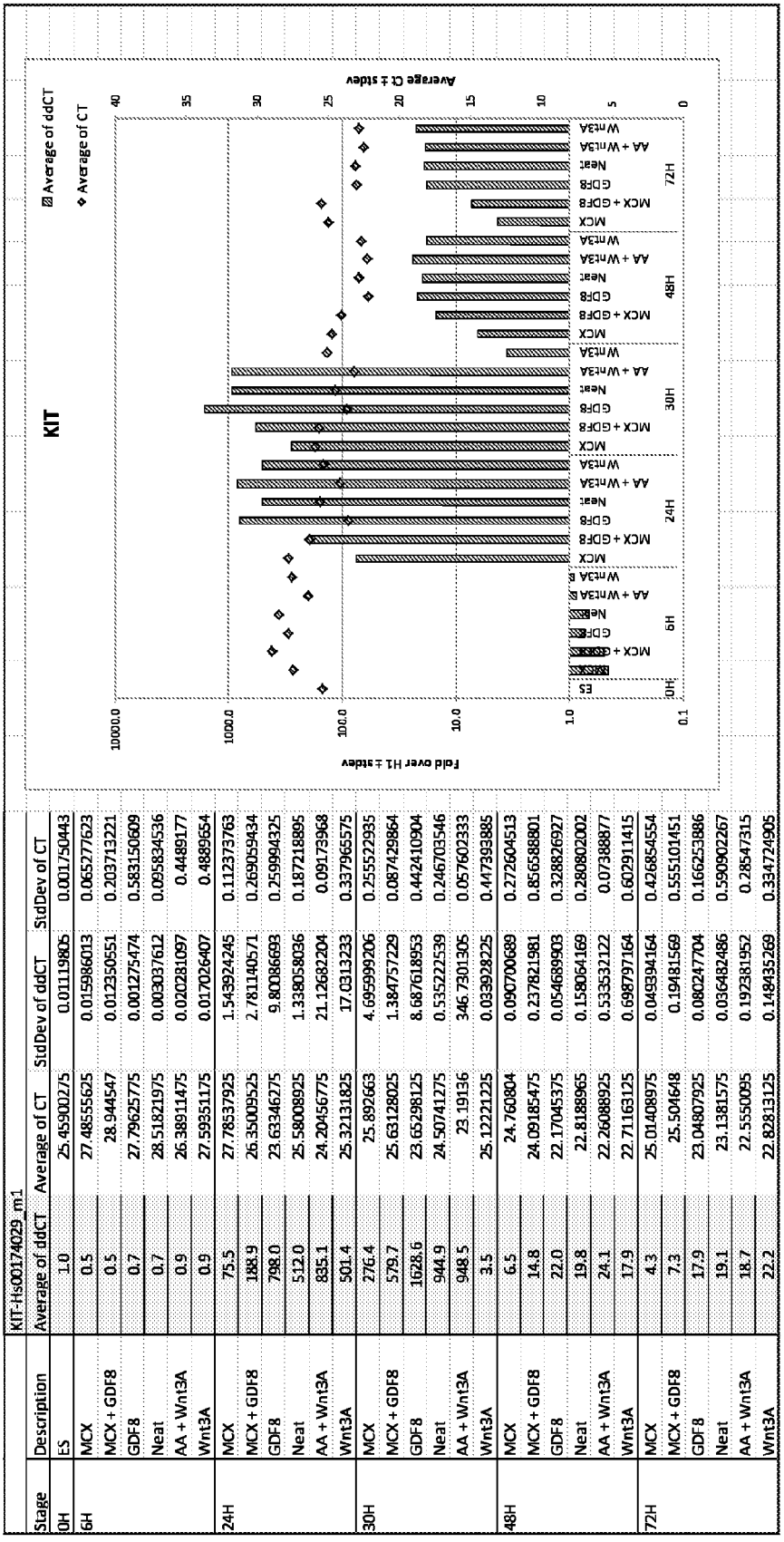


Figure 73

		MIXL1-Hs00430824_g1				
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT	
0H	ES	1.0	26.66712025	0.45257824	0.009230925	
6H	MCX	19.6	23.25942175	2.612468462	0.108186984	
	MCX + GDF8	43.0	23.69421875	18.38609048	0.412636051	
	GDF8	18.9	24.33267125	13.96823414	0.473416122	
	Neat	5.2	26.7779945	4.405031576	0.257374848	
	AA + Wnt3A	28.7	22.578432	55.38165667	0.634560454	
	Wnt3A	8.2	25.65967325	1.541163551	0.620753133	
24H	MCX	104018.3	20.32173475	77812.9798	0.104995811	
	MCX + GDF8	285561.1	18.7529745	173403.4754	0.089478706	
	GDF8	116130.6	19.4222955	174133.0663	0.060976742	
	Neat	87873.9	21.1221985	34640.22739	0.236334178	
	AA + Wnt3A	160959.8	19.579072	148713.6147	0.100677864	
	Wnt3A	105764.3	20.56027025	55071.23283	0.065317928	
30H	MCX	266532.0	18.952344	393004.8308	0.400235873	
	MCX + GDF8	379000.1	19.250916	496576.4052	0.312696761	
	GDF8	107392.4	20.577777	94834.5218	0.270239241	
	Neat	78759.6	21.0910285	17148.67025	0.284954133	
	AA + Wnt3A	72530.7	19.71169625	914946.0798	0.202561698	
	Wnt3A	280.5	20.02061475	58.28656733	0.360747141	
48H	MCX	178.2	21.19214125	80.78063307	0.276756998	
	MCX + GDF8	51.6	23.500574	3.508242735	0.956419197	
	GDF8	10.1	24.500413	5.959471228	0.247421612	
	Neat	29.4	23.458623	0.471069671	0.32756156	
	AA + Wnt3A	59.2	22.16680775	6.910854702	0.030202298	
	Wnt3A	79.4	21.76662425	78.00690922	0.661169236	
72H	MCX	38.7	23.057191	27.40116702	0.375982111	
	MCX + GDF8	30.4	24.64980625	2.262196072	0.395060912	
	GDF8	1.3	28.044167	1.918413085	0.097333956	
	Neat	6.7	25.8686065	11.79192096	0.886371078	
	AA + Wnt3A	25.9	23.2951505	15.20993226	0.133542772	
	Wnt3A	37.6	23.27805375	19.53569405	0.455688248	

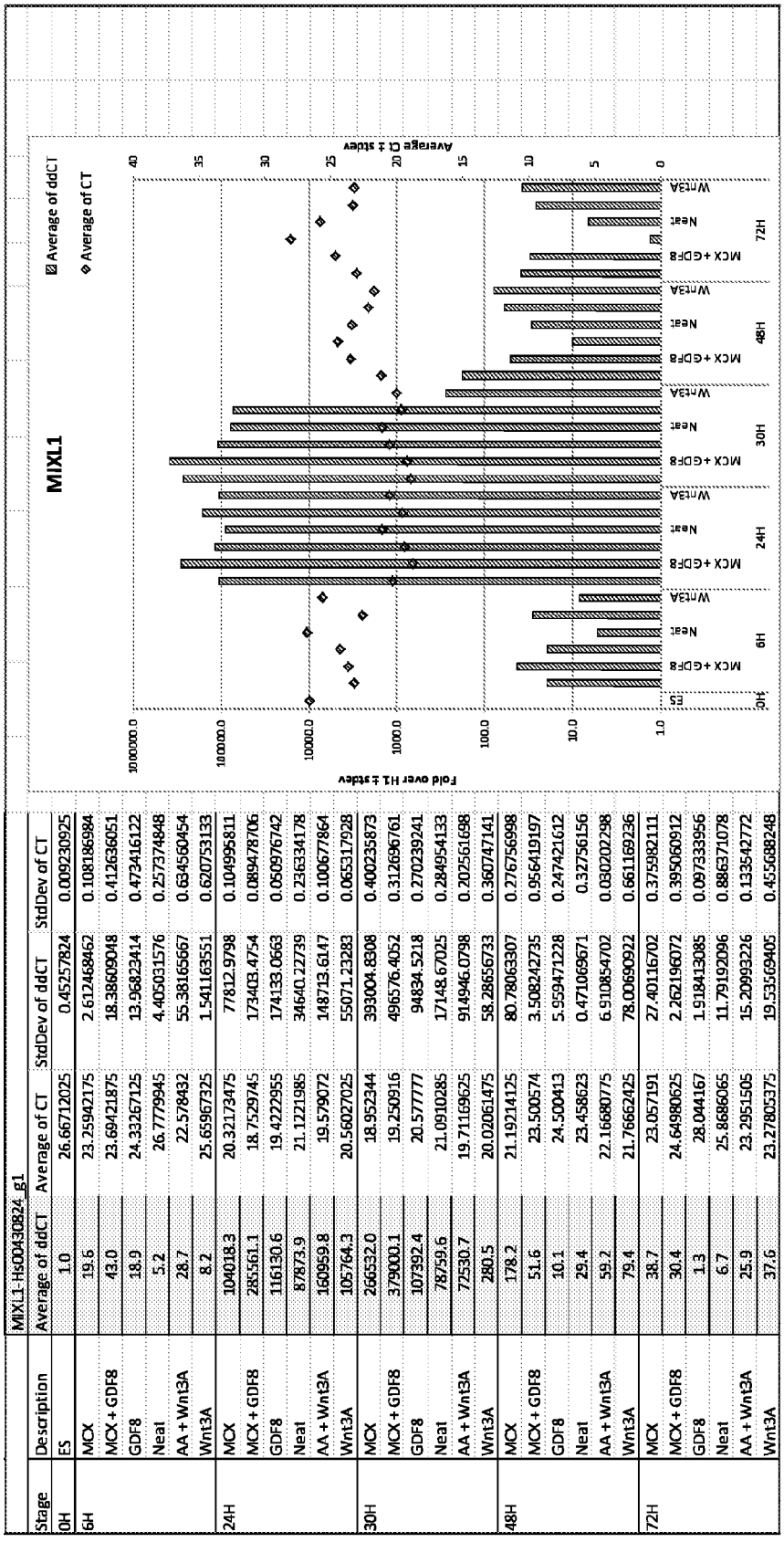
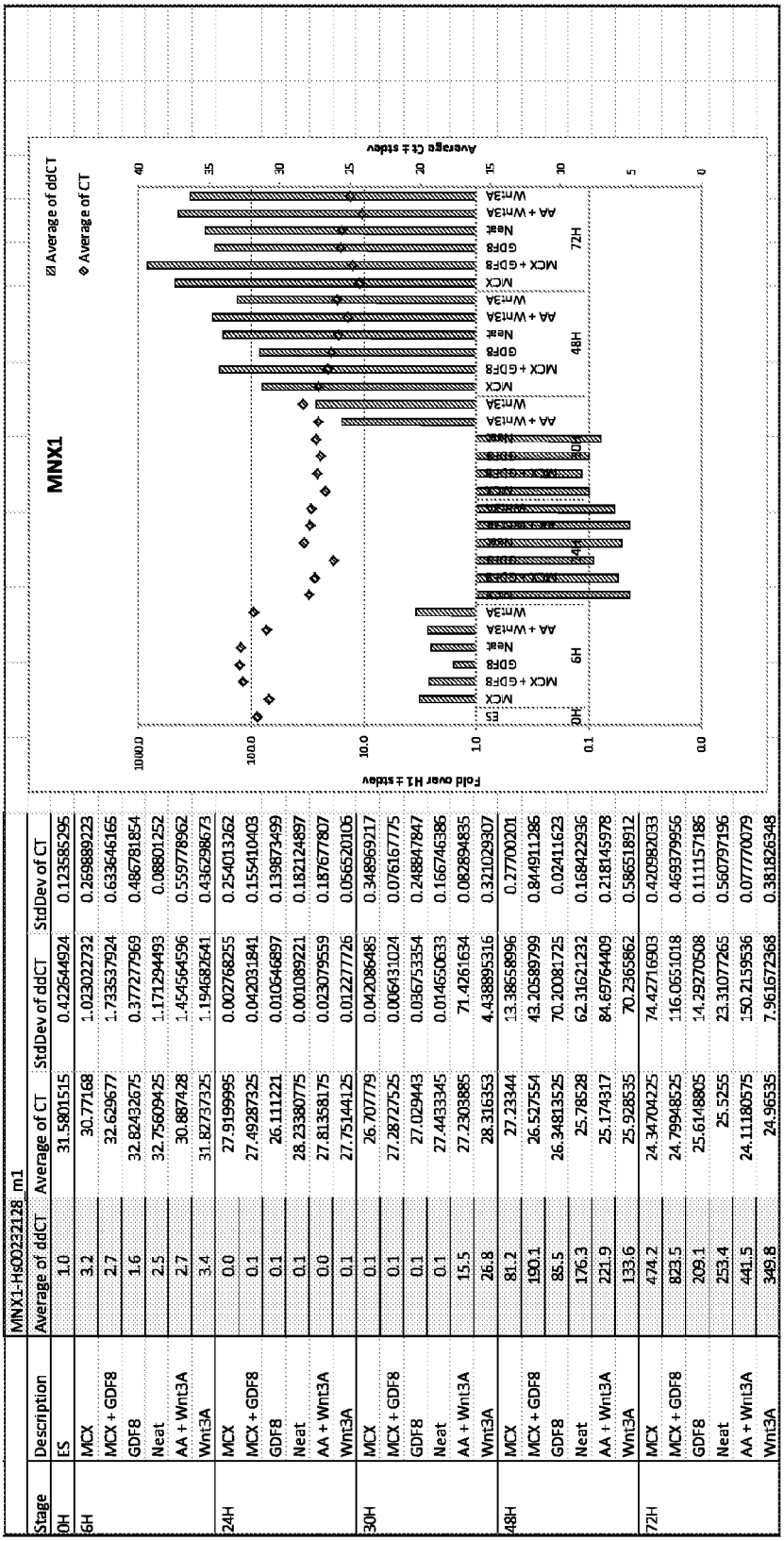
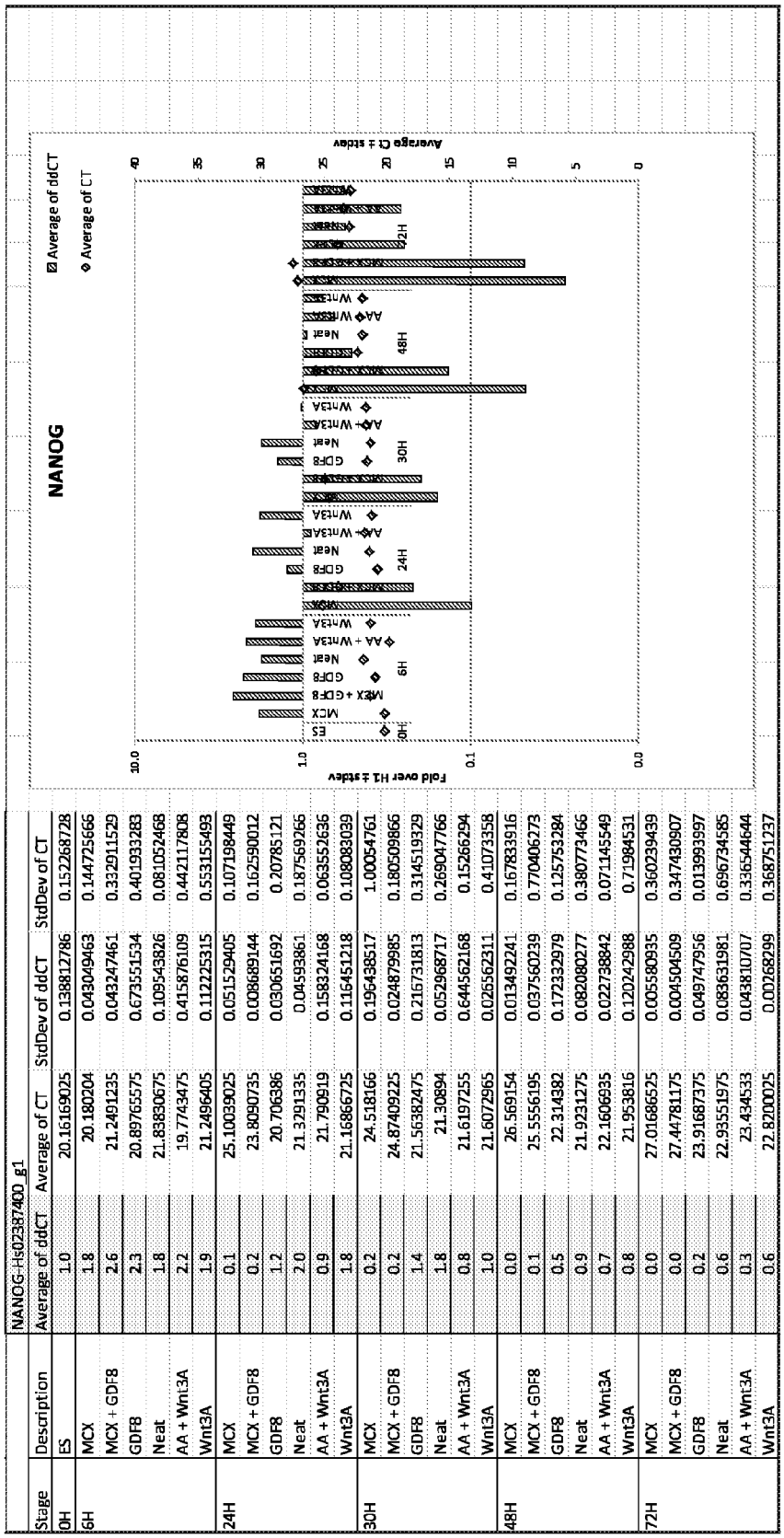


Figure 74



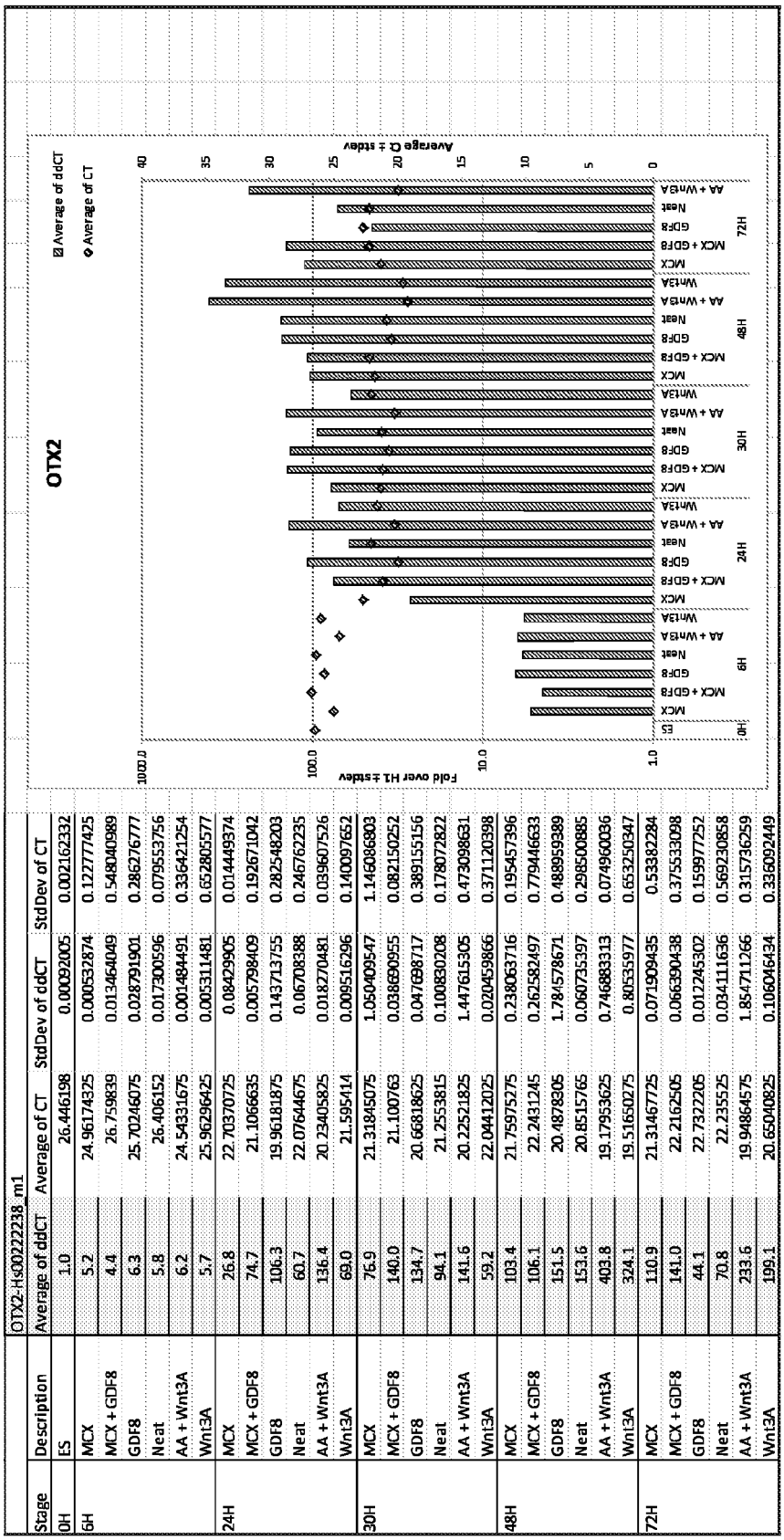
		MNX1-Hs00232128_m1			
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1.0	31.5801515	0.422644924	0.123585295
6H	MCX	3.2	30.77168	1.023022732	0.269889223
	MCX + GDF8	2.7	32.629677	1.733537924	0.633646165
	GDF8	1.6	32.82432675	0.377277969	0.486781854
	Neat	2.5	32.75609425	1.171294493	0.08801252
	AA + Wnt3A	2.7	30.887428	1.454564596	0.559778962
	Wnt3A	3.4	31.82737325	1.194682641	0.436298673
24H	MCX	0.0	27.9199995	0.002768255	0.254013262
	MCX + GDF8	0.1	27.49287325	0.042031841	0.155410403
	GDF8	0.1	26.111221	0.010546897	0.139873499
	Neat	0.1	28.23380775	0.001089221	0.182124897
	AA + Wnt3A	0.0	27.81358175	0.023079559	0.187677807
	Wnt3A	0.1	27.75144125	0.012277726	0.056520106
30H	MCX	0.1	26.707779	0.042086485	0.348969217
	MCX + GDF8	0.1	27.28727525	0.006431024	0.076167775
	GDF8	0.1	27.029443	0.036753354	0.248847847
	Neat	0.1	27.4433345	0.014650633	0.166746386
	AA + Wnt3A	15.5	27.2303885	71.4261634	0.082894835
	Wnt3A	26.8	28.316353	4.438895316	0.321029307
48H	MCX	81.2	27.23344	13.38558996	0.27700201
	MCX + GDF8	190.1	26.527554	43.20589799	0.844911386
	GDF8	85.5	26.34813525	70.20081725	0.02411623
	Neat	176.3	25.78528	62.31621232	0.168422936
	AA + Wnt3A	221.9	25.174317	84.69764409	0.218145978
	Wnt3A	133.6	25.928535	70.2365862	0.586518912
72H	MCX	474.2	24.34704225	74.42716903	0.420982033
	MCX + GDF8	823.5	24.79948525	116.0651018	0.469379956
	GDF8	209.1	25.6148805	14.29270508	0.111157186
	Neat	253.4	25.5255	23.31077265	0.560797196
	AA + Wnt3A	441.5	24.11180575	150.2159536	0.077770079
	Wnt3A	349.8	24.96535	7.961572368	0.381826348

Figure 75



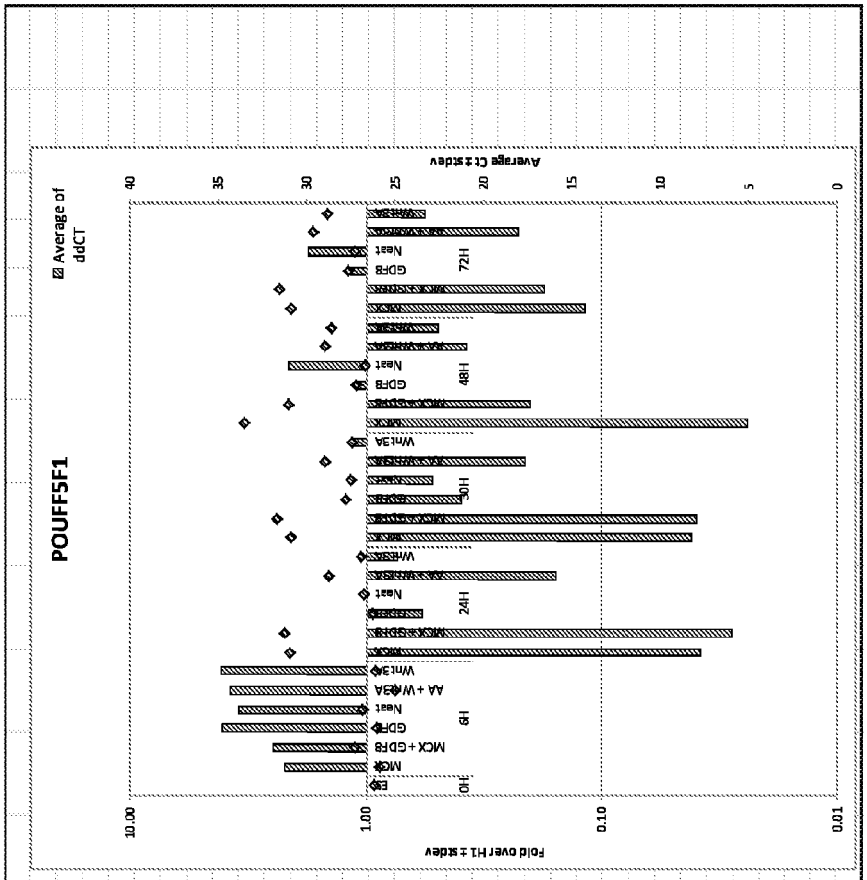
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Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1.0	20.16169025	0.138812786	0.152268728
6H	MCX	1.8	20.180204	0.043049463	0.144725666
	MCX + GDF8	2.6	21.2491235	0.043247461	0.332911529
	GDF8	2.3	20.89765575	0.673551534	0.401933283
	Neat	1.8	21.83830675	0.109543826	0.081052468
	AA + Wnt3A	2.2	19.7743475	0.415876109	0.442117808
	Wnt3A	1.9	21.2496405	0.112225315	0.553155493
24H	MCX	0.1	25.10039025	0.051529405	0.107198449
	MCX + GDF8	0.2	23.8090735	0.008689144	0.162590012
	GDF8	1.2	20.706386	0.030651692	0.20785121
	Neat	2.0	21.3291335	0.04593861	0.187569266
	AA + Wnt3A	0.9	21.790919	0.158324168	0.063552636
	Wnt3A	1.8	21.16866725	0.116451218	0.108083039
30H	MCX	0.2	24.518166	0.196438517	1.00054761
	MCX + GDF8	0.2	24.87409225	0.024879985	0.180509866
	GDF8	1.4	21.56382475	0.215731813	0.314519329
	Neat	1.8	21.30894	0.052968717	0.269047766
	AA + Wnt3A	0.8	21.6197255	0.644562168	0.15266294
	Wnt3A	1.0	21.6072965	0.026562311	0.41073358
48H	MCX	0.0	26.569154	0.013492241	0.167833916
	MCX + GDF8	0.1	25.5556195	0.037560239	0.770406273
	GDF8	0.5	22.314382	0.172332979	0.125753284
	Neat	0.9	21.9231275	0.082080277	0.380773466
	AA + Wnt3A	0.7	22.1606935	0.022738842	0.071145549
	Wnt3A	0.8	21.953816	0.120242988	0.71984531
72H	MCX	0.0	27.01686525	0.005580935	0.360239439
	MCX + GDF8	0.0	27.44781175	0.004504509	0.347430907
	GDF8	0.2	23.91687375	0.049747956	0.013993997
	Neat	0.6	22.93551975	0.083631981	0.696734585
	AA + Wnt3A	0.3	23.434533	0.043810707	0.336544644
	Wnt3A	0.6	22.8200025	0.00268299	0.368751237

Figure 76



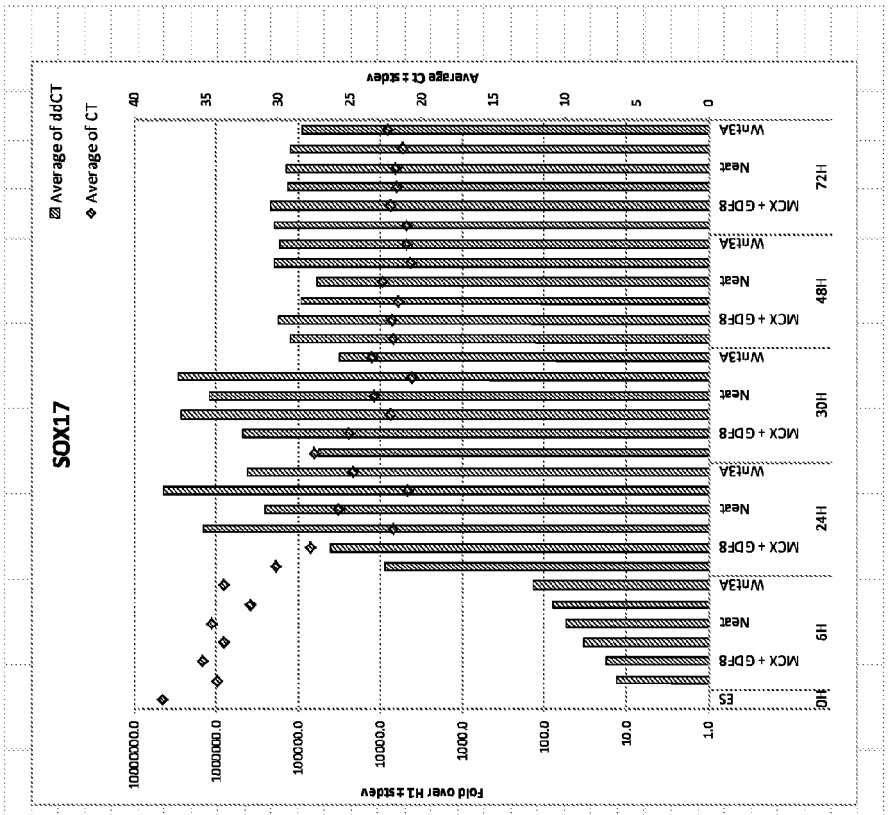
		OTX2-Hs00222238_m1			
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1.0	26.446198	0.00092005	0.002162332
6H	MCX	5.2	24.96174325	0.000532874	0.122777425
	MCX + GDF8	4.4	26.759839	0.013464049	0.548040989
	GDF8	6.3	25.70246075	0.028791901	0.286276777
	Neat	5.8	26.406152	0.017300596	0.079553756
	AA + Wnt3A	6.2	24.54331675	0.001484491	0.336421254
	Wnt3A	5.7	25.96296425	0.005311481	0.652805577
24H	MCX	26.8	22.70370725	0.08429905	0.014449374
	MCX + GDF8	74.7	21.1066635	0.005798409	0.192671042
	GDF8	106.3	19.96181875	0.143713755	0.282548203
	Neat	60.7	22.07644675	0.06708388	0.246762235
	AA + Wnt3A	136.4	20.23405825	0.018270481	0.039607526
	Wnt3A	69.0	21.595414	0.009516296	0.140097652
30H	MCX	76.9	21.31845075	1.050409547	1.146086803
	MCX + GDF8	140.0	21.100763	0.038690955	0.082150252
	GDF8	134.7	20.66818625	0.047698717	0.389155156
	Neat	94.1	21.2553815	0.100830208	0.178072822
	AA + Wnt3A	141.6	20.22521825	1.447615305	0.473098631
	Wnt3A	59.2	22.04412025	0.020459866	0.371120398
48H	MCX	103.4	21.75975275	0.238063716	0.195457396
	MCX + GDF8	106.1	22.2431245	0.262582497	0.779446633
	GDF8	151.5	20.4878305	1.784578671	0.488959389
	Neat	153.6	20.8515765	0.060735397	0.298500885
	AA + Wnt3A	403.8	19.17953625	0.746883313	0.074960036
	Wnt3A	324.1	19.51650275	0.80535977	0.653250347
72H	MCX	110.9	21.31467725	0.071909435	0.53382284
	MCX + GDF8	141.0	22.2162505	0.066390438	0.375533098
	GDF8	44.1	22.7322205	0.012245302	0.159977252
	Neat	70.8	22.235525	0.034111636	0.569230858
	AA + Wnt3A	233.6	19.94864575	1.854711266	0.315736259
	Wnt3A	199.1	20.65040825	0.106046434	0.336092449

Figure 77



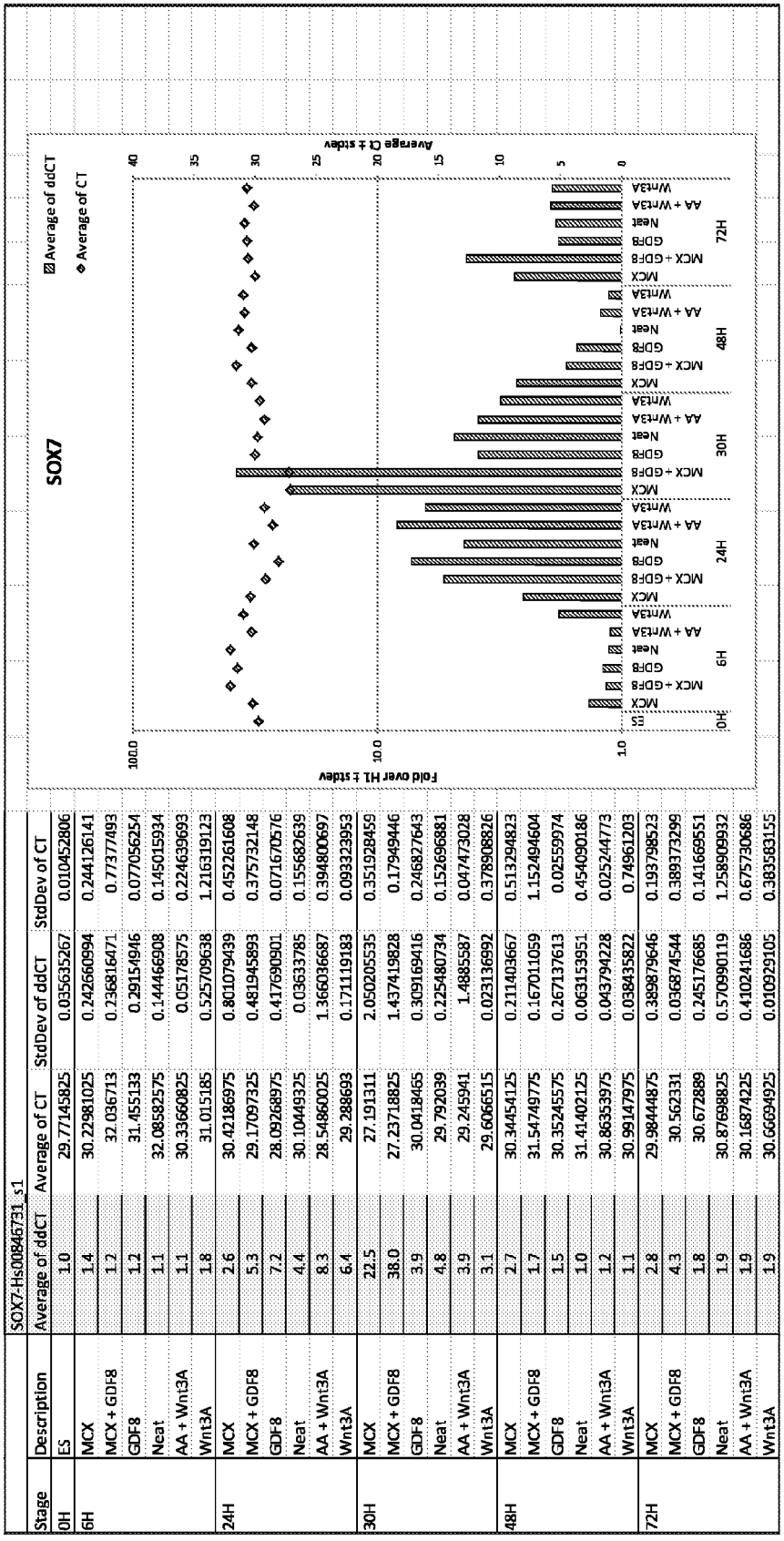
		POU5F1-Hs00742896_s1			
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1.00	26.15288625	0.083808356	0.023537817
6H	MCX	2.22	25.89640675	0.432742719	0.074273436
	MCX + GDF8	2.49	27.2872405	0.028196079	0.355401768
	GDF8	4.06	26.04998125	1.120640382	0.30323744
	Neat	3.45	26.8598365	0.512519663	0.034287608
	AA + Wnt3A	3.78	24.9841895	1.105596164	0.627041787
	Wnt3A	4.13	26.13255675	0.081192066	0.610885458
24H	MCX	0.04	30.94236	0.014125013	0.165998974
	MCX + GDF8	0.03	31.25960125	0.007241419	0.458581021
	GDF8	0.57	26.2544535	0.013593961	0.167236411
	Neat	1.00	26.7574365	0.124927352	0.042725513
	AA + Wnt3A	0.16	28.787047	0.061276831	0.364079382
	Wnt3A	0.73	26.920047	0.129197453	0.333873195
30H	MCX	0.04	30.87972575	0.032497251	1.016170074
	MCX + GDF8	0.04	31.66796	0.012787089	0.440513383
	GDF8	0.40	27.84078875	0.044362302	0.295872216
	Neat	0.52	27.50559375	0.022270714	0.205442451
	AA + Wnt3A	0.21	28.95805525	0.198580694	0.641337719
	Wnt3A	1.15	27.4439	0.144628972	0.262667542
48H	MCX	0.02	33.52965775	0.00364086	0.192631797
	MCX + GDF8	0.20	31.025079	0.084542446	0.499925909
	GDF8	1.08	27.21654775	0.229790852	0.120473671
	Neat	2.12	26.73446875	0.145848616	0.396495632
	AA + Wnt3A	0.37	28.96915975	0.05981573	0.11845276
	Wnt3A	0.49	28.5801595	0.053812444	0.9336843
72H	MCX	0.12	30.8945545	0.016333863	0.634235892
	MCX + GDF8	0.17	31.58899035	0.037257086	0.183907867
	GDF8	1.16	27.69417775	0.26444473	0.096785594
	Neat	1.77	27.29369525	0.6793045	1.006687065
	AA + Wnt3A	0.22	29.63042225	0.001452265	0.235202454
	Wnt3A	0.56	28.81985655	0.056393622	0.267669615

Figure 78



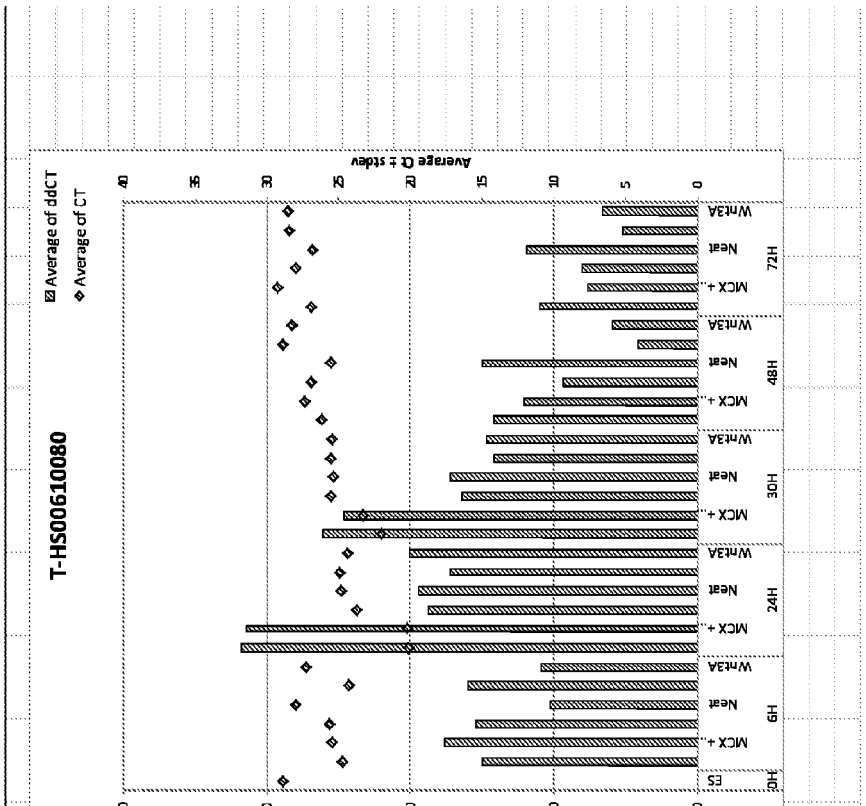
		SOX17-Hs00751752_s1			
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1.0	37.9899465	0.156050945	2.842644921
6H	MCX	13.0	34.23791225	0.893088761	0.961753964
	MCX + GDF8	17.4	35.273308	0.33652377	0.566205856
	GDF8	33.2	33.80067725	0.810592562	0.310624231
	Neat	53.2	34.55142875	7.907695228	2.337024328
	AA + Wnt3A	77.4	31.89635325	9.749388201	1.480506591
	Wnt3A	139.6	33.771761	23.98494294	4.70577583
24H	MCX	8694.6	30.10699725	421.1653505	0.343927192
	MCX + GDF8	40771.4	27.7174	672.9231641	0.377235811
	GDF8	1426214.5	21.94637925	9293.962743	0.266699111
	Neat	254350.5	25.748836	5029.425942	0.400379416
	AA + Wnt3A	4318544.3	20.9830875	39985.13612	0.154816787
	Wnt3A	4100137.7	24.75568475	1226.481038	0.115043091
30H	MCX	55930.9	27.42999925	3286.028031	0.861137619
	MCX + GDF8	487969.3	25.031811	4055.471571	0.196007171
	GDF8	2634957.1	22.11110625	24534.59113	0.306023441
	Neat	1234990.8	23.2741615	13076.83769	0.128304525
	AA + Wnt3A	2863911.5	20.706602	487561.4891	0.037114621
	Wnt3A	31499.1	23.4761815	11.1769974	0.39019425
48H	MCX	125437.0	22.00333075	1744.42517	0.50965393
	MCX + GDF8	174501.0	22.04393725	1086.329049	1.016846775
	GDF8	914401.1	21.62495775	1031.792709	0.472150401
	Neat	598502.2	22.7336945	277.1847933	0.271868415
	AA + Wnt3A	1960961.1	20.74278775	1688.742436	0.049791278
	Wnt3A	1649580.0	21.008289	242.9172379	0.80308097
72H	MCX	1973732.2	21.009108	2872.0322	0.323196589
	MCX + GDF8	2177806.6	22.1153545	1352.325619	0.478436226
	GDF8	1329339.9	21.6616915	242.7192748	0.162310705
	Neat	1391064.4	21.78391875	302.575302	0.626409988
	AA + Wnt3A	1260505.5	21.3294645	3680.70371	0.109366792
	Wnt3A	876678.8	22.35575	422.3162921	0.427004815

Figure 79



	SOX7-Hs00846731_s1				
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1.0	29.7714825	0.035635267	0.010452806
6H	MCX	1.4	30.22981025	0.242660994	0.244126141
	MCX + GDF8	1.2	32.036713	0.236816471	0.77377493
	GDF8	1.2	31.455133	0.29154946	0.077056254
	Neat	1.1	32.08582575	0.144466908	0.145015934
	AA + Wnt3A	1.1	30.33660825	0.05178575	0.22463693
	Wnt3A	1.8	31.015185	0.525709638	1.216319123
24H	MCX	2.6	30.42186975	0.801079439	0.452261608
	MCX + GDF8	5.3	29.17097325	0.481945893	0.375732148
	GDF8	7.2	28.09268975	0.417690901	0.071670576
	Neat	4.4	30.10449325	0.03633785	0.155682639
	AA + Wnt3A	8.3	28.54860025	1.366036687	0.394800697
	Wnt3A	6.4	29.288693	0.171119183	0.093323953
30H	MCX	22.5	27.191311	2.050205535	0.351928459
	MCX + GDF8	38.0	27.23718825	1.437419828	0.17949446
	GDF8	3.9	30.0418465	0.309169416	0.246827643
	Neat	4.8	29.792039	0.225480734	0.152696881
	AA + Wnt3A	3.9	29.245941	1.4885587	0.047473028
	Wnt3A	3.1	29.6066515	0.023136992	0.378908826
48H	MCX	2.7	30.34454125	0.211403667	0.513294823
	MCX + GDF8	1.7	31.54749775	0.167011059	1.152494604
	GDF8	1.5	30.35245575	0.267137613	0.02559974
	Neat	1.0	31.41402125	0.063153951	0.454090186
	AA + Wnt3A	1.2	30.86353975	0.043794228	0.025244773
	Wnt3A	1.1	30.99147975	0.038435822	0.74961203
72H	MCX	2.8	29.98444875	0.389879646	0.193798523
	MCX + GDF8	4.3	30.562331	0.036874544	0.389373299
	GDF8	1.8	30.672889	0.245176685	0.141669551
	Neat	1.9	30.87698825	0.570990119	1.258909932
	AA + Wnt3A	1.9	30.16874225	0.410241686	0.675730686
	Wnt3A	1.9	30.66694925	0.010929105	0.383583155

Figure 80



		T-Hs00610080_m1			
Stage	Description	Average of ddCT	Average of CT	StdDev of ddCT	StdDev of CT
0H	ES	1.0	28.87712275	0.813941329	0.171039584
6H	MCX	31.5	24.7762485	8.675091645	0.208759135
	MCX + GDF8	57.9	25.46522125	14.06687323	0.413413869
	GDF8	35.2	25.64747575	30.59507694	0.341483431
	Neat	10.6	27.9601755	8.654471956	0.356260195
	AA + Wnt3A	39.7	24.299049	24.04545995	0.49500586
	Wnt3A	12.3	27.277599	0.205684172	0.58562725
24H	MCX	1524.6	20.157217	488.2723073	0.133713185
	MCX + GDF8	1388.3	20.18051025	287.3582166	0.128004359
	GDF8	75.0	23.75389525	13.10288774	0.242166748
	Neat	88.0	24.82903525	4.25343008	0.186625632
	AA + Wnt3A	53.4	24.883103	36.36455631	0.244691473
	Wnt3A	101.3	24.334308	41.26954506	0.032133761
30H	MCX	404.0	22.052845	57.1639152	0.2020296
	MCX + GDF8	292.8	23.32683125	82.92840681	0.182064086
	GDF8	44.3	25.565177	16.00981258	0.308867778
	Neat	52.7	25.381405	6.372659072	0.215087741
	AA + Wnt3A	25.9	25.51441775	56.17223806	0.209717618
	Wnt3A	29.4	25.47393475	2.592201901	0.419555091
48H	MCX	26.3	26.15560575	15.74959284	0.17775922
	MCX + GDF8	16.1	27.38118025	2.151763639	0.90706279
	GDF8	8.7	26.93450525	8.779882311	0.049980075
	Neat	31.6	25.552775	3.196306761	0.295962372
	AA + Wnt3A	2.6	28.8829965	1.411212611	0.20529714
	Wnt3A	3.9	28.2976405	0.30033391	0.798045663
72H	MCX	12.7	26.872777	8.078648106	0.306605036
	MCX + GDF8	5.8	29.23774175	1.252565195	0.468896295
	GDF8	6.3	27.952985	2.089968684	0.04664642
	Neat	15.5	26.8526075	10.12712201	0.78924784
	AA + Wnt3A	3.3	28.4675235	1.730759191	0.379196618
	Wnt3A	4.5	28.533259	0.20216885	0.358914674

Figure 81

	Time (hours)					
G0/G1	0	6	24	30	48	72
MCX + GDF8	24.6	33.9	33.4	19.2	71.9	40.1
MCX	24.6	38	34.4	18.6	75.5	35.8
GDF8	24.6	20.9	35.3	32.7	48.5	36.8
NEAT	24.6	21.1	33.4	35.6	49	28.7
WNTA/AA	24.6	23.1	36.8	34.2	57.7	37.1
WNT only	24.6	20.4	32.7	27.9	55.8	37.1
S	0	6	24	30	48	72
MCX + GDF8	39.2	24.4	28.7	48.3	12	23.9
MCX	39.2	28.3	27.8	55.6	11.8	27.6
GDF8	39.2	31.3	20.9	41.9	27.7	19.8
NEAT	39.2	28.8	25.7	40.4	28	20.9
WNTA/AA	39.2	32.4	25.4	41.6	17.2	27.6
WNT only	39.2	28.6	16.9	36.1	23.3	31.6

Figure 81 (continued)

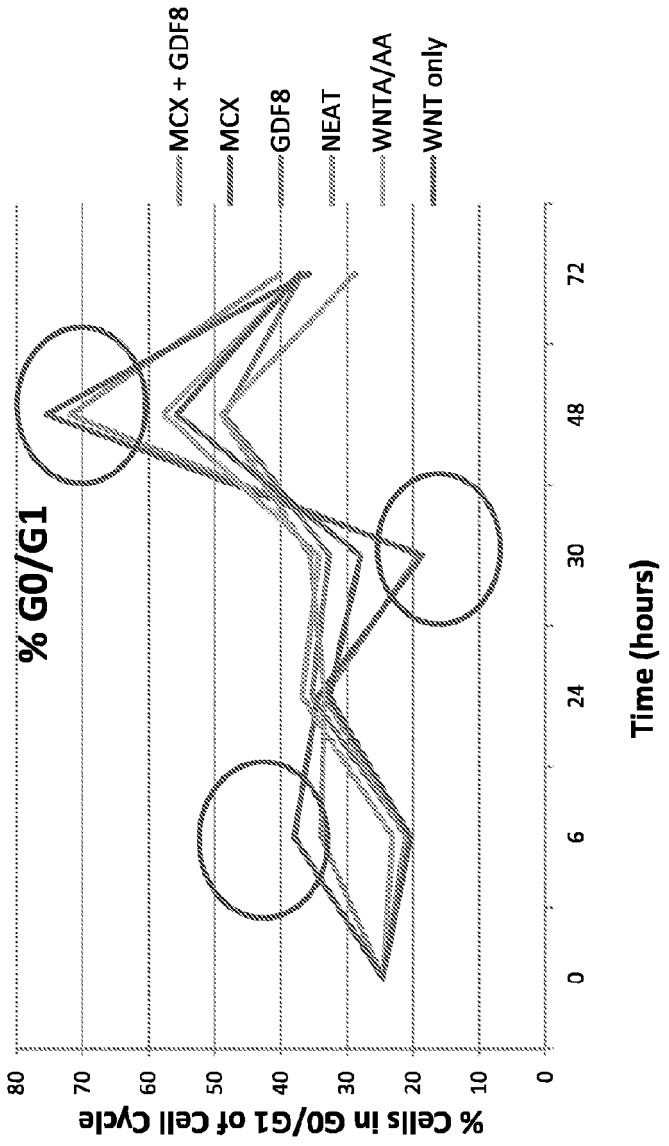


Figure 81 (continued)

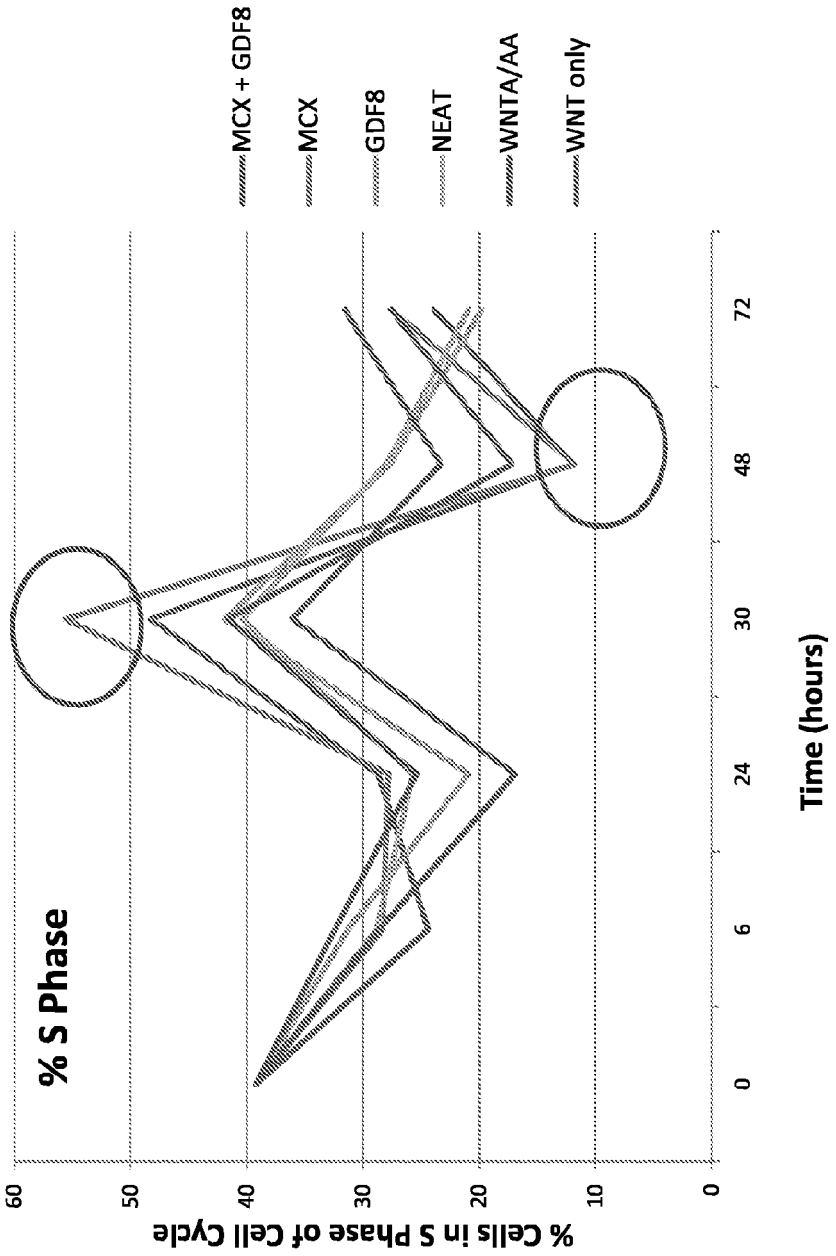


Figure 82

	Time (hours)					
M	0	6	24	30	48	72
MCX + GDF8	17.5	18	14	11.2	9.5	21.2
MCX	17.5	14.4	15.6	10.6	8.9	20.3
GDF8	17.5	17.6	19.2	12.9	12.2	22
NEAT	17.5	18.6	18	11.7	11.7	22.4
WNTA/AA	17.5	17.2	18.4	12.3	12.3	19.5
WNT only	17.5	18.4	18	15.8	12.9	16.8
EDU+	0	6	24	30	48	72
MCX + GDF8	50.4	30	41.7	58.6	12.8	30.4
MCX	50.4	29.2	36.1	62.9	11.2	32.6
GDF8	50.4	49.5	30	46.2	28.7	28
NEAT	50.4	46.7	35.1	47.2	28.9	32.6
WNTA/AA	50.4	48.4	32.5	49	20.3	30
WNT only	50.4	47.9	27.5	48.7	22.2	35.6
DE @ 72hrs	CXCR4	CD99	CD9			
MCX + GDF8	87.4	29.7	0.4			
MCX	96.9	31.7	0.7			
GDF8	95.1	55.8	5.1			
NEAT	90.1	60.2	9.1			
WNTA/AA	98.1	22.1	3.3			
WNT only	87.8	6.2	31.7			

Figure 82 (continued)

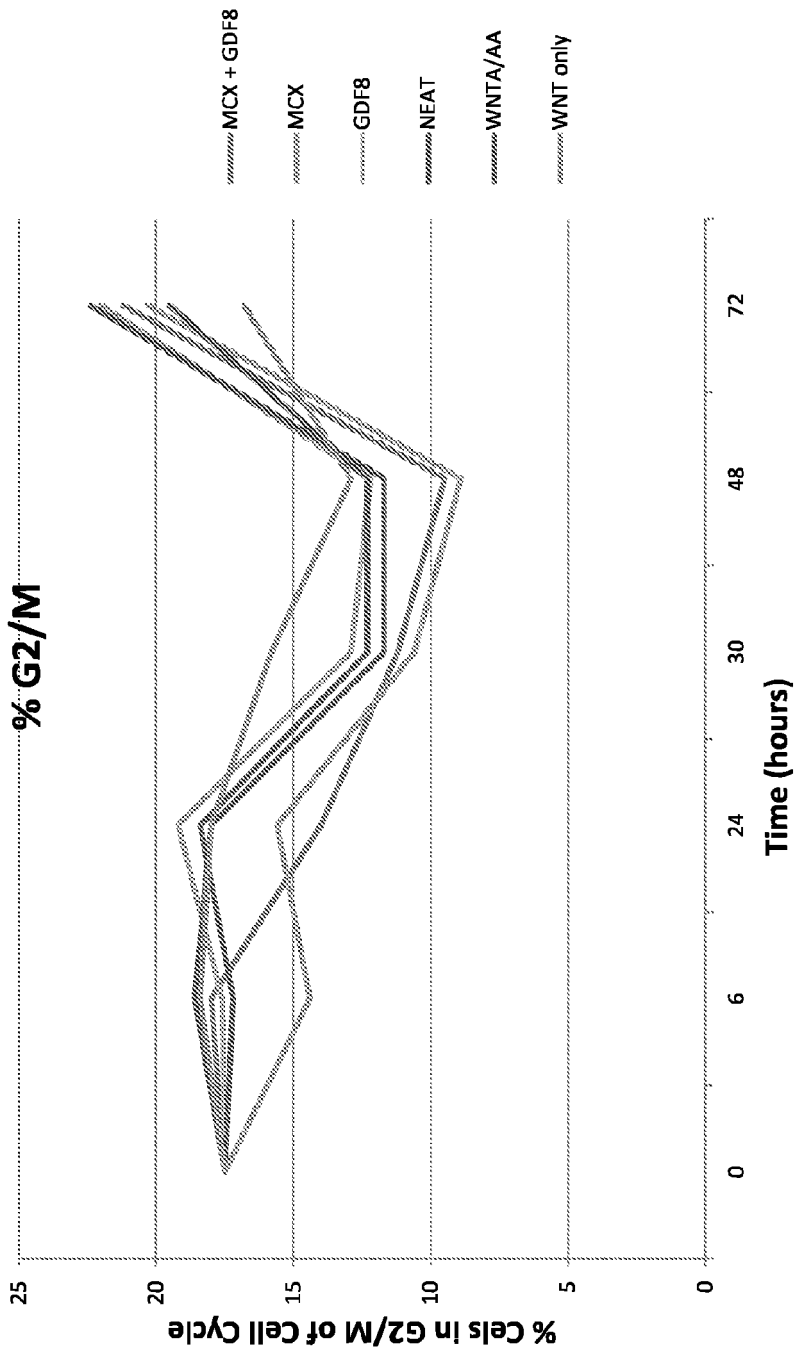


Figure 82 (continued)

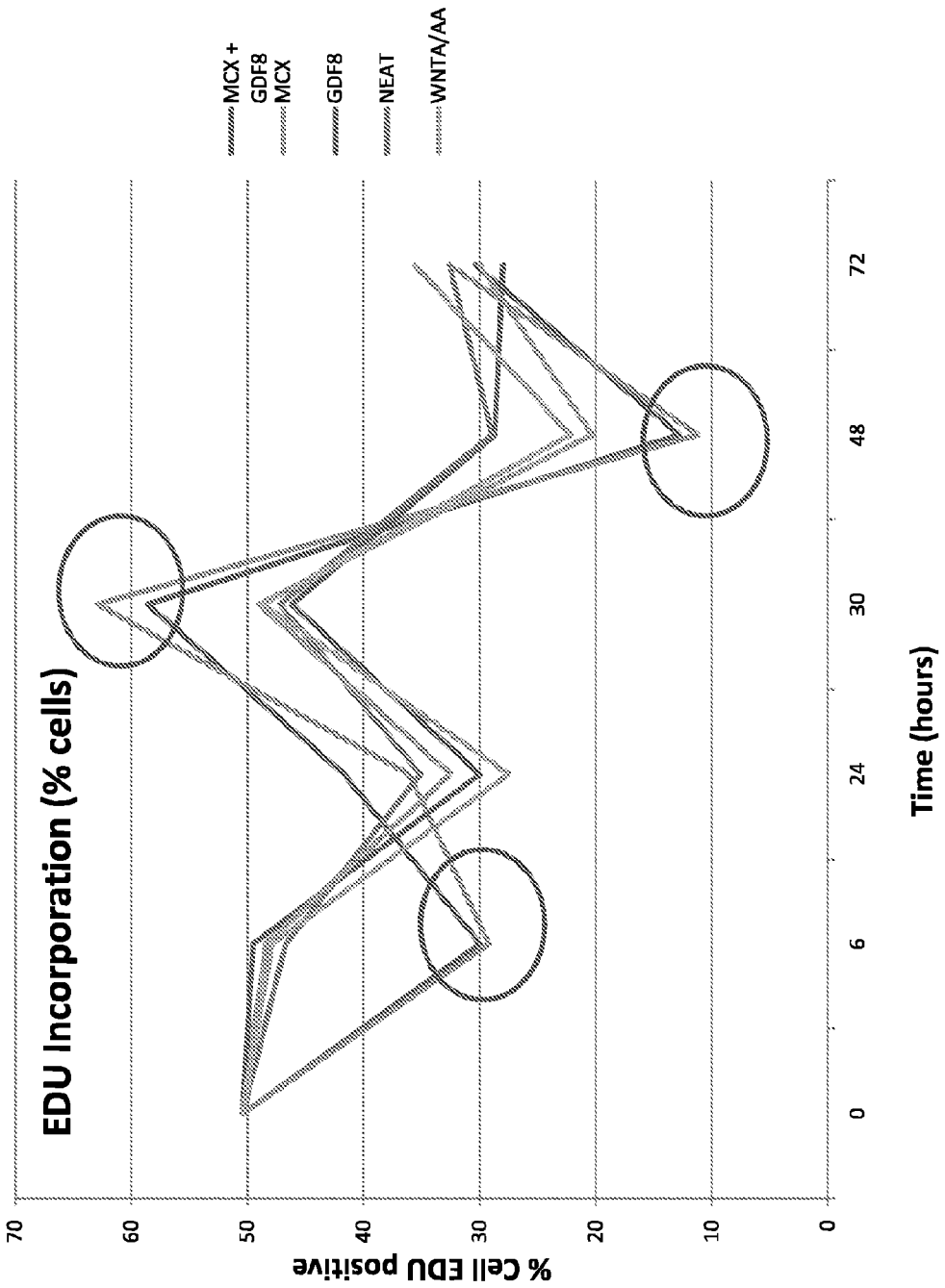


Figure 83

Ca++	Osmolalit	Batch ID	O2 Satura	CO2 Satur	HCO3	Gas/Electi	Nutrient/	Nutrient/	Cell Densi	Cell Densi	IgG Flow	IgG Range	Tray Locat	Mixing Ro	Media Typ	Cell IgG T	Operator
	342	061311 MB DE Assay				0.92	3.84	1:01					-		Default		novaservice
1.01	350	061311 MI	100	2.3	39.5	5.46	3.92	1:01					-		Default		novaservice
1.01	356	061311 MI	100	2.7	39.4	5.49	3.92	1:01					-		Default		novaservice
1.01	356	061311 MI	100	2.5	40.7	5.431	3.92	1:01					-		Default		novaservice
1.04	350	061311 MI	100	3.9	44.2	5.541	3.801	1:01					-		Default		novaservice
1		061311 MI	100	1.5	33.3	5.441	3.721	1:01					-		Default		novaservice
1	343	061311 MI	100	2.5	34.1	5.49	3.881	1:01					-		Default		novaservice
0.99		061311 MI	100	1.7	29.6	5.46	3.88	1:01					-		Default		novaservice
1	337	061311 MI	100	1.9	33.4	5.46	3.801	1:01					-		Default		novaservice
1.08		E061311 N	100	2.9	27.9	5.56	3.92	1:01					-		Default		novaservice
1.08		061311 MI	100	2.6	25.3	5.5	3.92	1:01					-		Default		novaservice
1.08		061311 MI	100	3.1	24.8	5.461	3.92	1:01					-		Default		novaservice
1.09		061311 MI	100	3.6	28	5.44	3.88	1:01					-		Default		novaservice
1.09		E061311 N	100	3.7	29.1	5.48	4	1:01					-		Default		novaservice
1.07		E061311 N	100	3.3	13.2	5.46	3.881	1:01					-		Default		novaservice
1.07		E061311 N	100	3.6	13.4	5.44	3.96	1:01					-		Default		novaservice
1.1		E061311 N	100	4.3	27.8	5.44	3.88	1:01					-		Default		novaservice
1.11		E061311 N	100	3.5	30	5.5	3.8	1:01					-		Default		novaservice
1.08		E061311 N	100	3.3	15.6	5.44	3.84	1:01					-		Default		novaservice
1.09		E061311 N	100	3.4	16.2	5.5	3.84	1:01					-		Default		novaservice
1.1		E061311 N	100	3.2	28.3	5.52	3.88	1:01					-		Default		novaservice
Ca++	Osmolalit	Batch ID	O2 Satura	CO2 Satur	HCO3	Gas/Electi	Nutrient/	Nutrient/	Cell Densi	Cell Densi	IgG Flow	IgG Range	Tray Locat	Mixing Ro	Media Typ	Cell IgG T	Operator
1.01	350	061311 MI	100	2.3	39.5	5.46	3.92	1:01					-		Default		novaservice
1		061311 MI	100	1.5	33.3	5.441	3.721	1:01					-		Default		novaservice
1.08		E061311 N	100	2.9	27.9	5.56	3.92	1:01					-		Default		novaservice
1.09		E061311 N	100	3.7	29.1	5.48	4	1:01					-		Default		novaservice
1.11		E061311 N	100	3.5	30	5.5	3.8	1:01					-		Default		novaservice
1.01	356	061311 MI	100	2.7	39.4	5.49	3.92	1:01					-		Default		novaservice
1	343	061311 MI	100	2.5	34.1	5.49	3.881	1:01					-		Default		novaservice
1.08		061311 MI	100	2.6	25.3	5.5	3.92	1:01					-		Default		novaservice
1.07		E061311 N	100	3.3	13.2	5.46	3.881	1:01					-		Default		novaservice
1.08		E061311 N	100	3.3	15.6	5.44	3.84	1:01					-		Default		novaservice
1.01	356	061311 MI	100	2.5	40.7	5.431	3.92	1:01					-		Default		novaservice
0.99		061311 MI	100	1.7	29.6	5.46	3.88	1:01					-		Default		novaservice
1.08		061311 MI	100	3.1	24.8	5.461	3.92	1:01					-		Default		novaservice
1.07		E061311 N	100	3.6	13.4	5.44	3.96	1:01					-		Default		novaservice
1.09		E061311 N	100	3.4	16.2	5.5	3.84	1:01					-		Default		novaservice
1.04	350	061311 MI	100	3.9	44.2	5.541	3.801	1:01					-		Default		novaservice
1	337	061311 MI	100	1.9	33.4	5.46	3.801	1:01					-		Default		novaservice
1.09		061311 MI	100	3.6	28	5.44	3.88	1:01					-		Default		novaservice
1.1		E061311 N	100	4.3	27.8	5.44	3.88	1:01					-		Default		novaservice
1.1		E061311 N	100	3.2	28.3	5.52	3.88	1:01					-		Default		novaservice

Figure 84

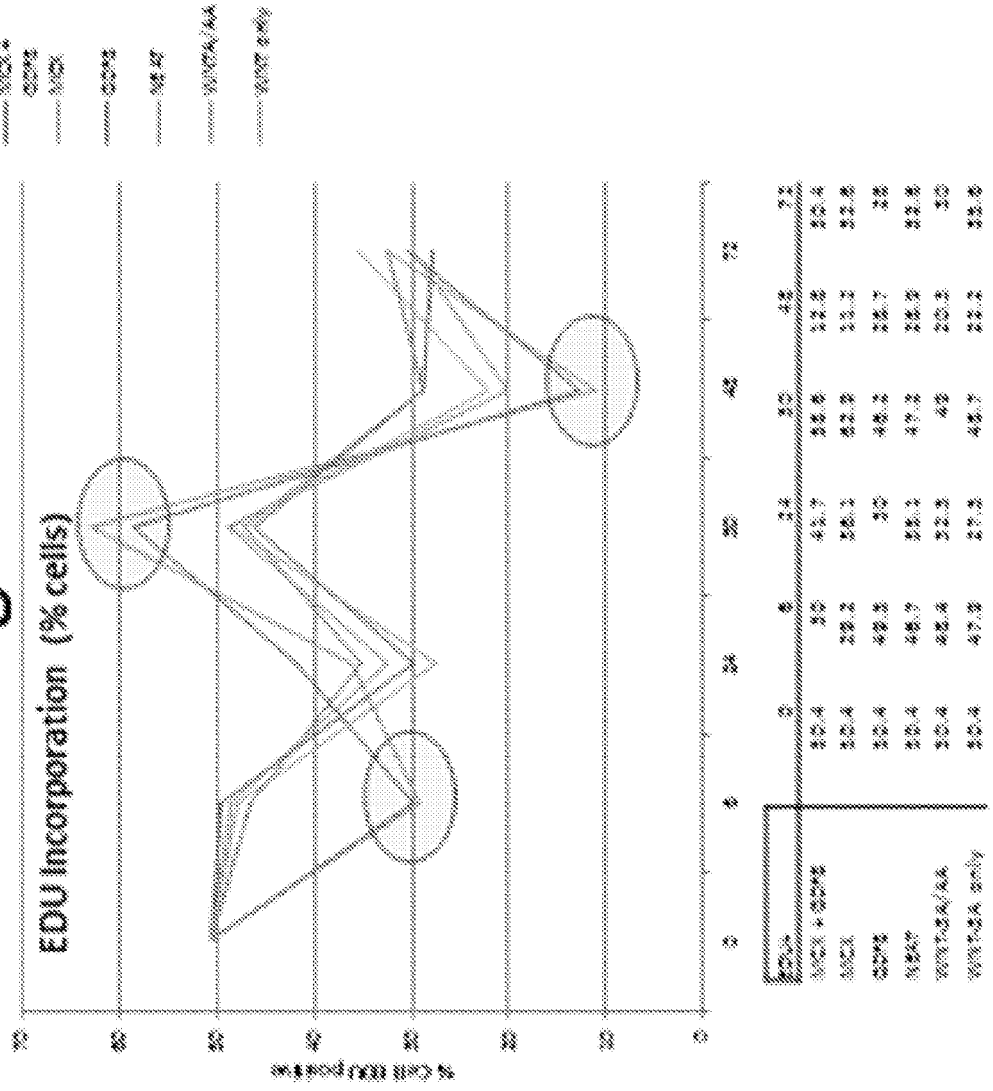


Figure 85

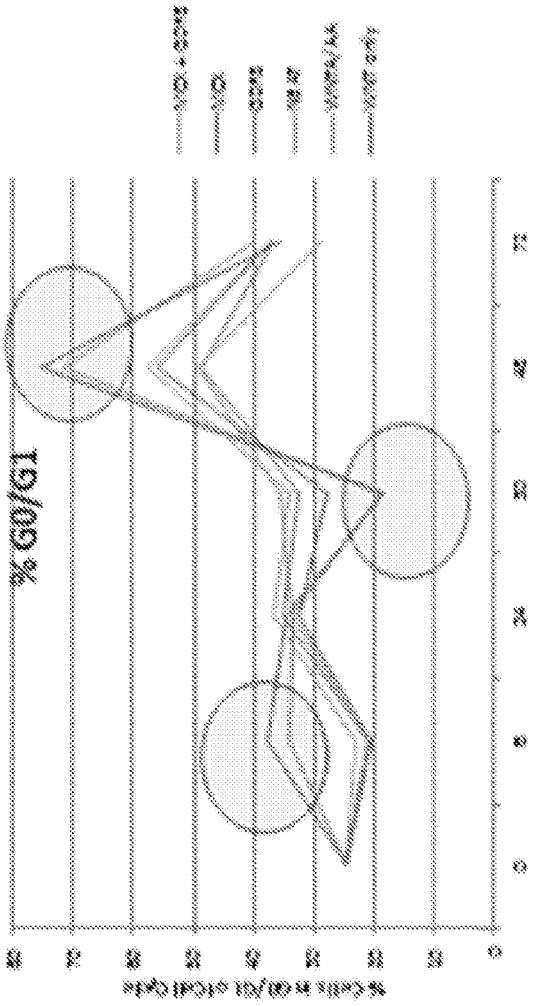


Figure 86

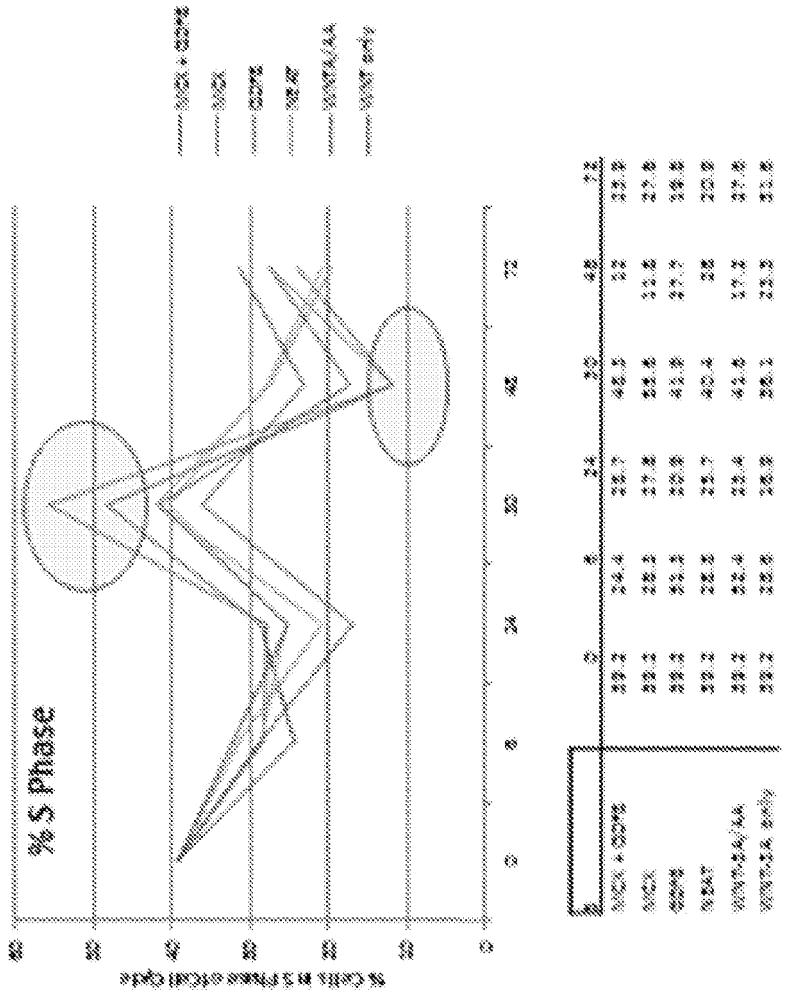


Figure 87

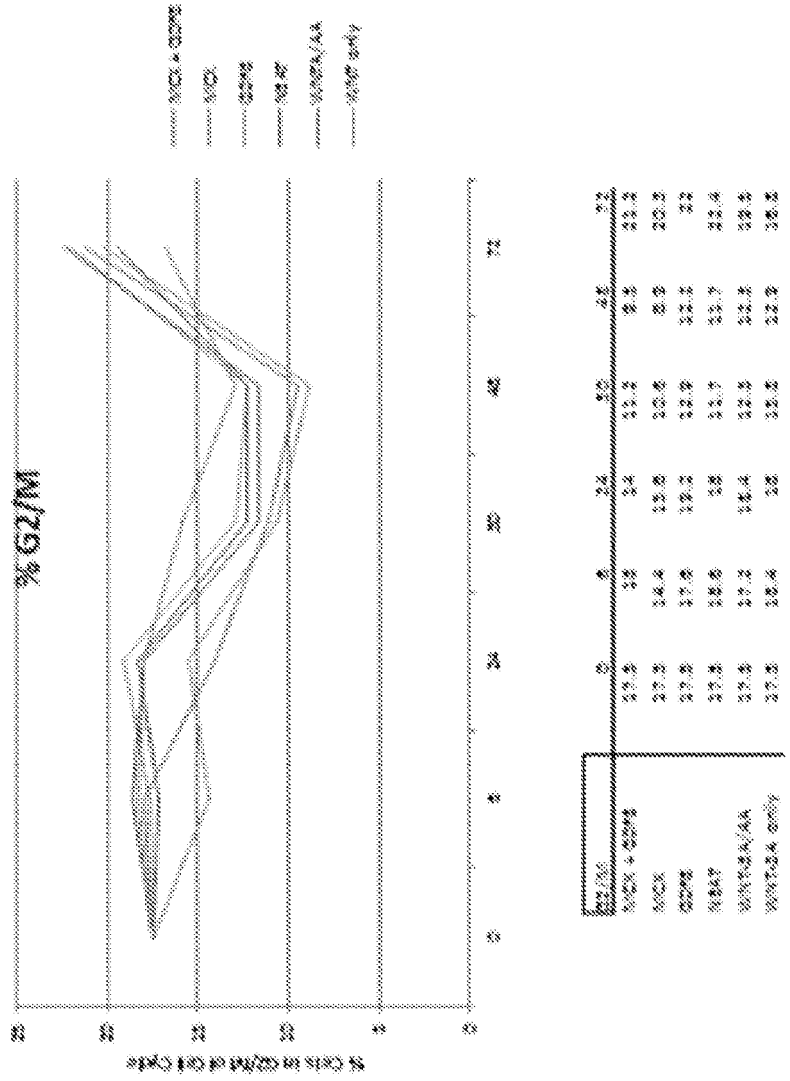


Figure 88 a

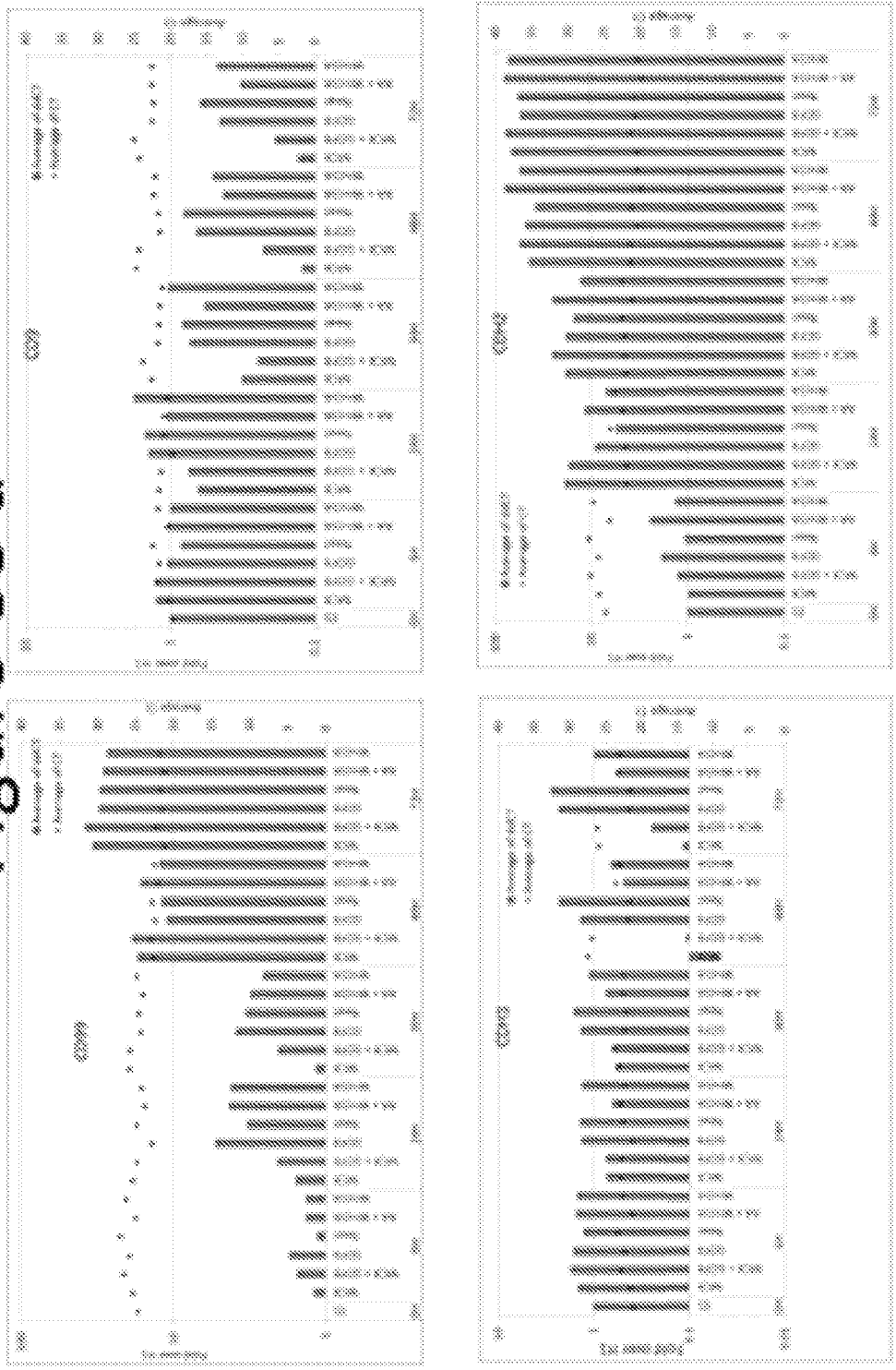


Figure 88 b

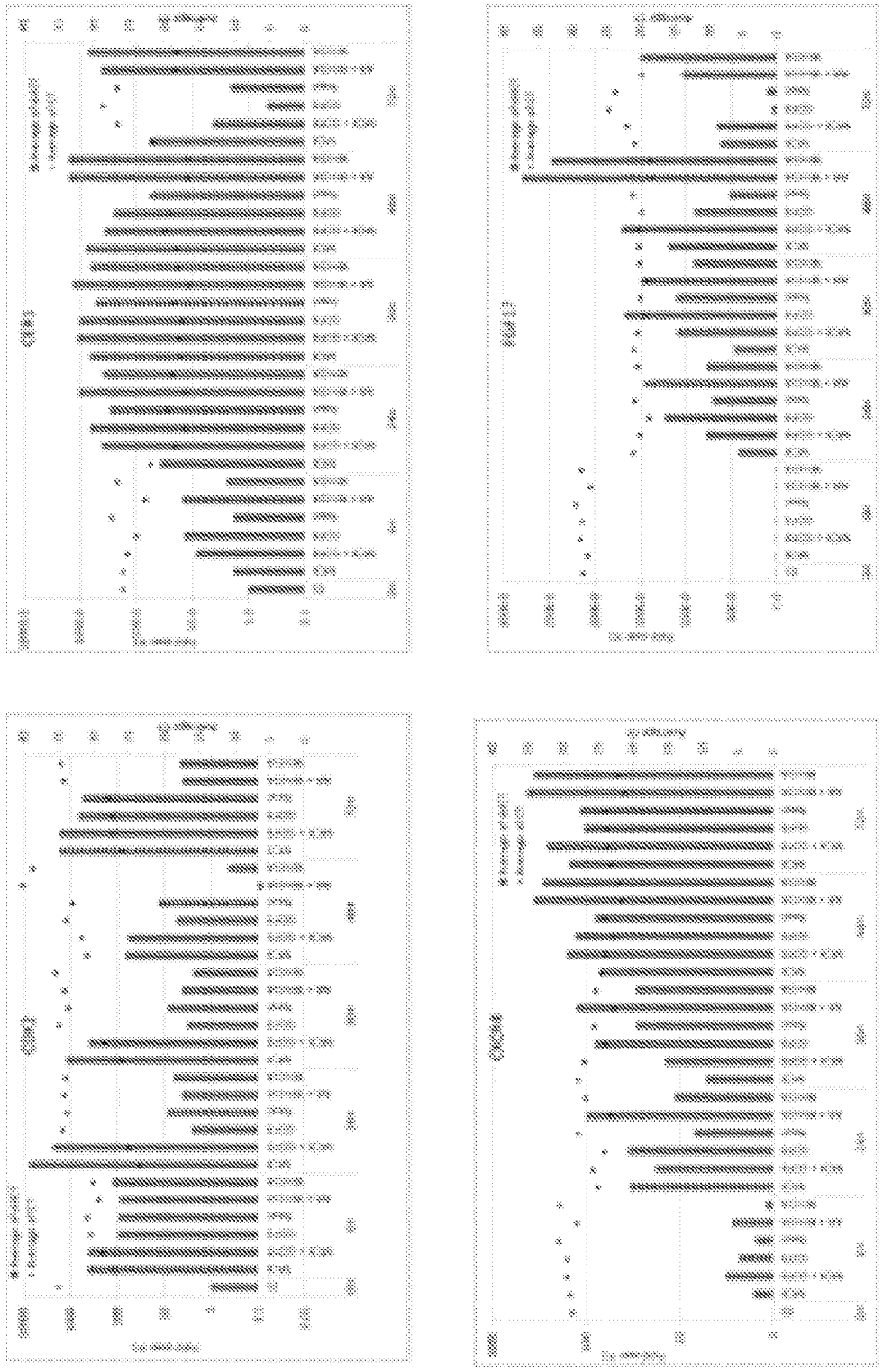


Figure 88 c

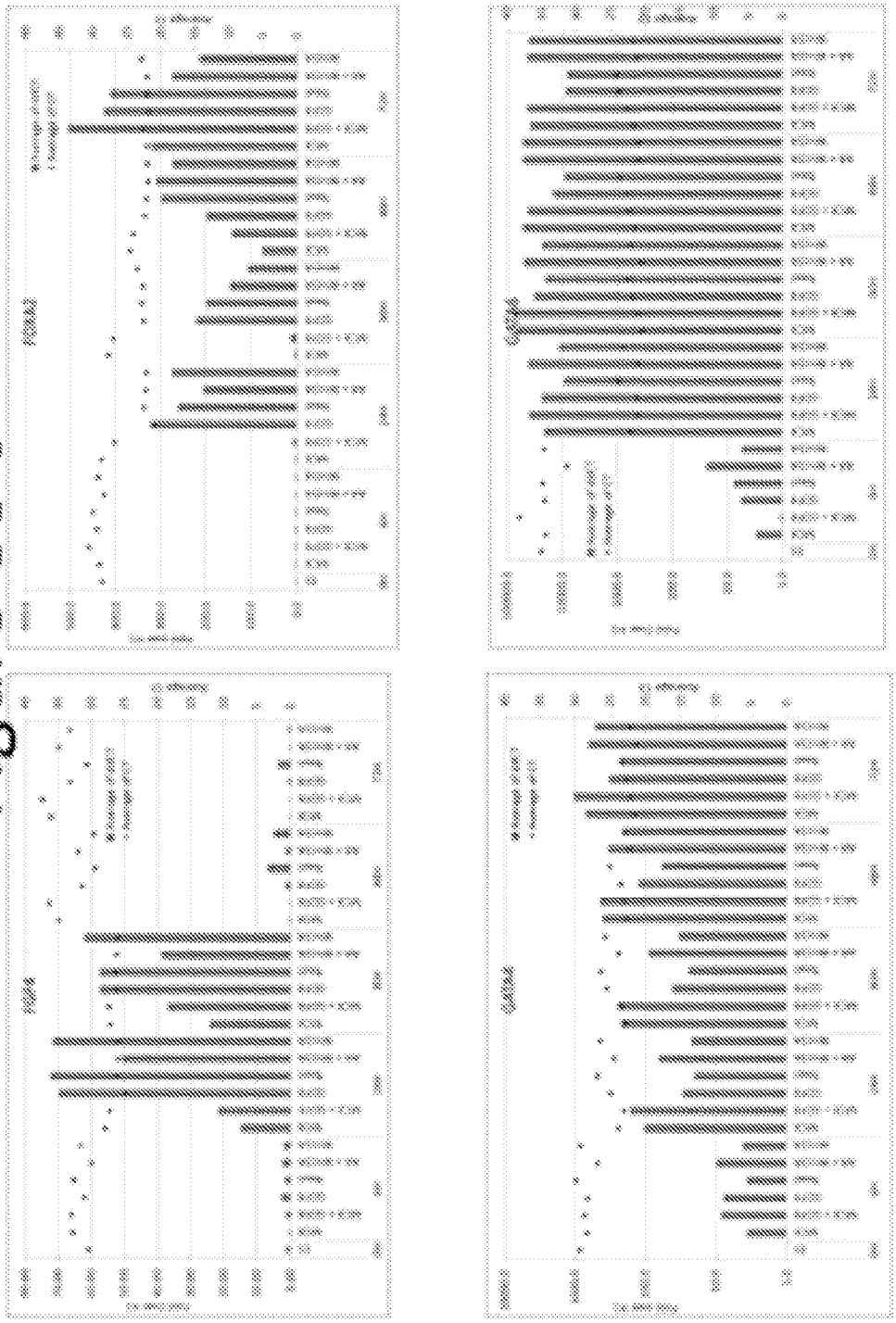


Figure 88 d

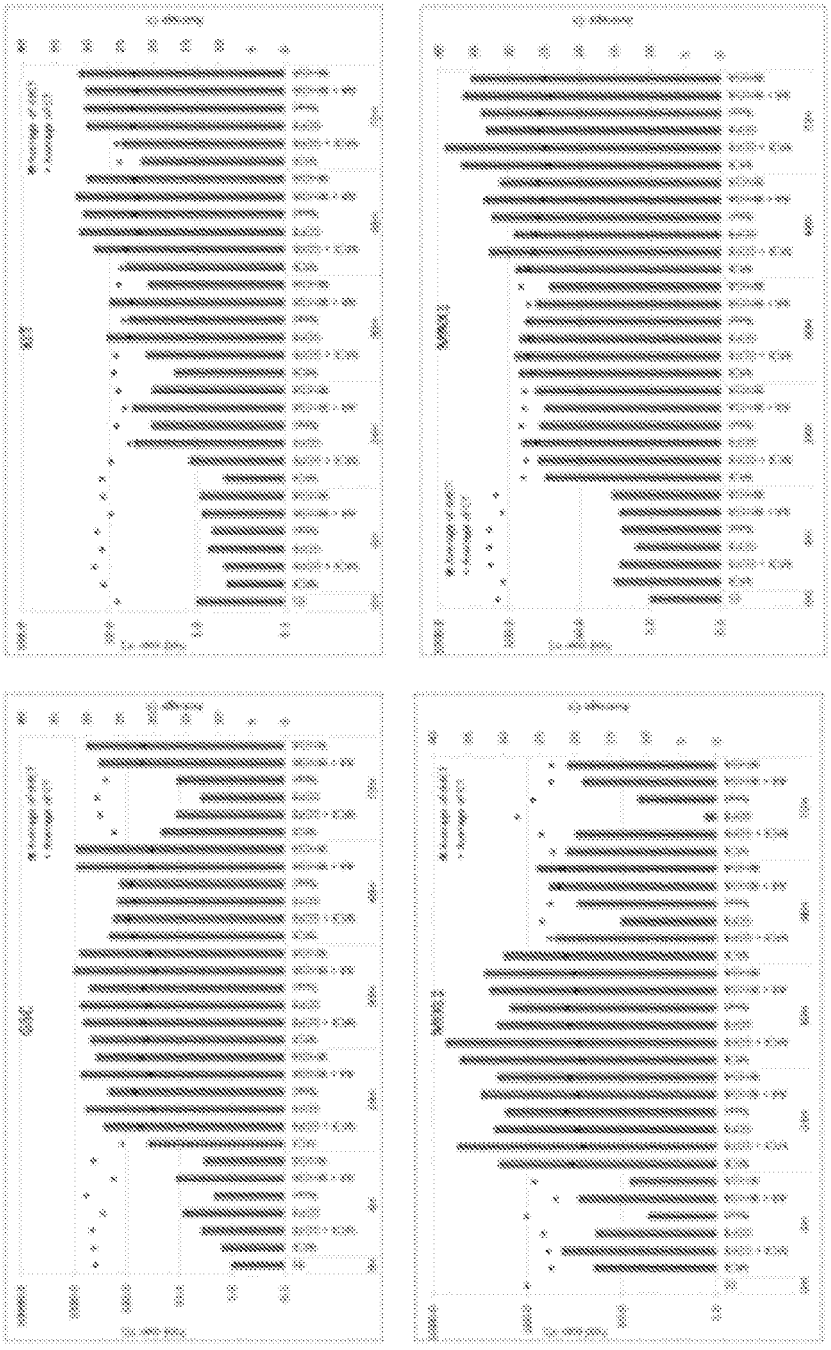


Figure 88e

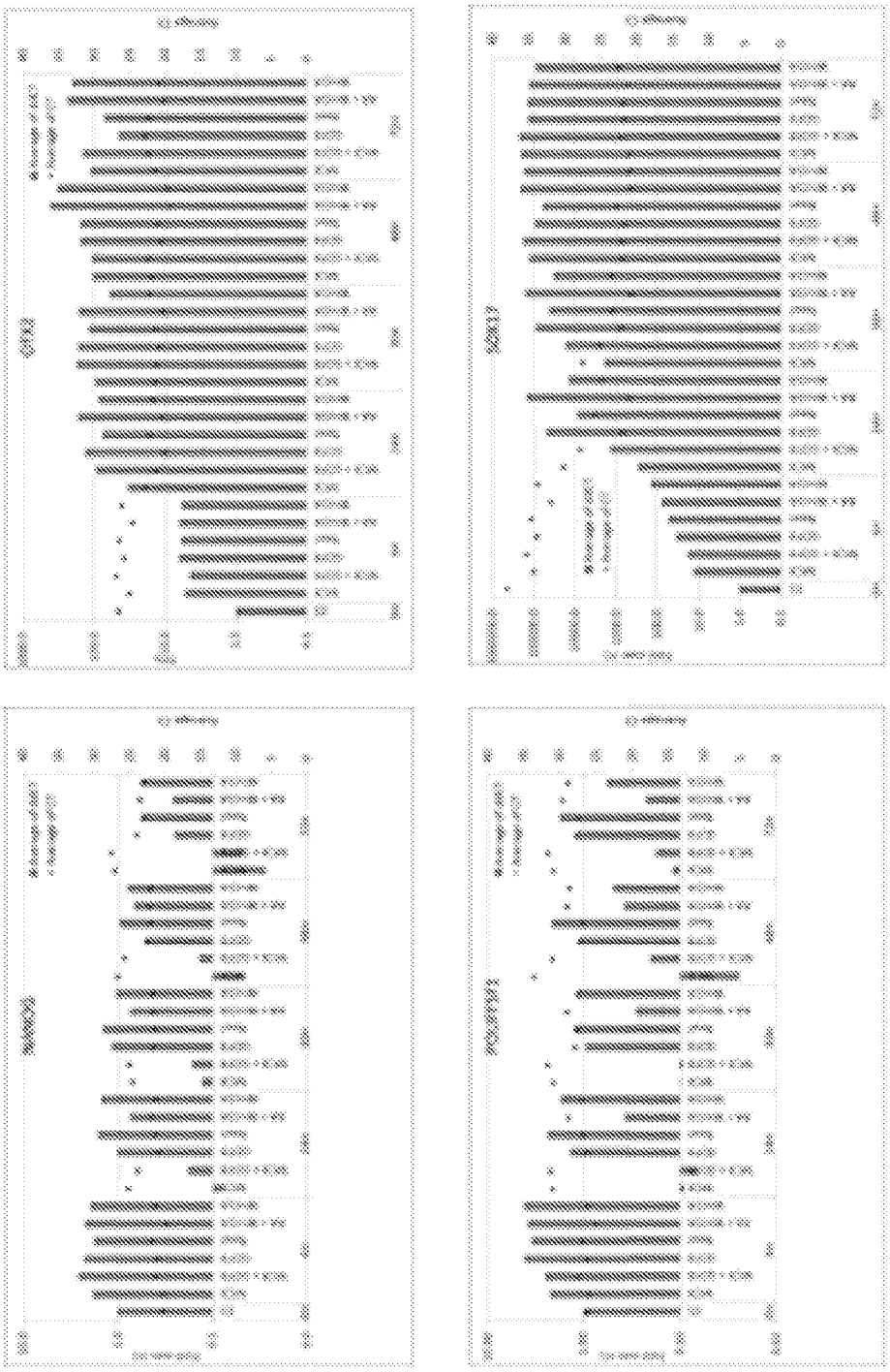


Figure 88f

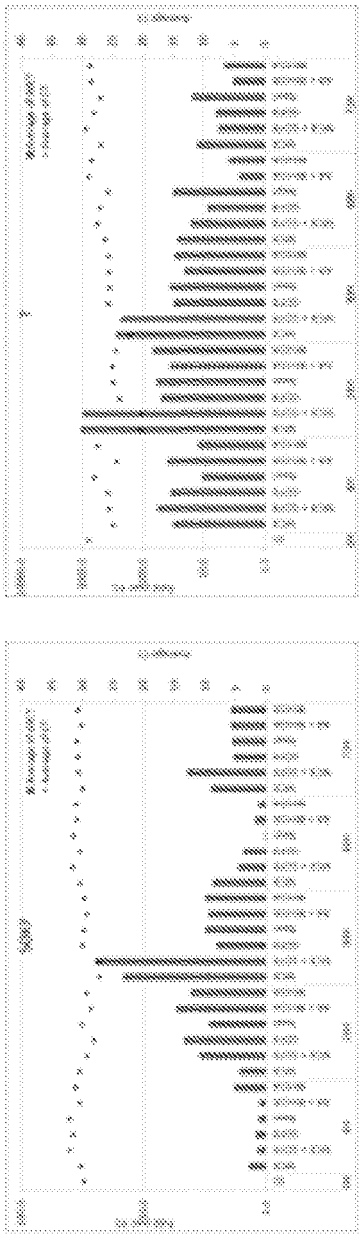


Figure 89

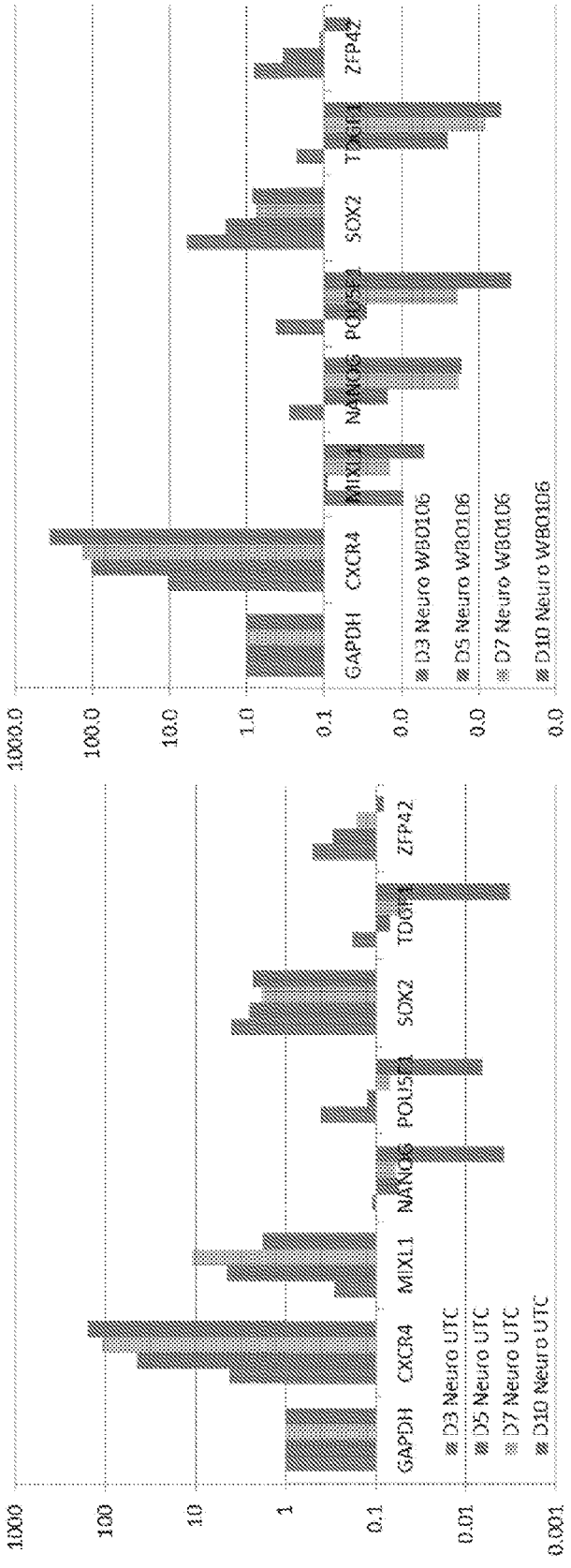

1000.0
100.0
10.0
1.0
0.1
0.0
GAPDH
CXCR4
SOX2
ZFP42
D3 Neuro WB0106
D5 Neuro WB0106
D7 Neuro WB0106
D10 Neuro WB0106
1000
100
10
1
0.1
0.01
0.001
GAPDH
CXCR4
MIXL1
SOX2
ZFP42
D3 Neuro UTC
D5 Neuro UTC
D7 Neuro UTC
D10 Neuro UTC

Figure 90

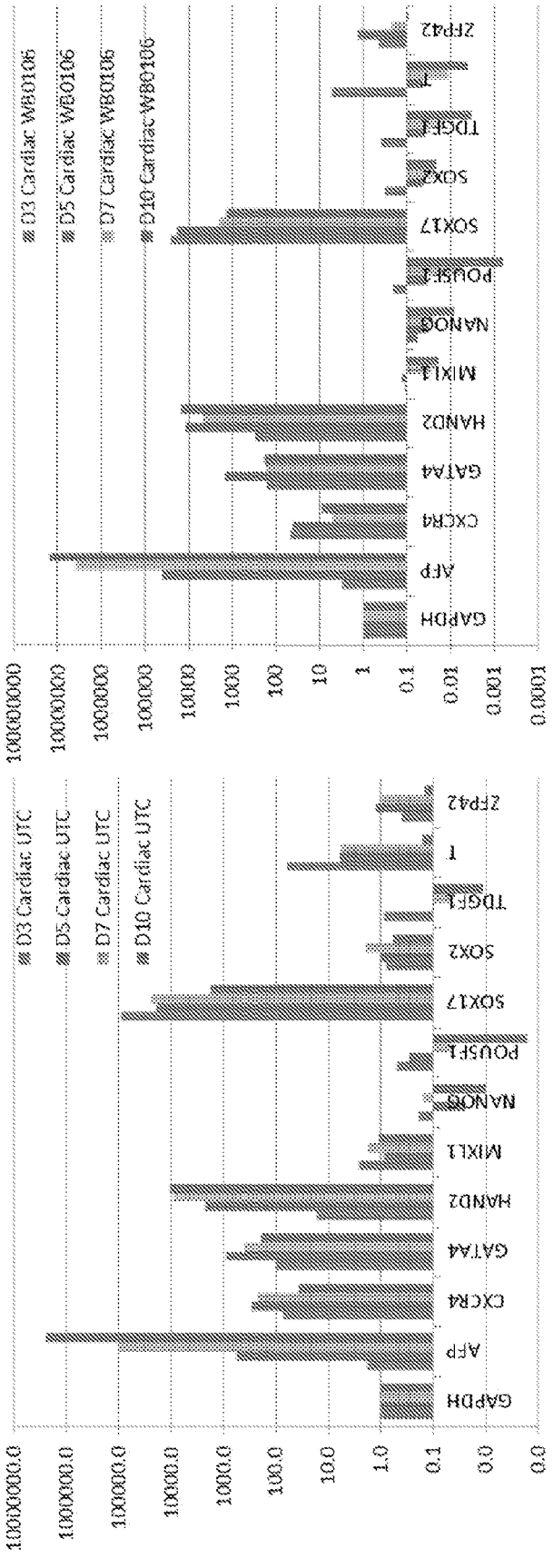

D3 Cardiac WB0106
D5 Cardiac WB0106
D7 Cardiac WB0106
D10 Cardiac WB0106
100000000
10000000
1000000
100000
10000
1000
100
10
1
0.1
0.01
0.001
0.0001
GAPDH
AFP
CXCR4
GATA4
HAND2
MIXL1
NANOG
POU5F1
SOX17
SOX2
TDGF1
T
ZFP42
D3 Cardiac UTC
D5 Cardiac UTC
D7 Cardiac UTC
D10 Cardiac UTC
100000000.0
10000000.0
1000000.0
100000.0
10000.0
1000.0
100.0
10.0
1.0
0.1
0.0
0.0

Figure 91

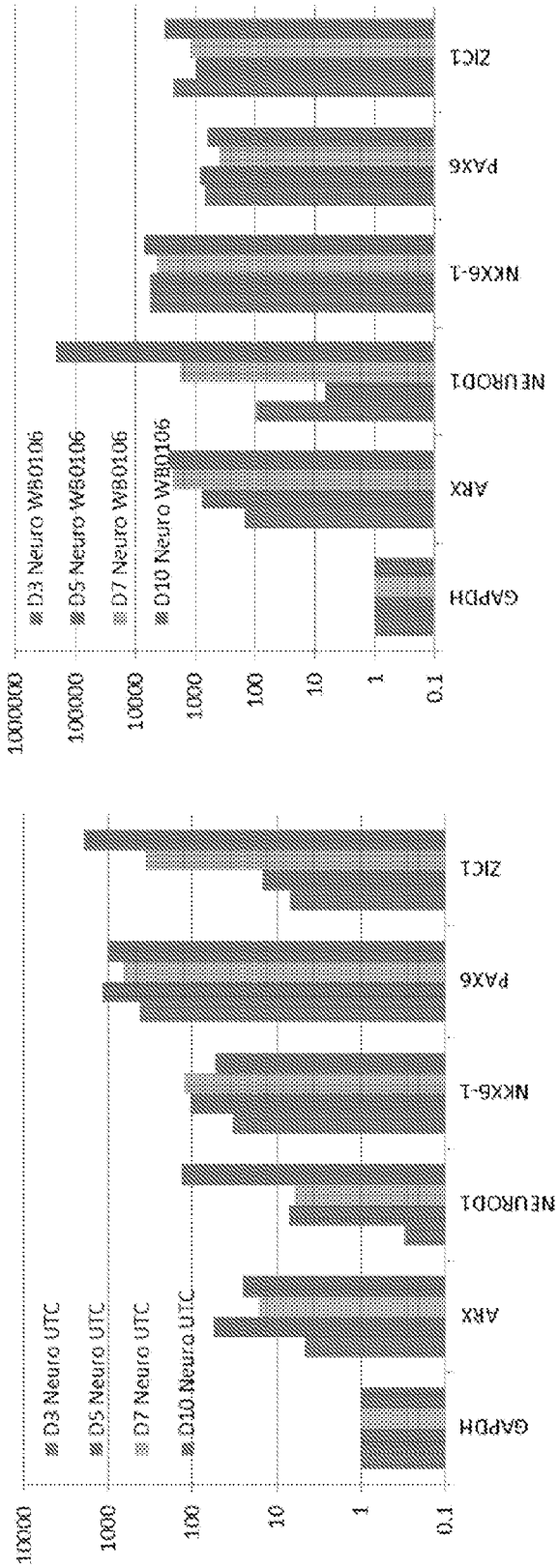

D3 Neuro WB0106
D5 Neuro WB0106
D7 Neuro WB0106
D10 Neuro WB0106
D3 Neuro UTC
D5 Neuro UTC
D7 Neuro UTC
D10 Neuro UTC
GAPDH
ARX
NEUROD1
NKX6-1
PAX6
ZIC1
100000
10000
1000
100
10
1
0.1

Figure 92

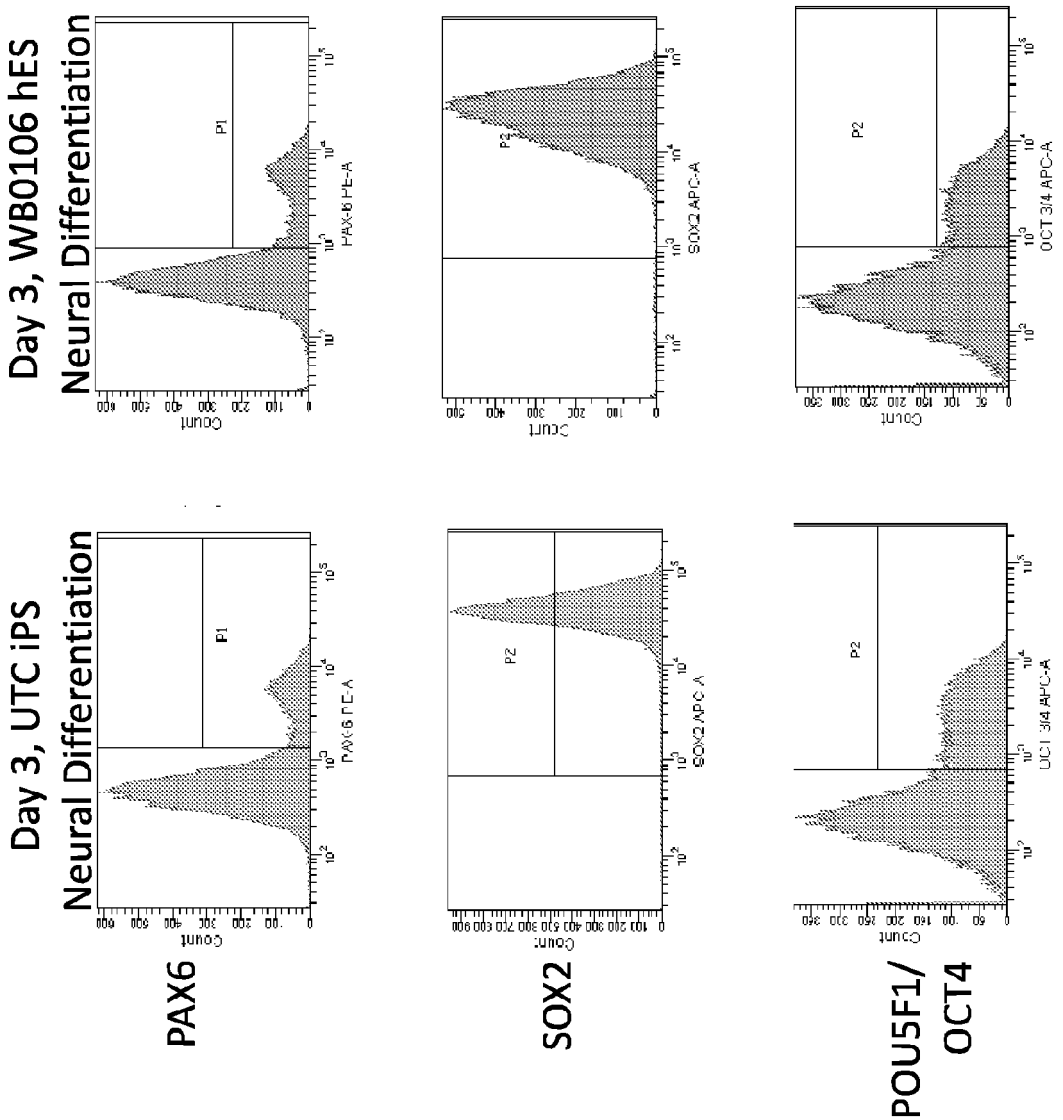

Day 3, WB0106 hES
Neural Differentiation
Day 3, UTC iPS
Neural Differentiation
PAX6
SOX2
POU5F1/
OCT4
P1
P2
Count
PAX6 PE-A
SOX2 APC-A
OCT 3/4 APC-A

Figure 93

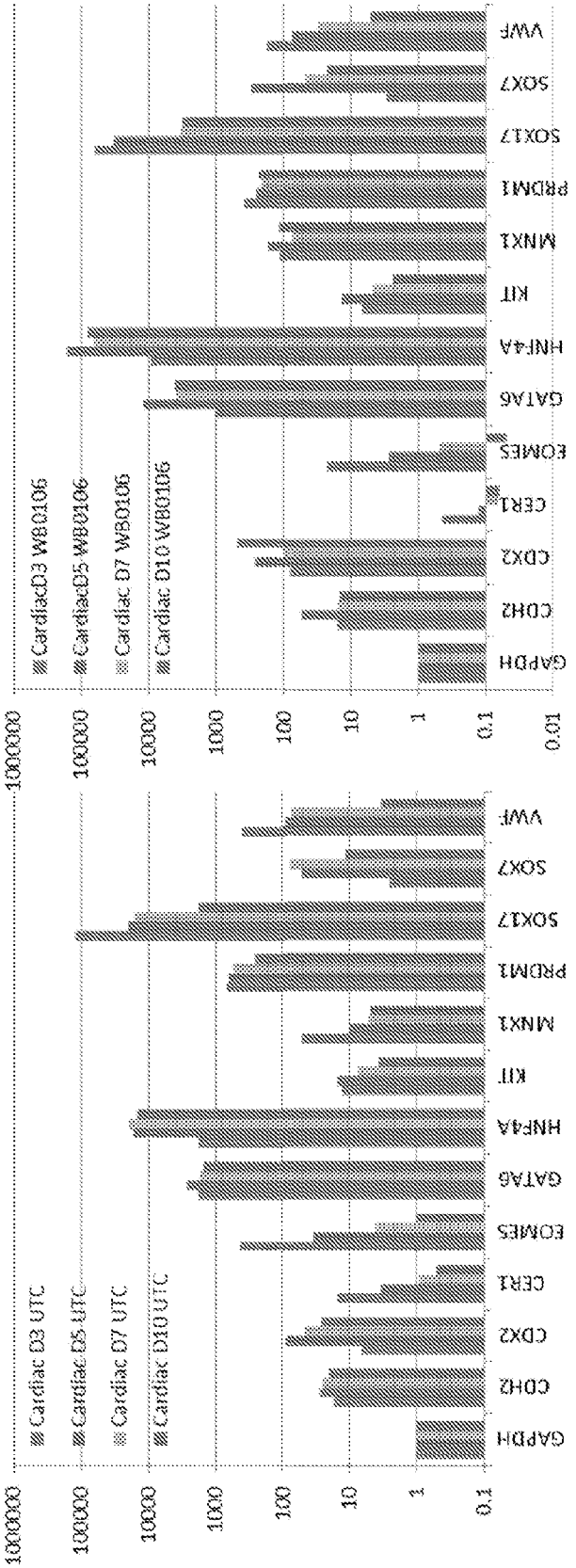
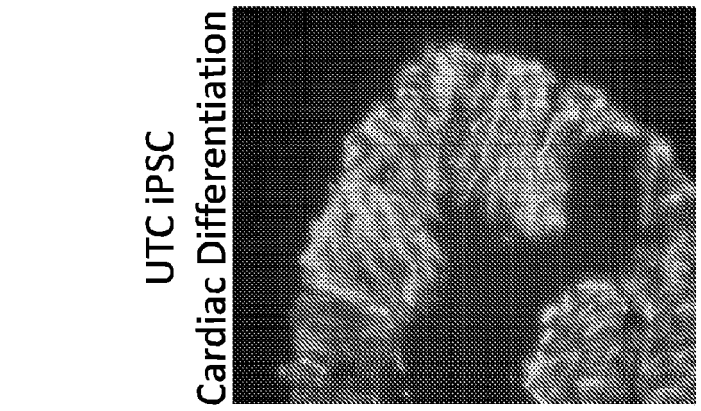

Cardiac D3 UTC
Cardiac D5 UTC
Cardiac D7 UTC
Cardiac D10 UTC
CardiacD3 WB0106
CardiacD5 WB0106
Cardiac D7 WB0106
Cardiac D10 WB0106
1000000
100000
10000
1000
100
10
1
0.1
0.01
GAPDH
CDH2
CDX2
CER1
EOMES
GATA6
HNF4A
KIT
MNX1
PRDM1
SOX17
SOX7
VWF

Figure 94


UTC iPSC
Cardiac Differentiation
Day 10

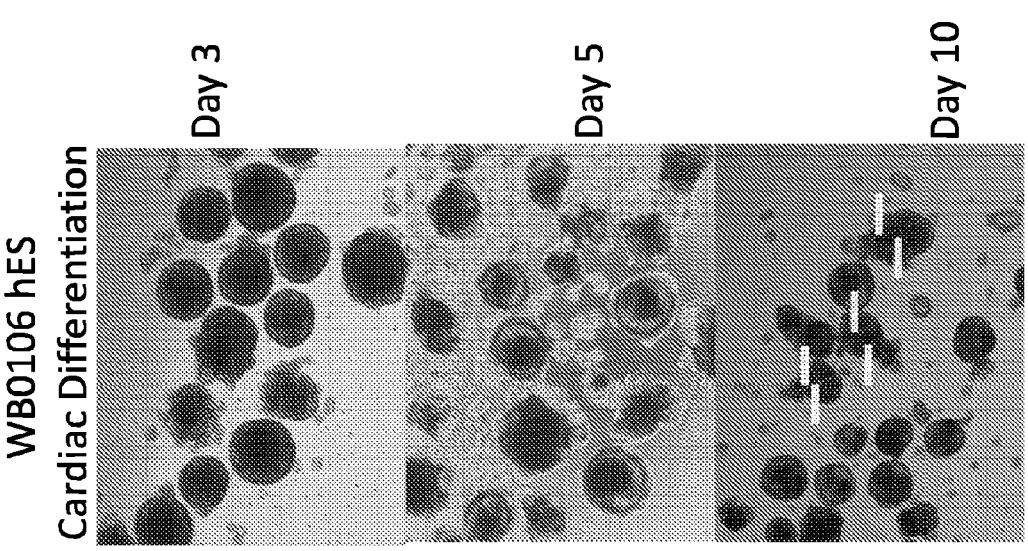
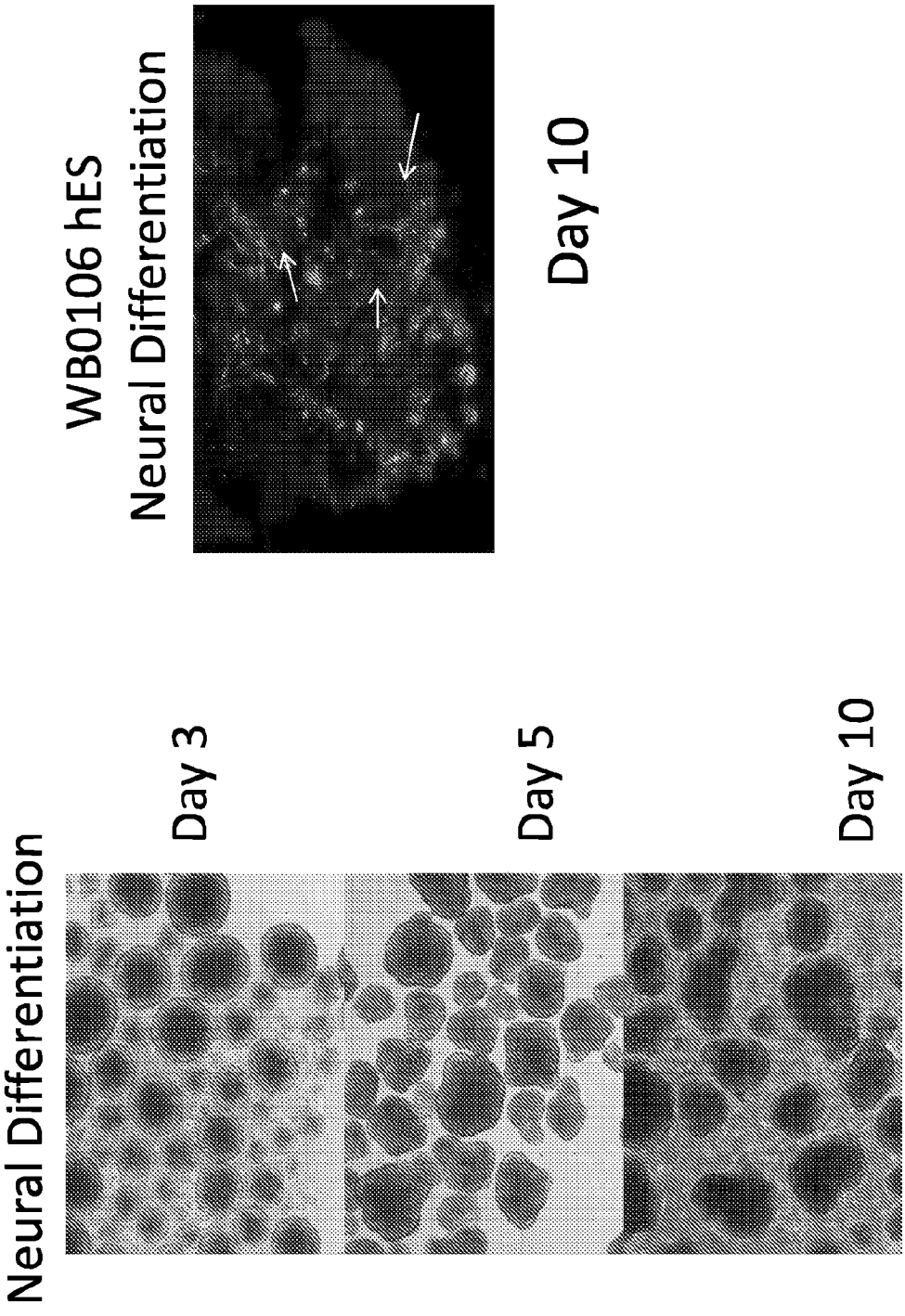

WB0106 hES
Cardiac Differentiation
Day 3
Day 5
Day 10

Figure 95


UTC iPS
Neural Differentiation
Day 3
Day 5
Day 10
WB0106 hES
Neural Differentiation
Day 10