FIGURE 1A

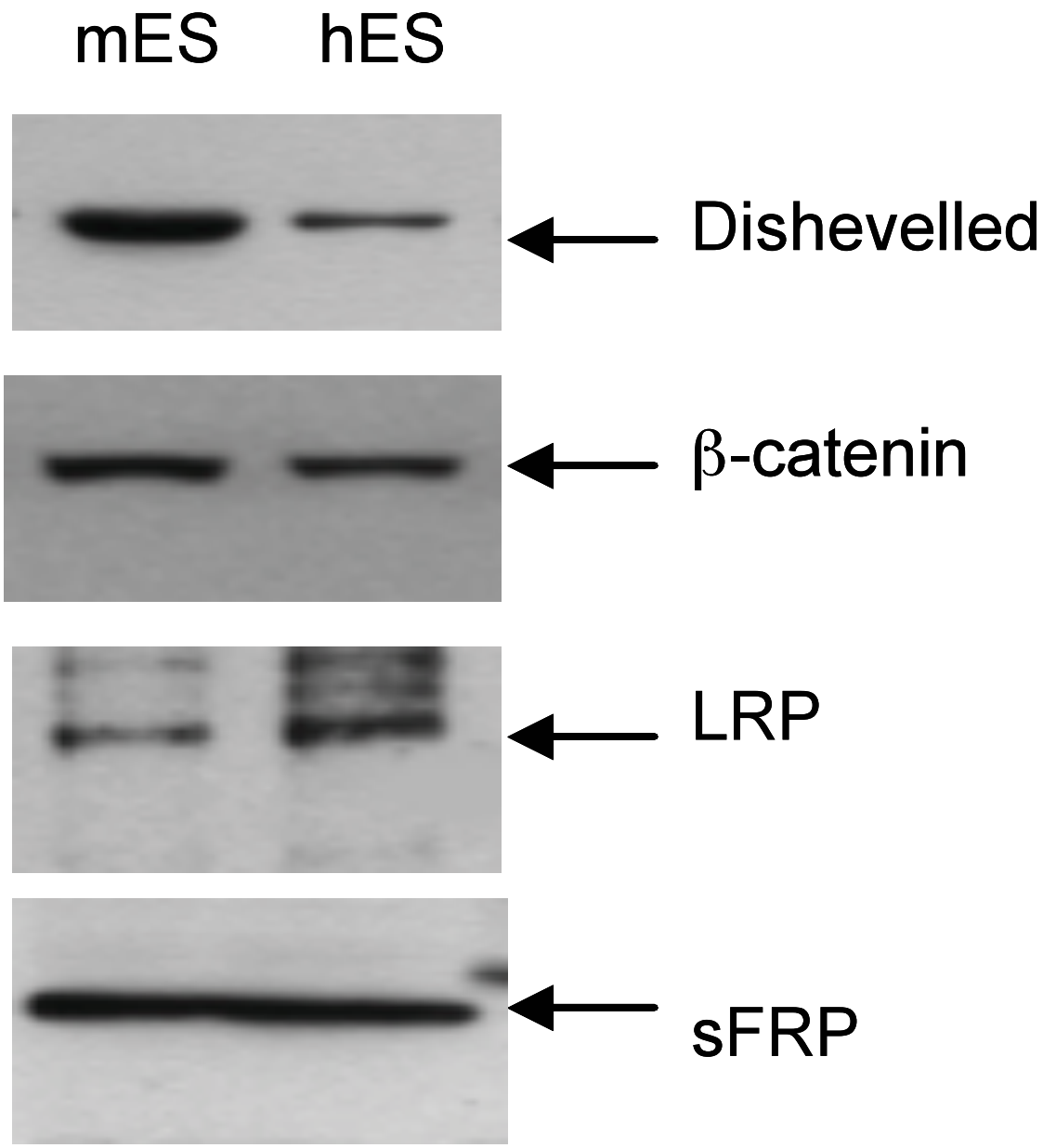


FIGURE 1B

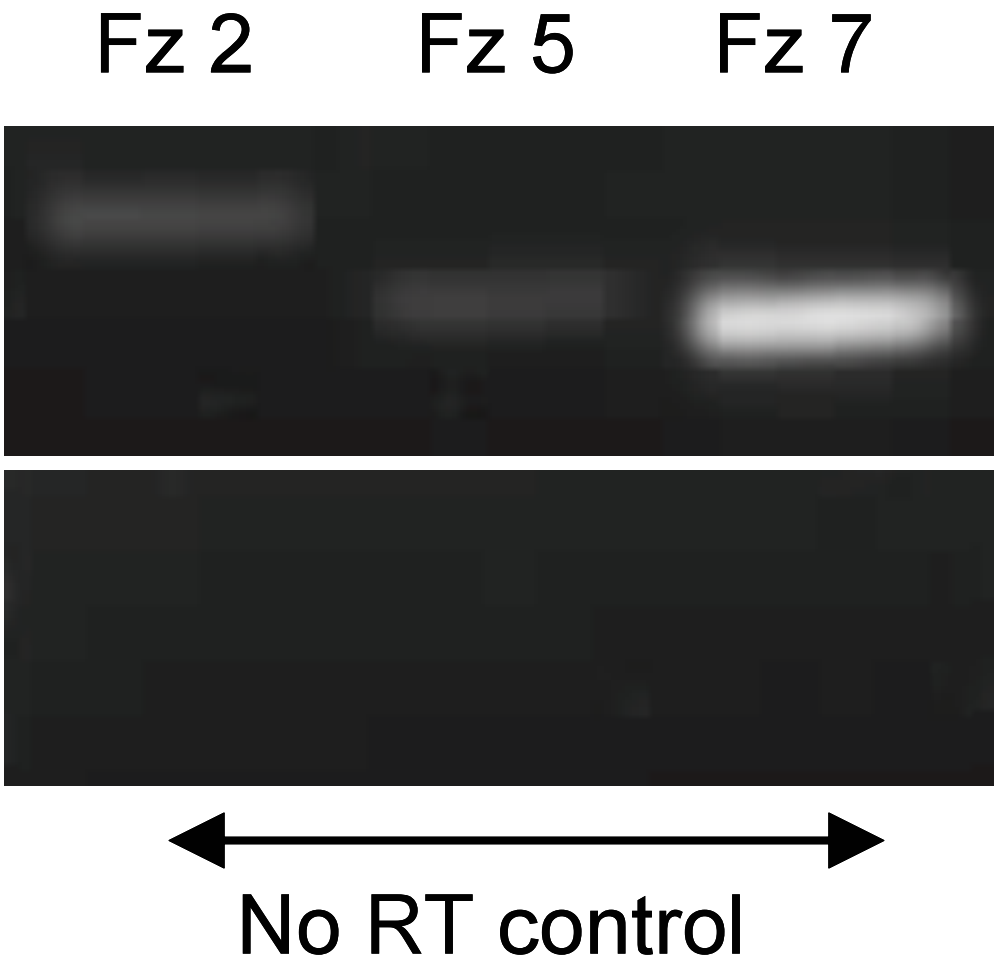


FIGURE 1C

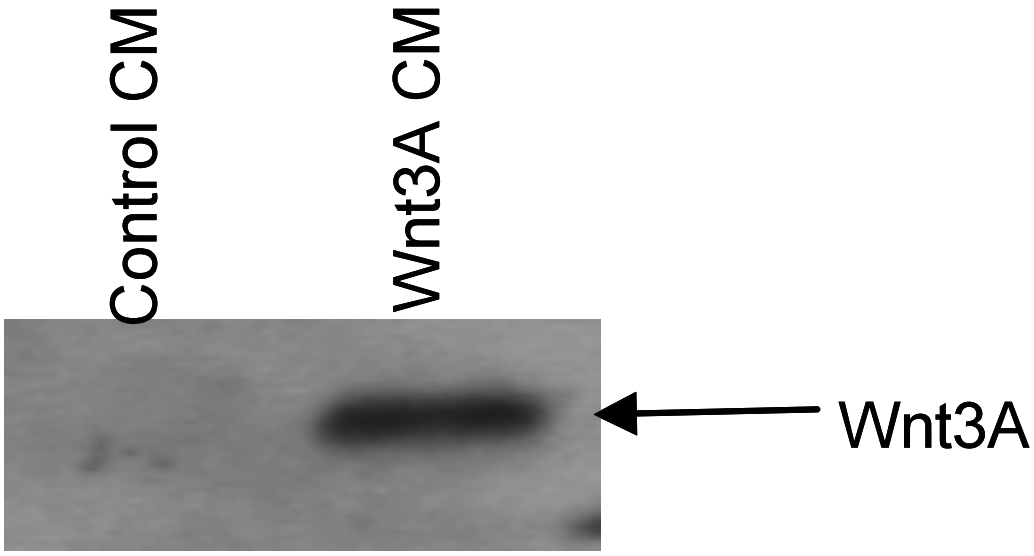


FIGURE 1D

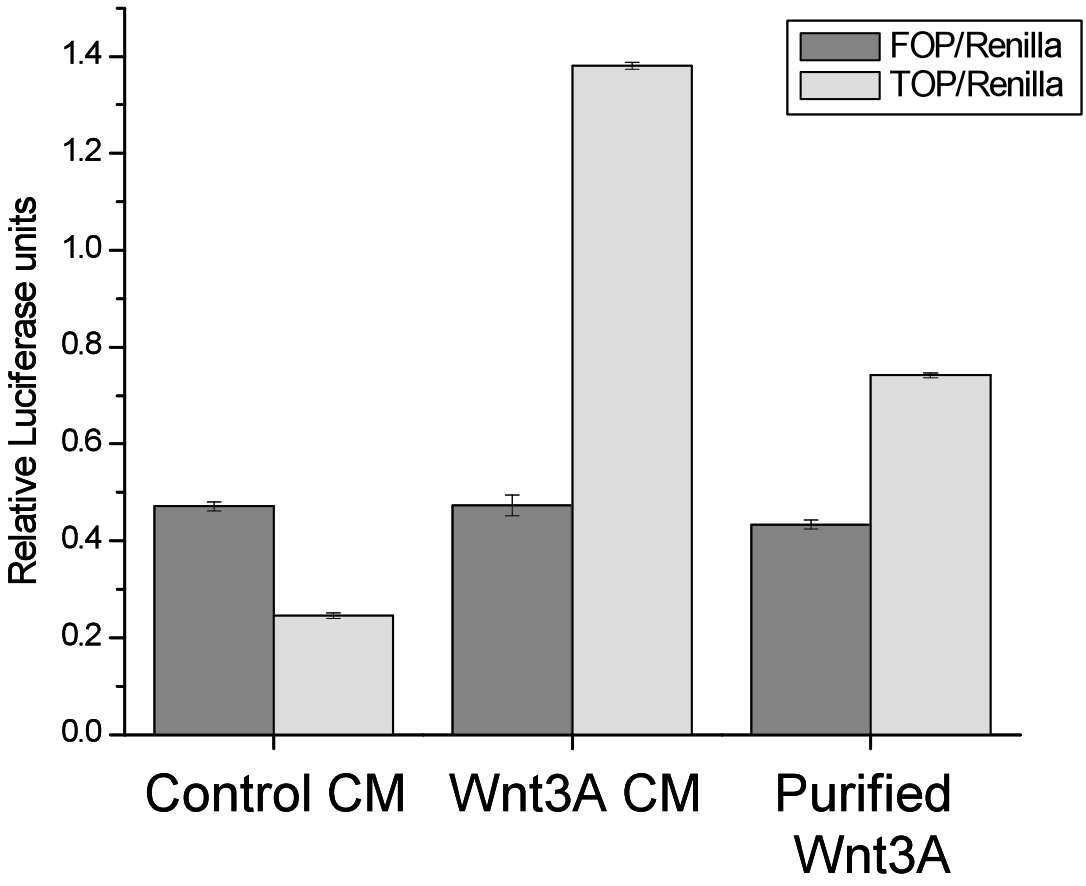

FOP/Renilla
TOP/Renilla
Relative Luciferase units
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
Control CM
Wnt3A CM
Purified Wnt3A

FIGURE 1E

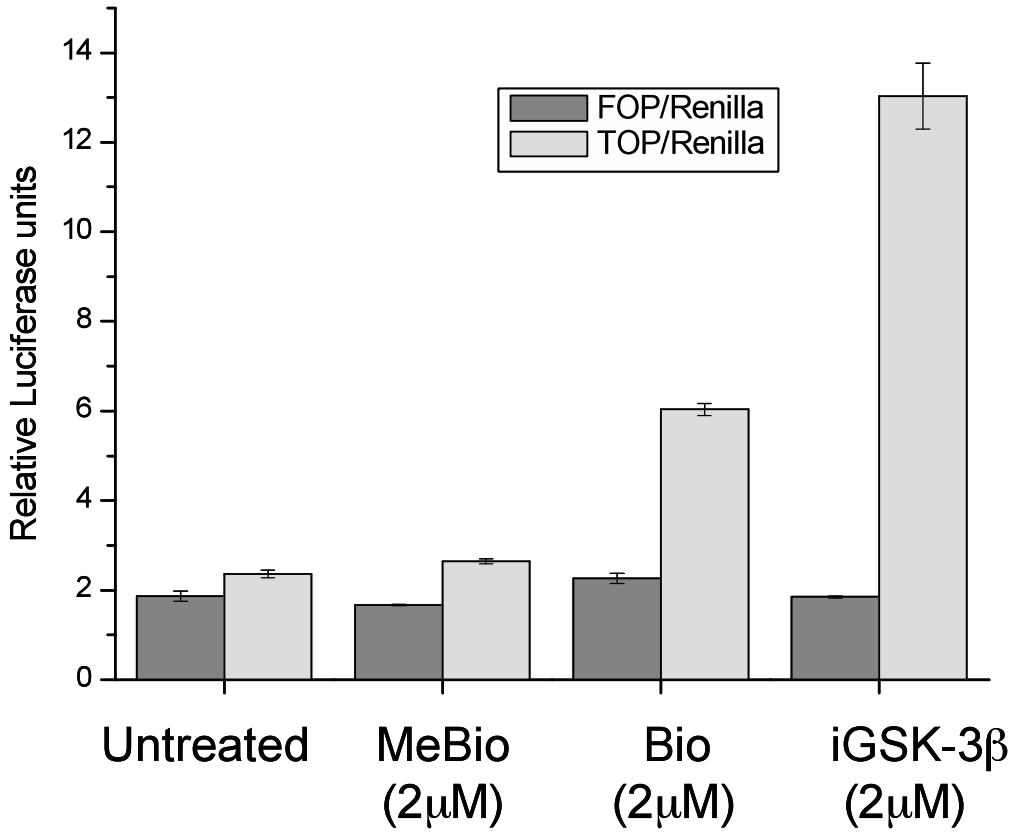
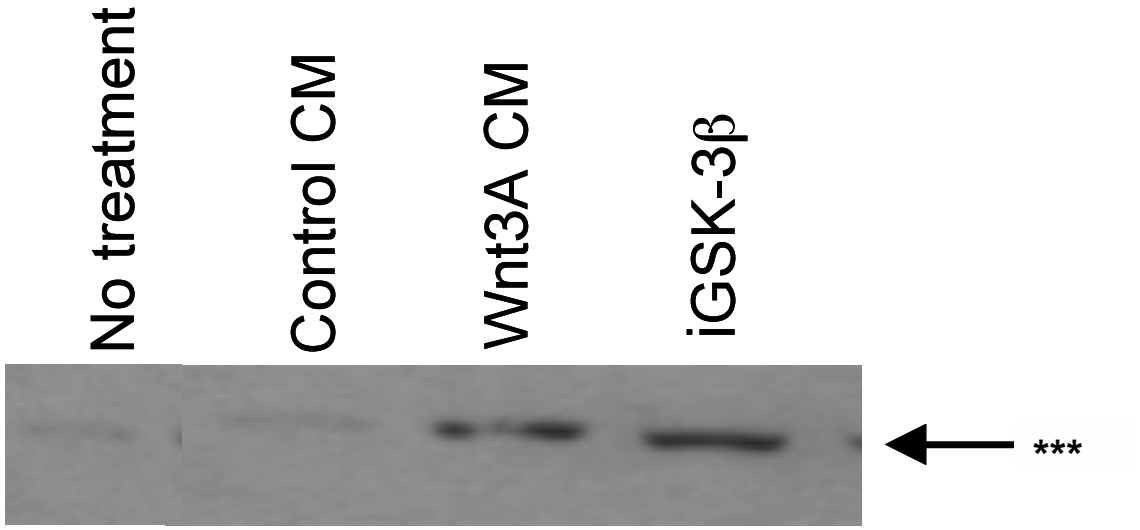

Relative Luciferase units
0
2
4
6
8
10
12
14
FOP/Renilla
TOP/Renilla
Untreated
MeBio (2μM)
Bio (2μM)
iGSK-3β (2μM)

FIGURE 1F



*** Active β-catenin

FIGURE 1G

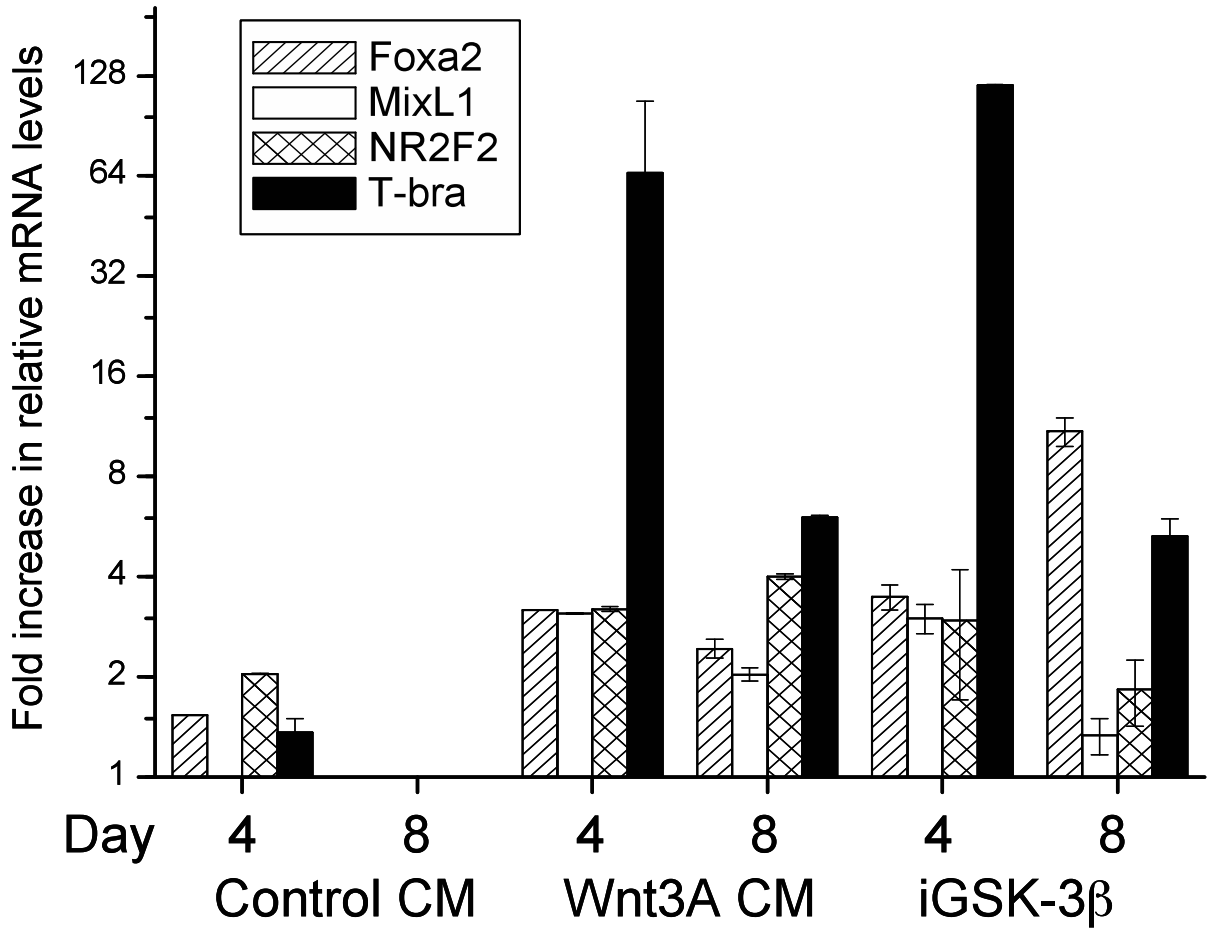

Foxa2
MixL1
NR2F2
T-bra
Fold increase in relative mRNA levels
128
64
32
16
8
4
2
1
Day
4
8
4
8
4
8
Control CM
Wnt3A CM
iGSK-3β

FIGURE 2A

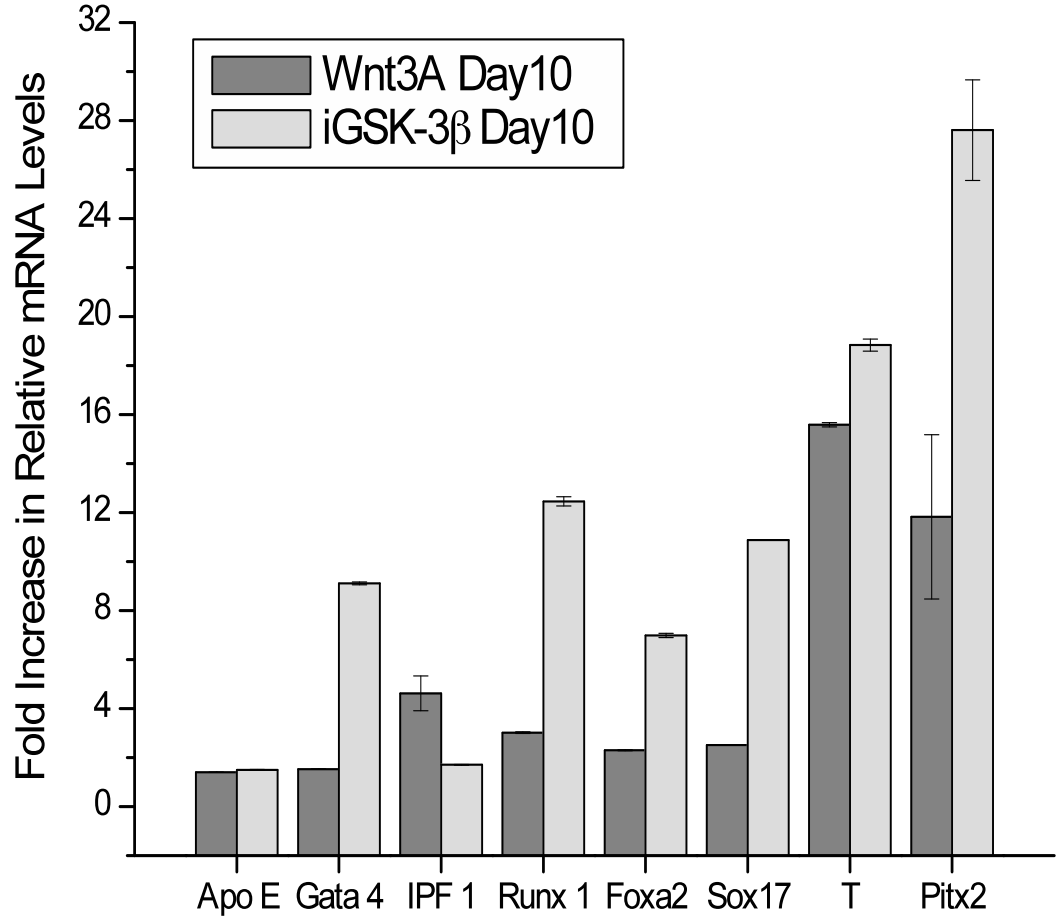

Fold Increase in Relative mRNA Levels
32
28
24
20
16
12
8
4
0
Wnt3A Day10
iGSK-3β Day10
Apo E
Gata 4
IPF 1
Runx 1
Foxa2
Sox17
T
Pitx2

FIGURE 2B

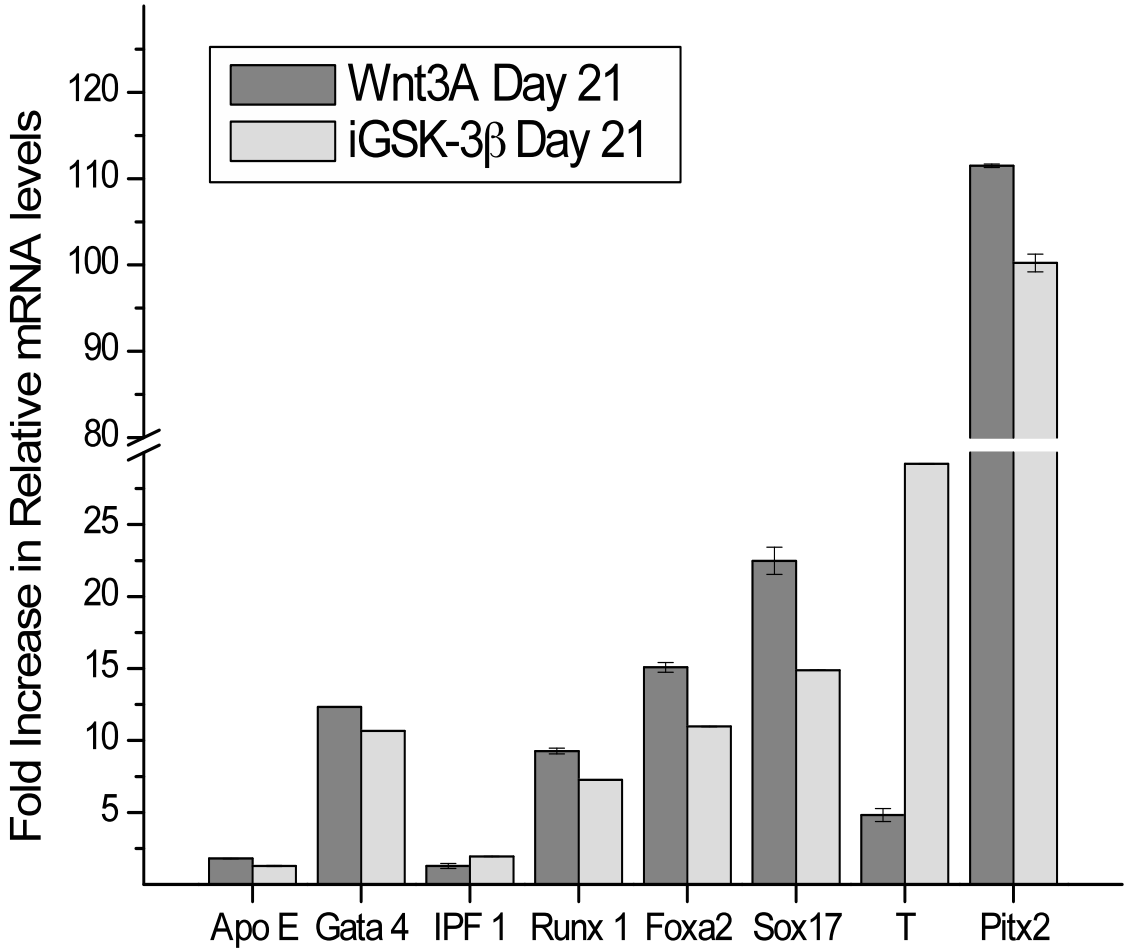

Wnt3A Day 21
iGSK-3β Day 21
Fold Increase in Relative mRNA levels
120
110
100
90
80
25
20
15
10
5
Apo E
Gata 4
IPF 1
Runx 1
Foxa2
Sox17
T
Pitx2

FIGURE 2C

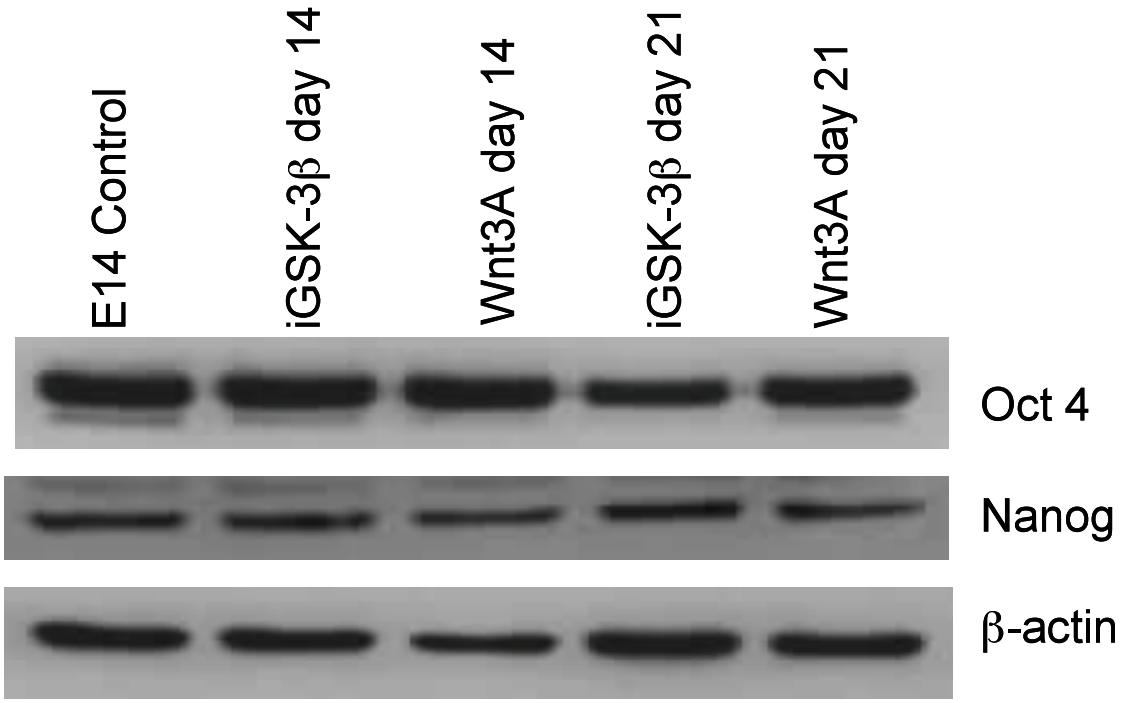
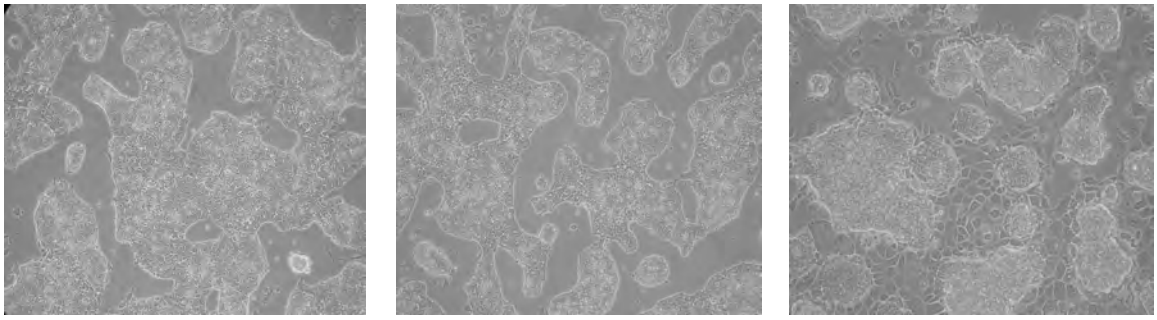

E14 Control
iGSK-3β day 14
Wnt3A day 14
iGSK-3β day 21
Wnt3A day 21
Oct 4
Nanog
β-actin

FIGURE 2D

E14 Control (Day14) E14 + Wnt3A (Day 14) E14 + iGSK-3β (Day 14)



E14 Control (Day14) E14 + Wnt3A (Day 14) E14 + 1μM iGSK-3β (Day 14)

FIGURE 3A

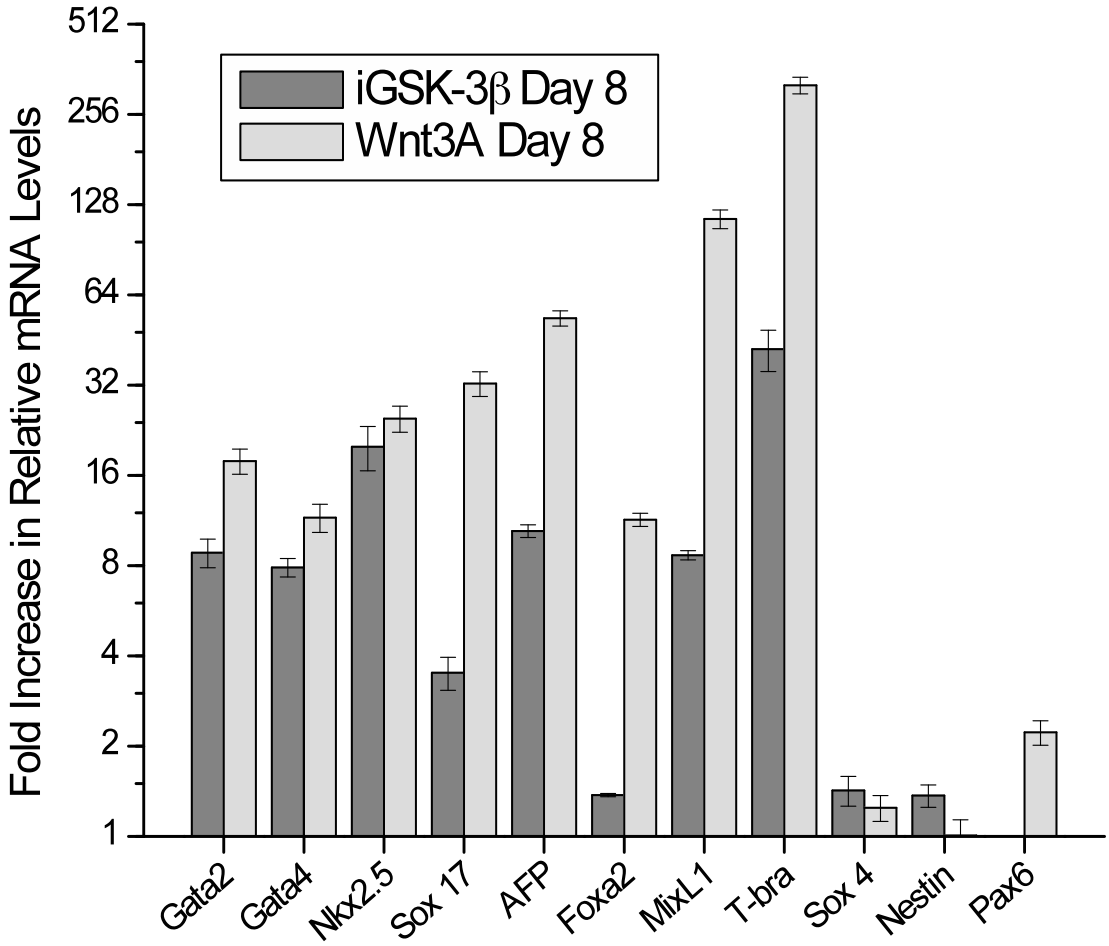

Fold Increase in Relative mRNA Levels
512
256
128
64
32
16
8
4
2
1
iGSK-3β Day 8
Wnt3A Day 8
Gata2
Gata4
Nkx2.5
Sox 17
AFP
Foxa2
MixL1
T-bra
Sox 4
Nestin
Pax6

FIGURE 3B

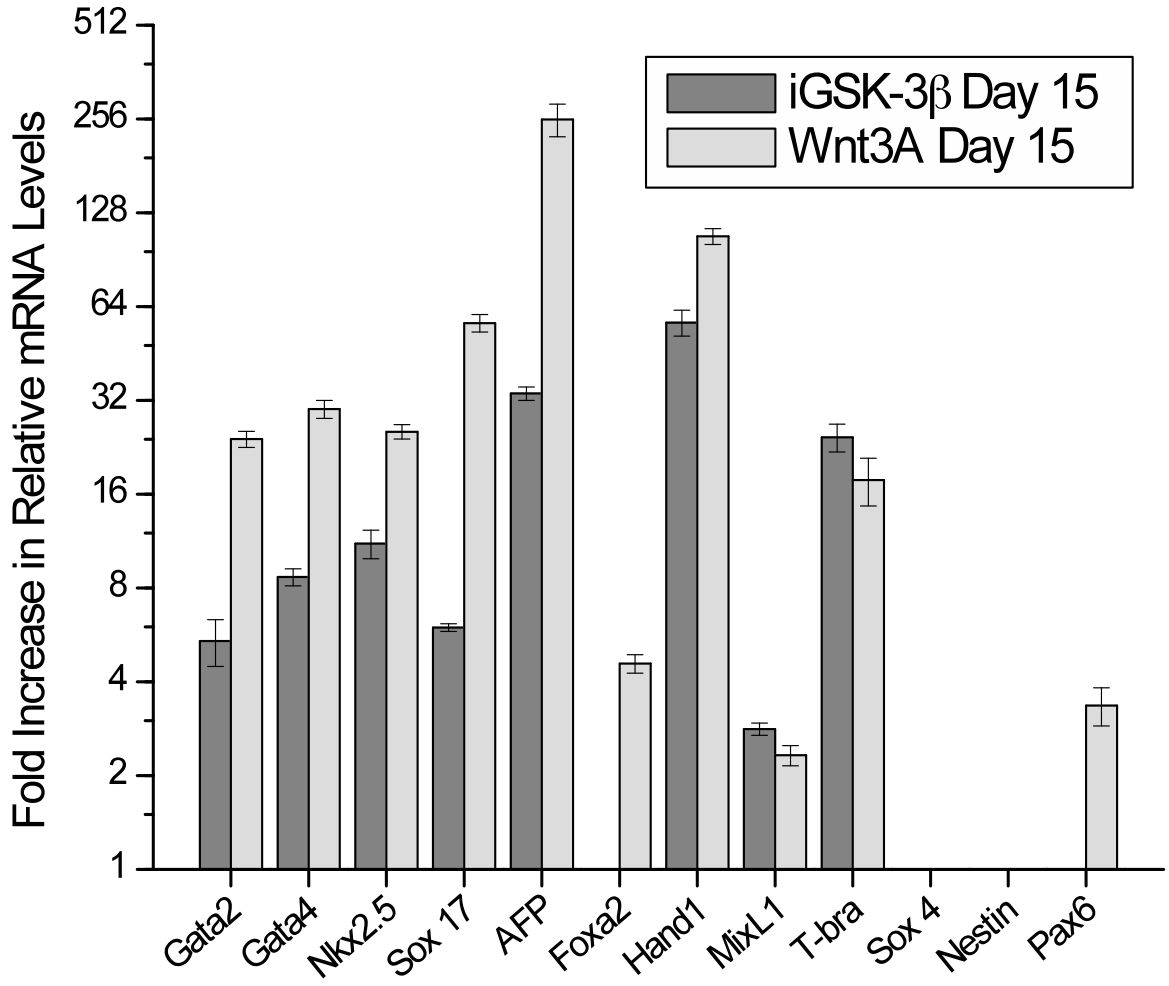

Fold Increase in Relative mRNA Levels
512
256
128
64
32
16
8
4
2
1
iGSK-3β Day 15
Wnt3A Day 15
Gata2
Gata4
Nkx2.5
Sox 17
AFP
Foxa2
Hand1
MixL1
T-bra
Sox 4
Nestin
Pax6

FIGURE 3C

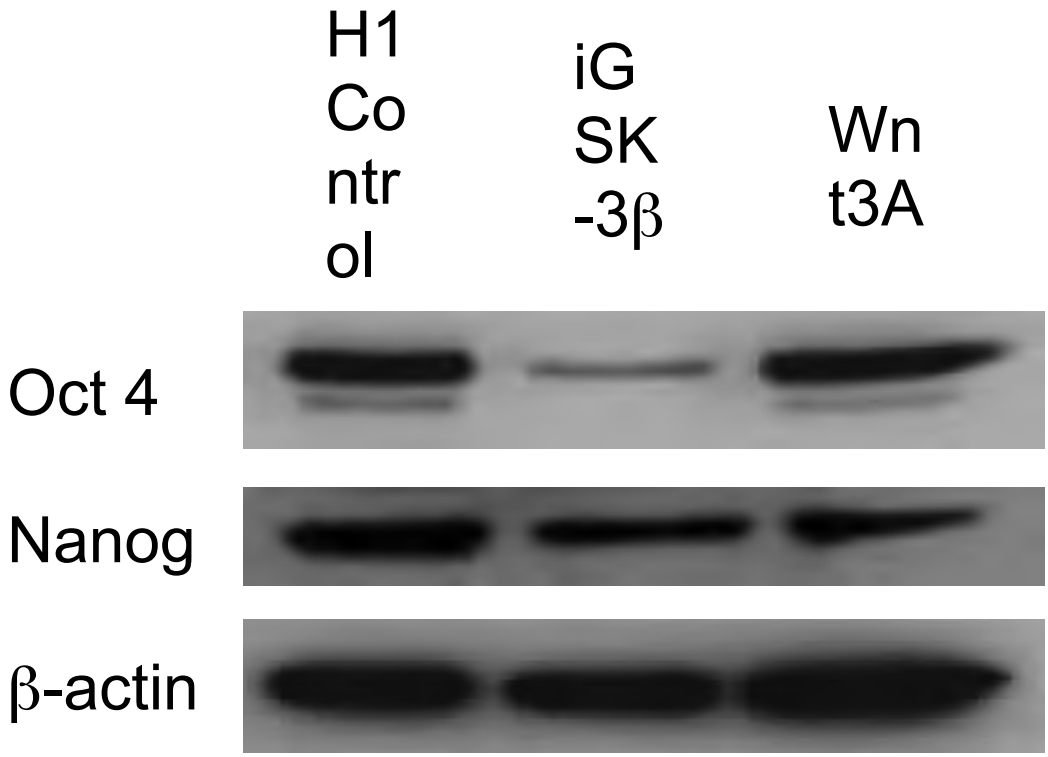
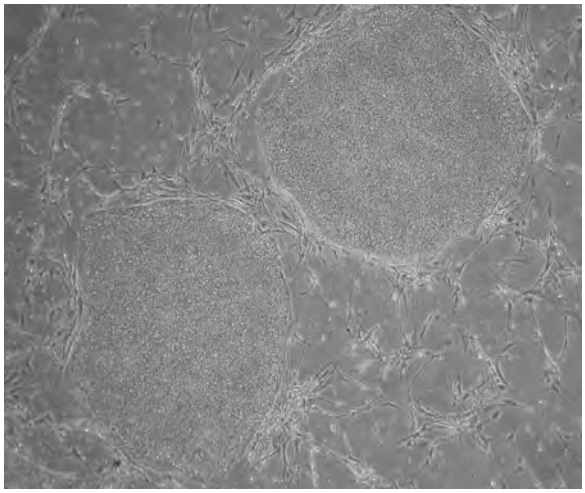
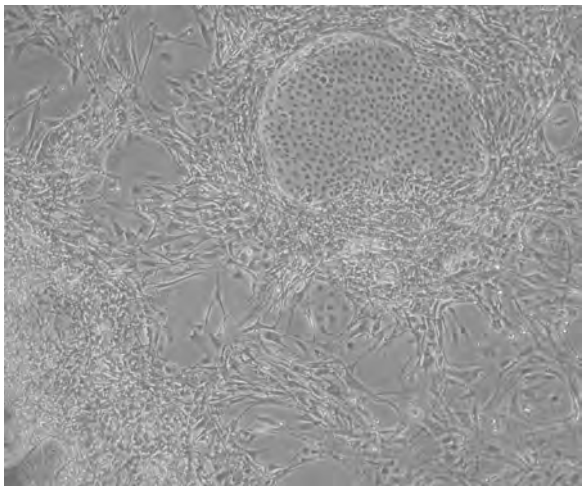


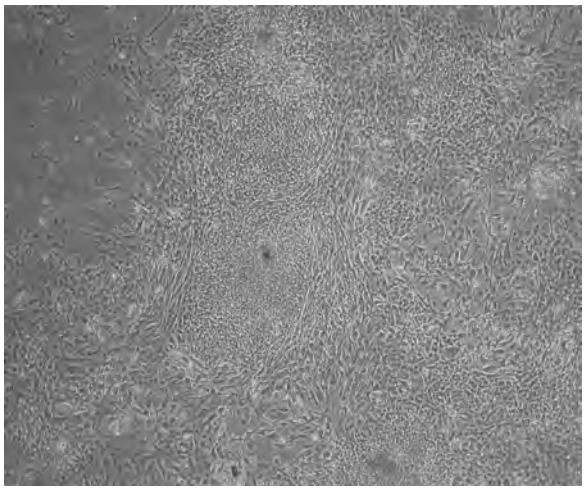
FIGURE 3D



H1 Control (Day 15)



H1 + Wnt3A (Day 15)



H1 + 2μM iGSK-3β

FIGURE 4A

H1 Control (Day 21)

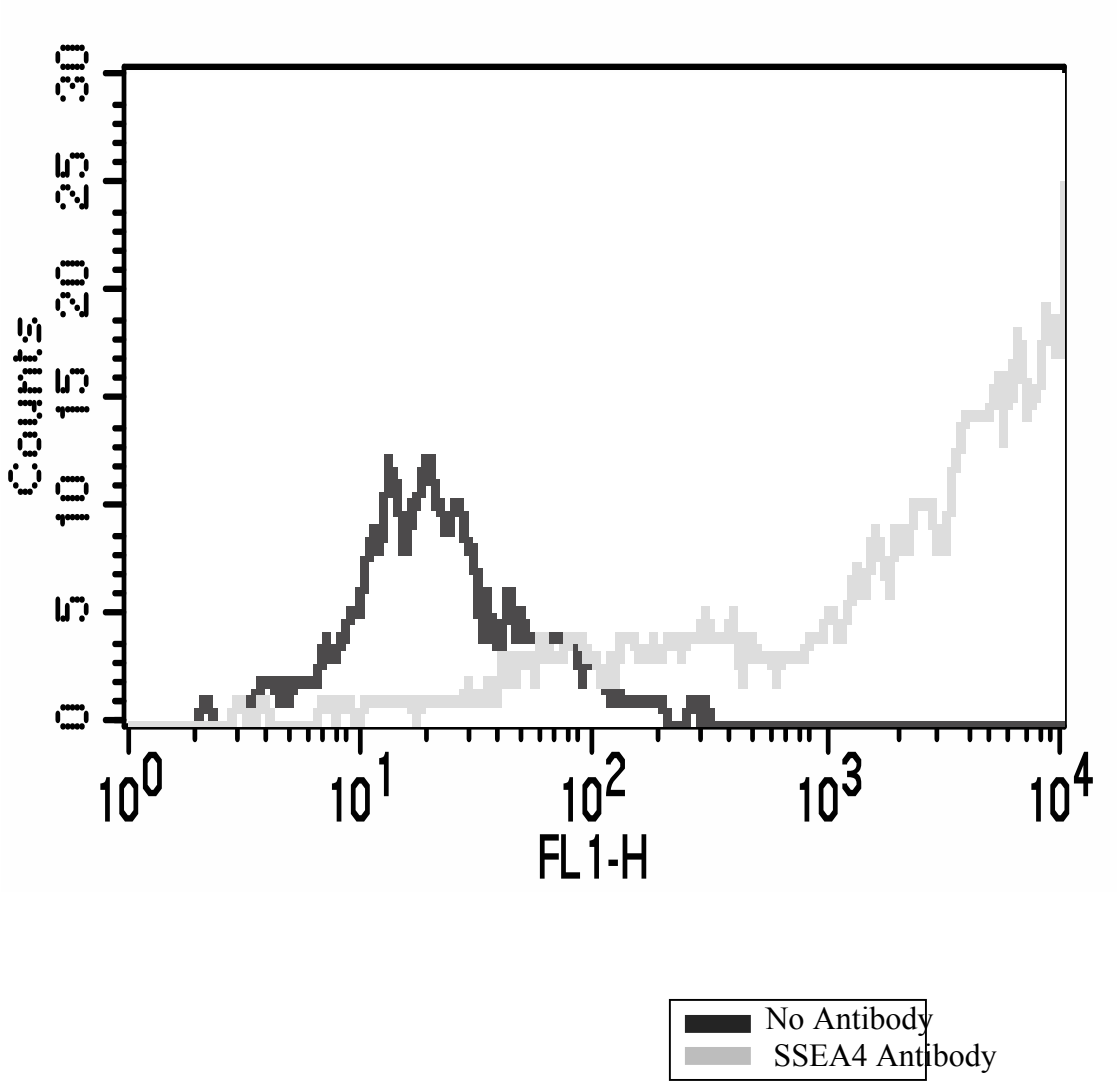


FIGURE 4 (CONTINUED)

H1 + Wnt3A (Day 21)

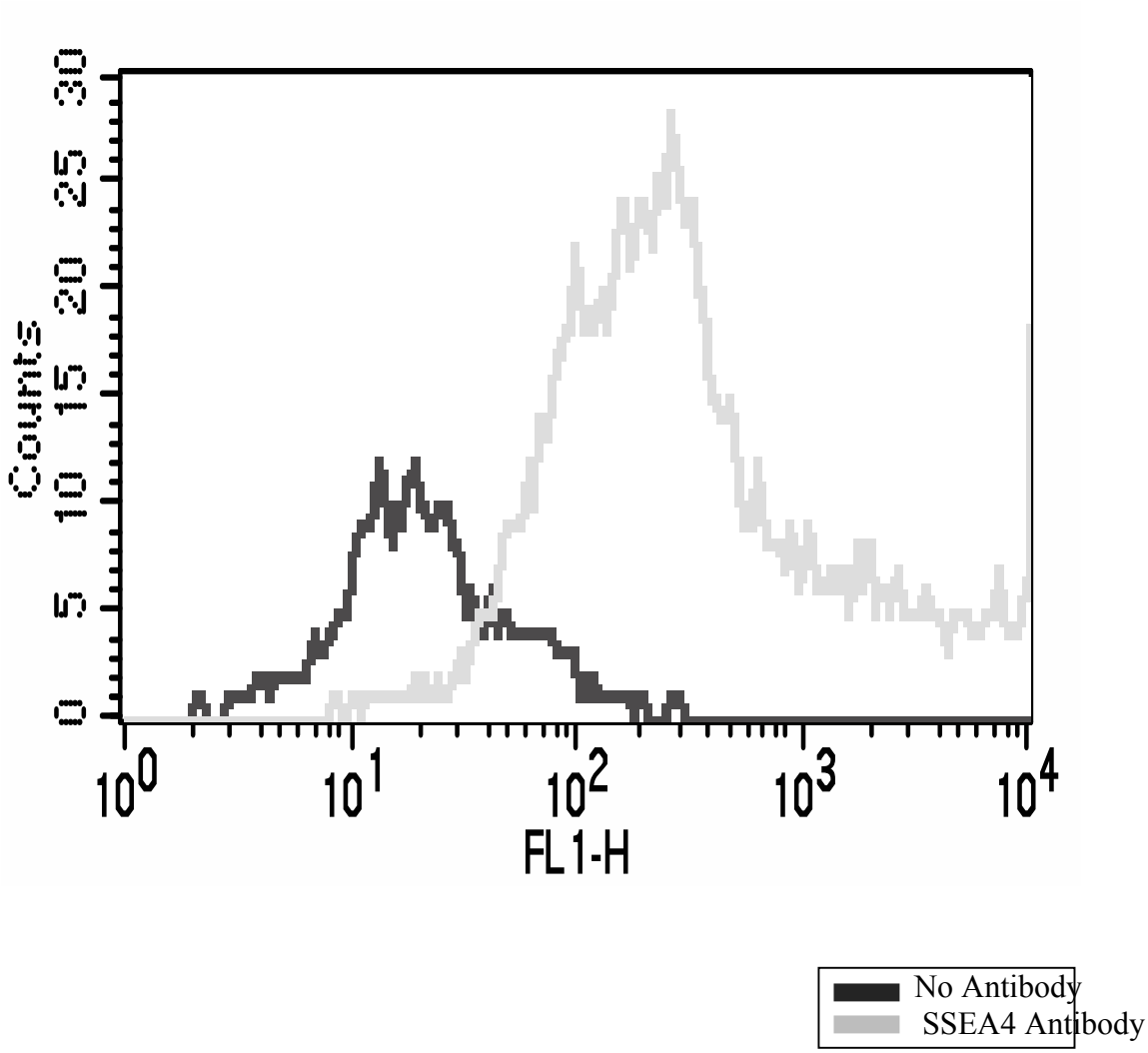


FIGURE 4 (CONTINUED)

H1+ iGSK-3β (Day 21)

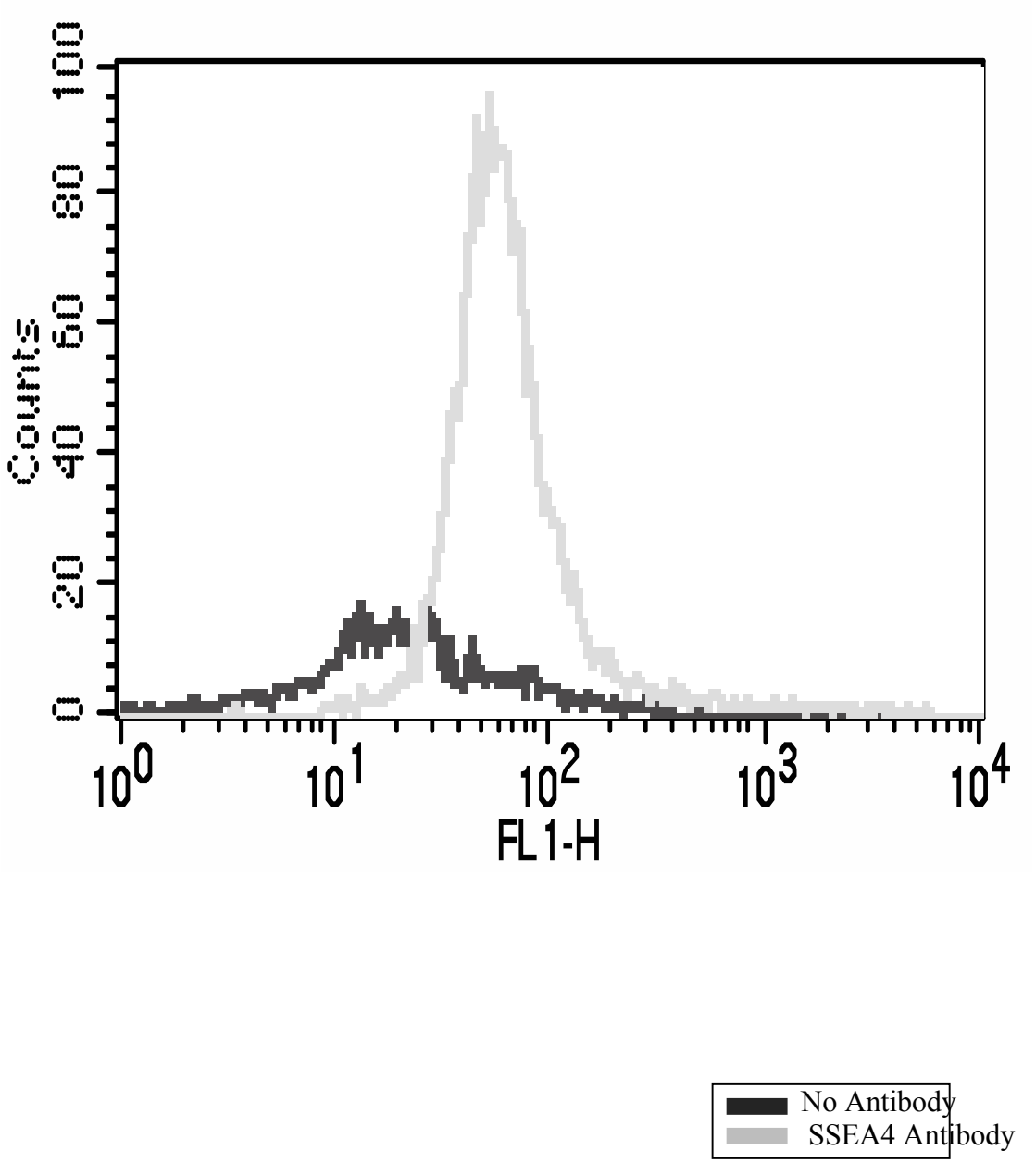


FIGURE 5

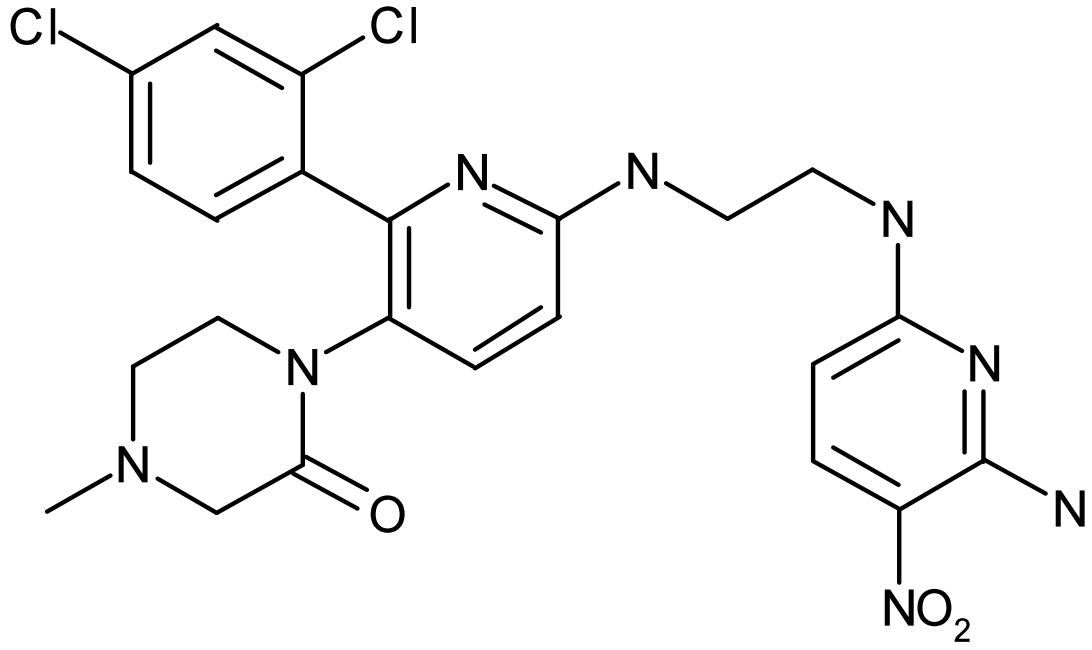


FIGURE 6



FIGURE 7

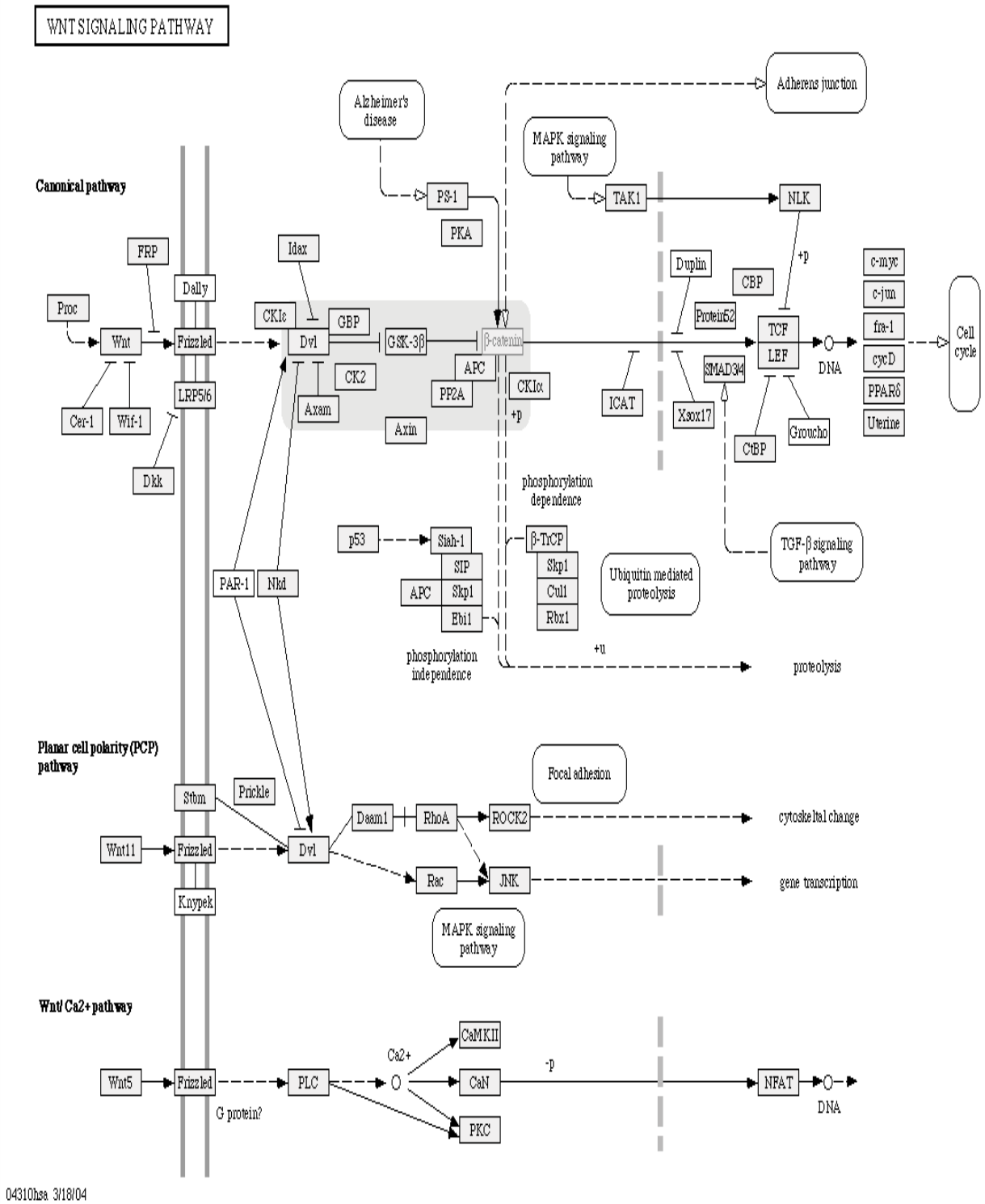

WNT SIGNALING PATHWAY
Canonical pathway
Alzheimer's disease
Adherens junction
MAPK signaling pathway
PS-1
PKA
TAK1
NLK
FRP
Dally
Idax
Duplin
CBP
+p
c-myc
c-jun
fra-1
cycD
PPARδ
Uterine
Proc
Wnt
Frizzled
CKIε
GBP
Dvl
GSK-3β
β-catenin
Protein52
TCF
LEF
DNA
Cell cycle
APC
CK2
PP2A
CKIα
SMAD3/4
LRP5/6
Axam
Axin
ICAT
Xsox17
Groucho
CtBP
Cer-1
Wif-1
Dkk
+p
phosphorylation dependence
p53
Siah-1
SIP
Skp1
Ebi1
β-TrCP
Skp1
Cul1
Rbx1
Ubiquitin mediated proteolysis
TGF-β signaling pathway
PAR-1
Nkd
phosphorylation independence
+u
proteolysis
Planar cell polarity (PCP) pathway
Focal adhesion
Stbm
Prickle
Daam1
RhoA
ROCK2
cytoskeltal change
Wnt11
Frizzled
Dvl
Rac
JNK
gene transcription
Knypek
MAPK signaling pathway
Wnt/ Ca2+ pathway
CaMKII
Ca2+
-p
Wnt5
Frizzled
PLC
CaN
NFAT
DNA
G protein?
PKC
04310hsa 3/18/04

FIGURE 8

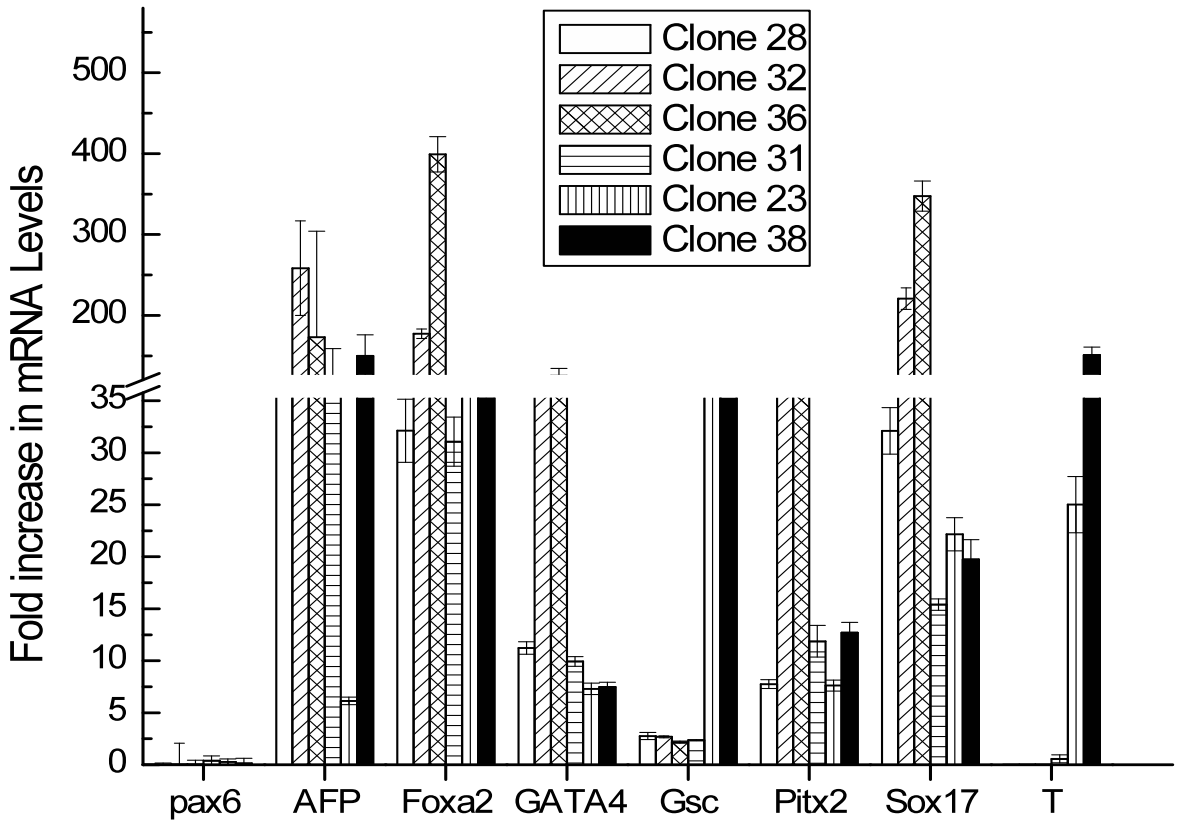

Clone 28
Clone 32
Clone 36
Clone 31
Clone 23
Clone 38
Fold increase in mRNA Levels
500
400
300
200
35
30
25
20
15
10
5
0
pax6
AFP
Foxa2
GATA4
Gsc
Pitx2
Sox17
T

FIGURE 9

No Primary Ab control

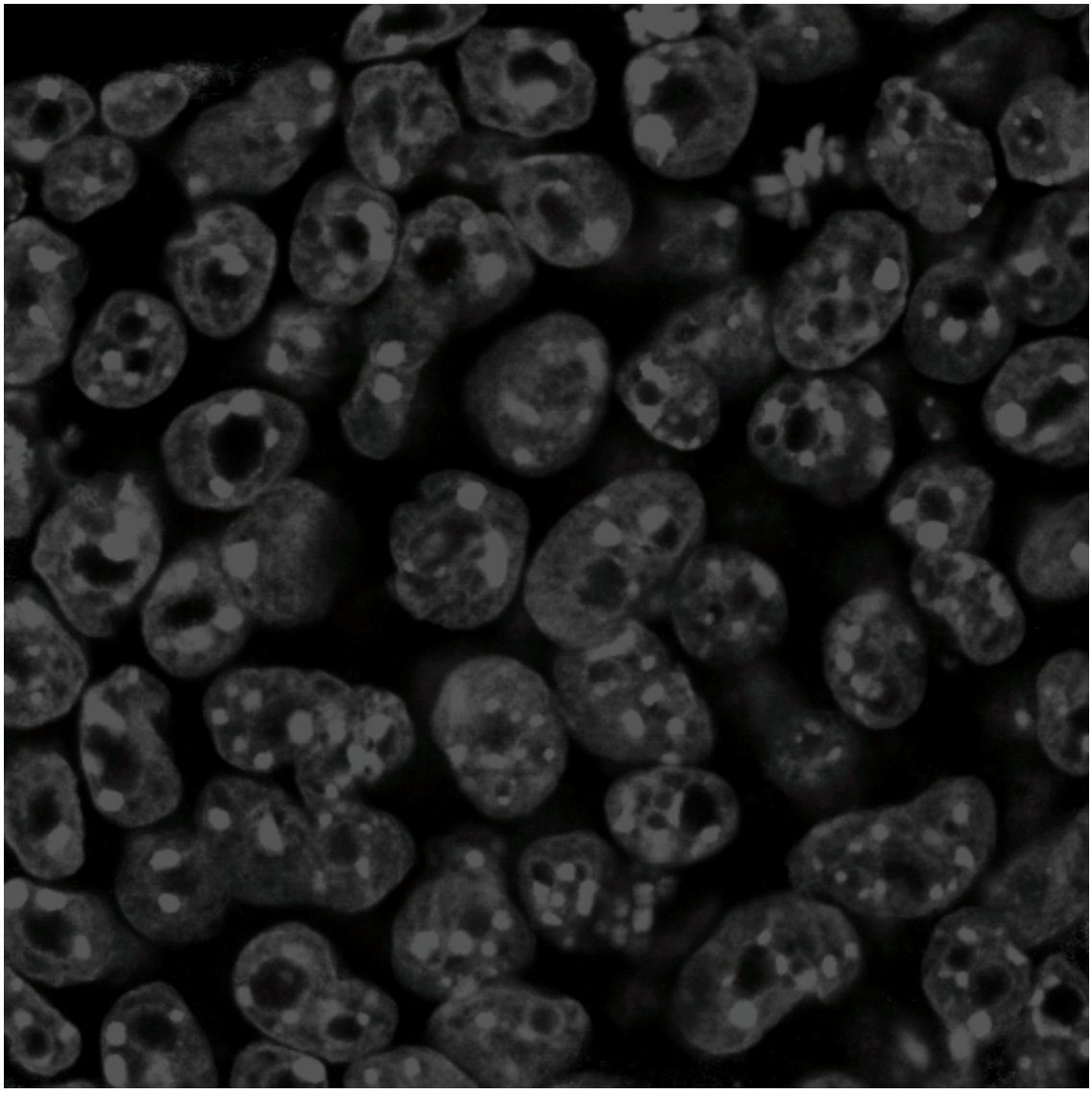


FIGURE 9 (CONTINUED)

Pitx2 Ab

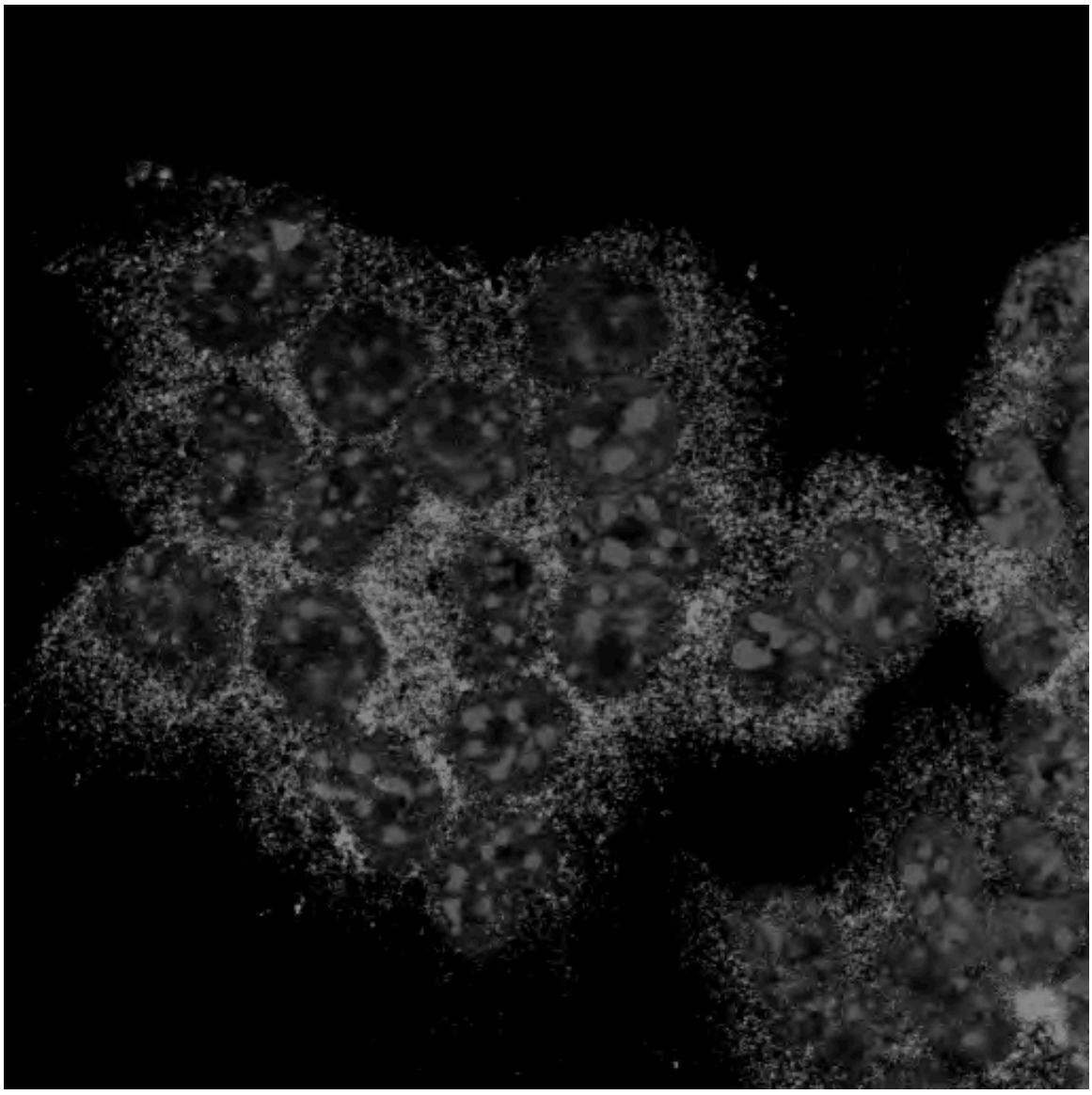


FIGURE 9 (CONTINUED)

T-brachyury

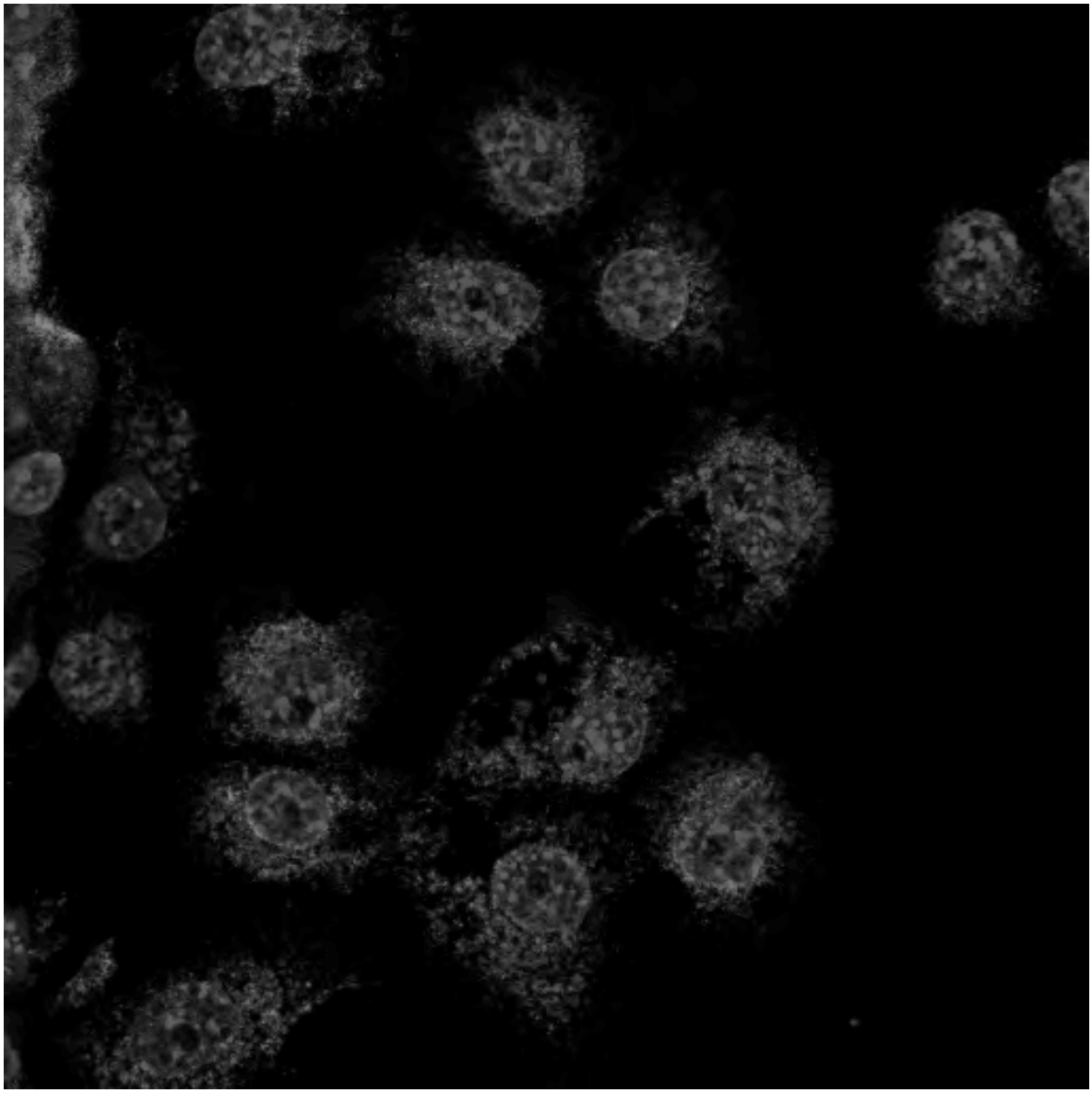


FIGURE 10

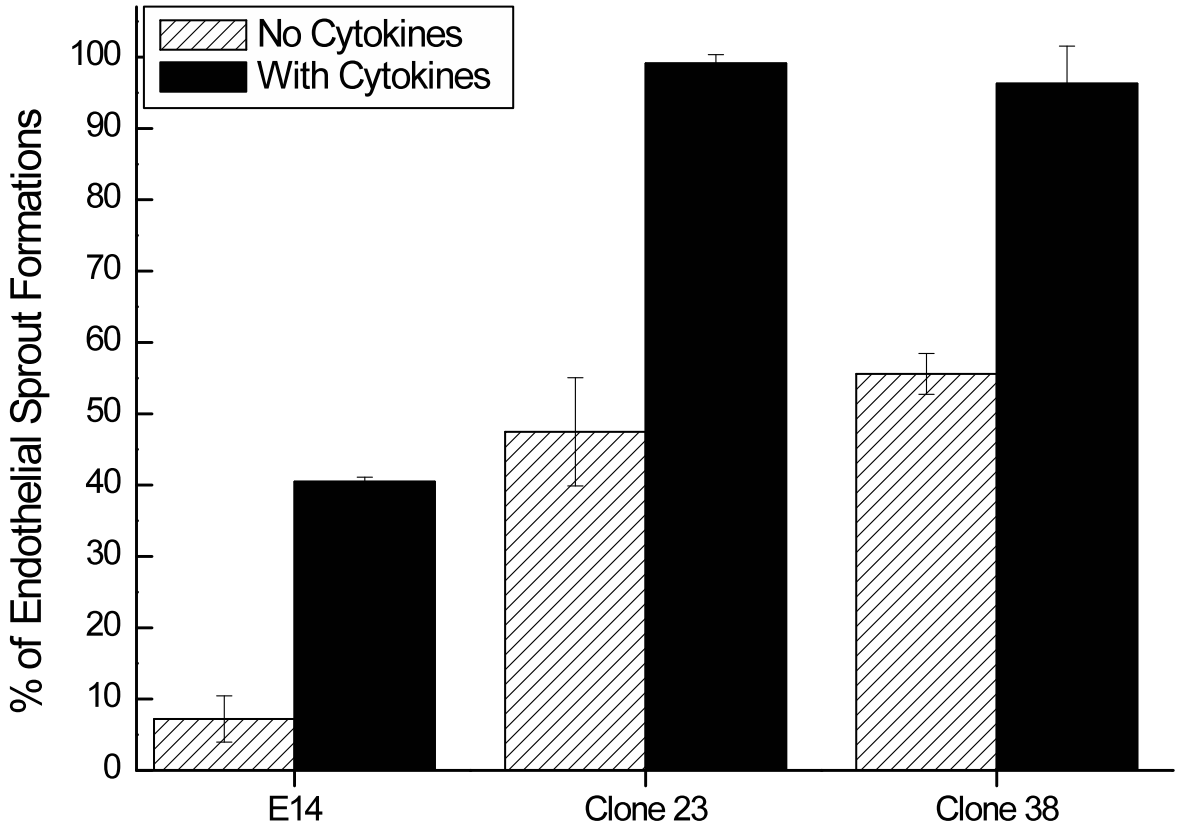

No Cytokines
With Cytokines
% of Endothelial Sprout Formations
0
10
20
30
40
50
60
70
80
90
100
E14
Clone 23
Clone 38

FIGURE 11

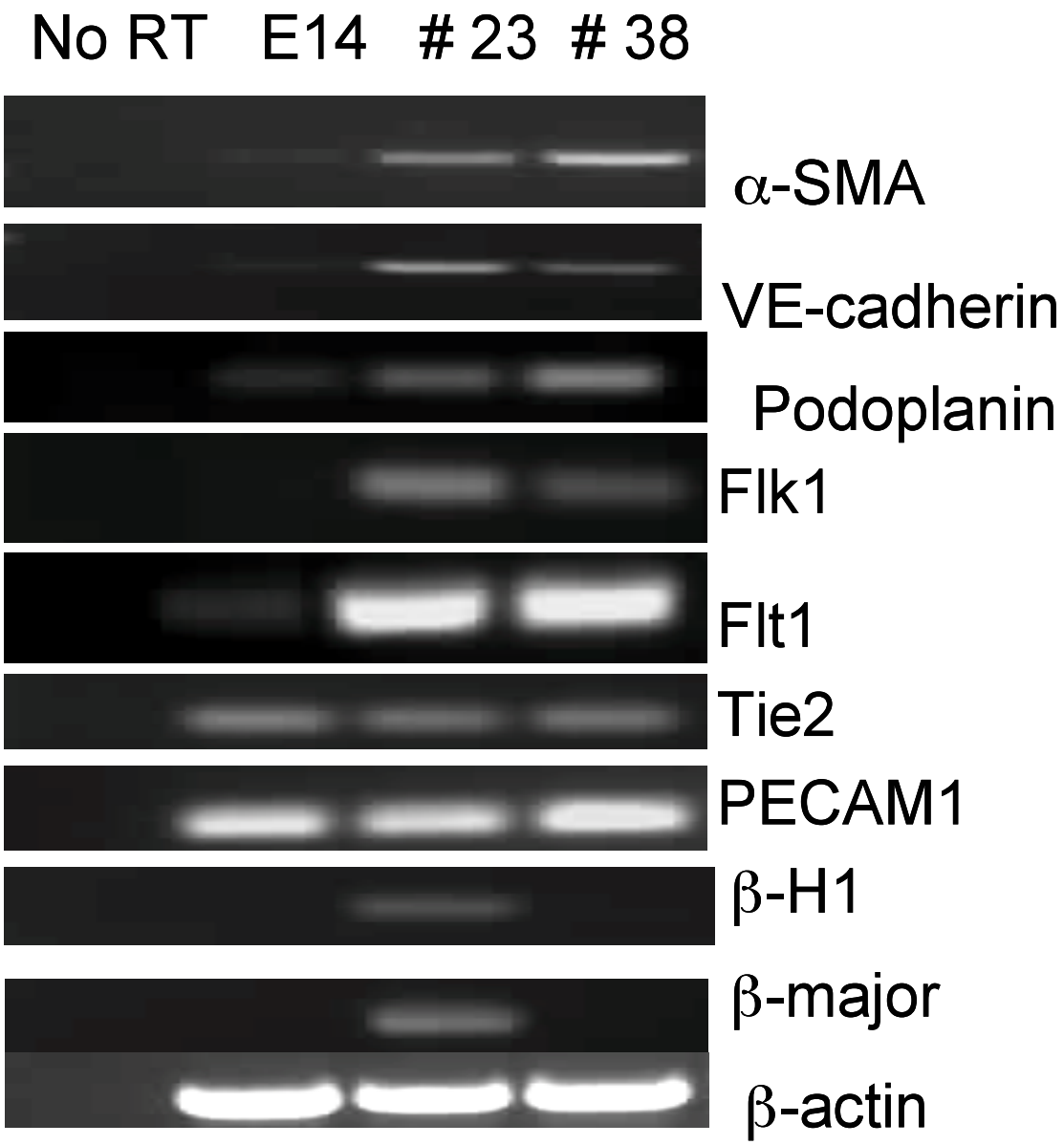
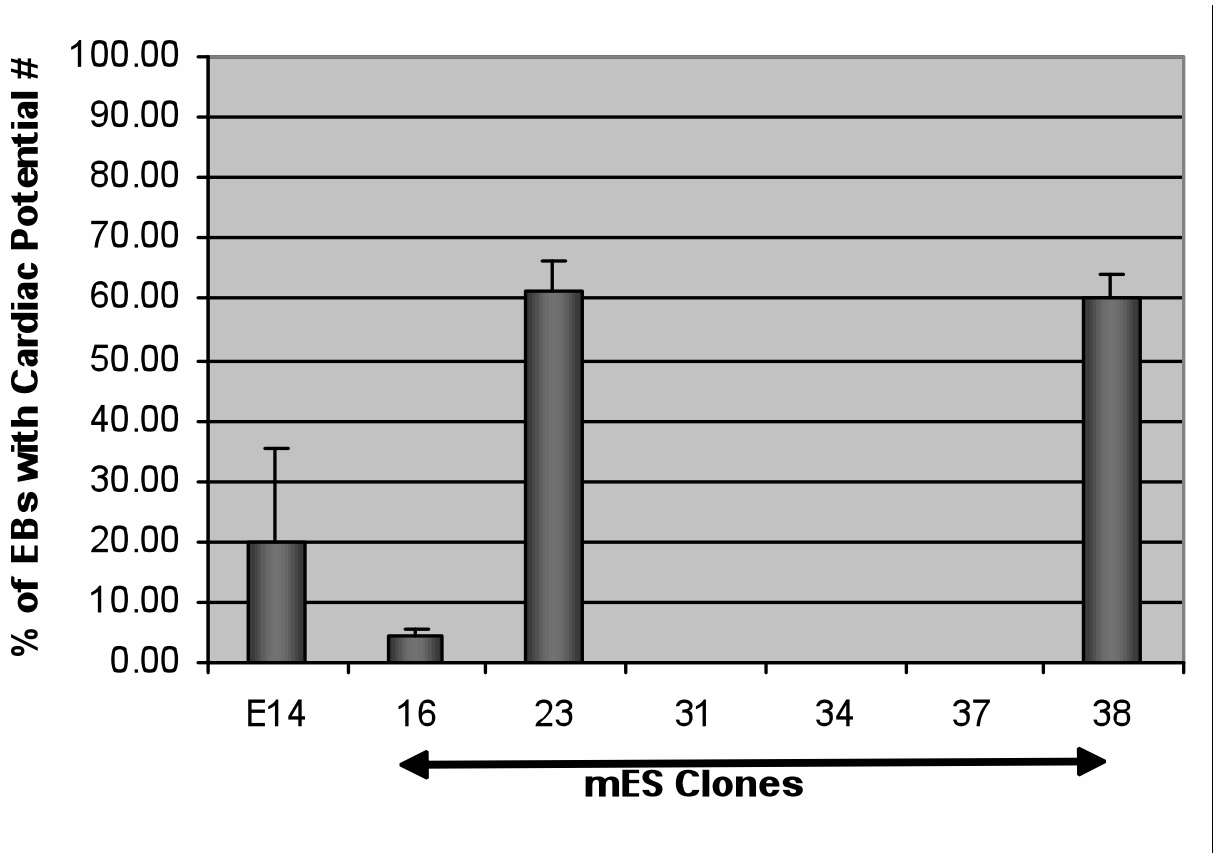

No RT
E14
23
38
α-SMA
VE-cadherin
Podoplanin
Flk1
Flt1
Tie2
PECAM1
β-H1
β-major
β-actin

FIGURE 12


% of EBs with Cardiac Potential #
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
E14
16
23
31
34
37
38
mES Clones