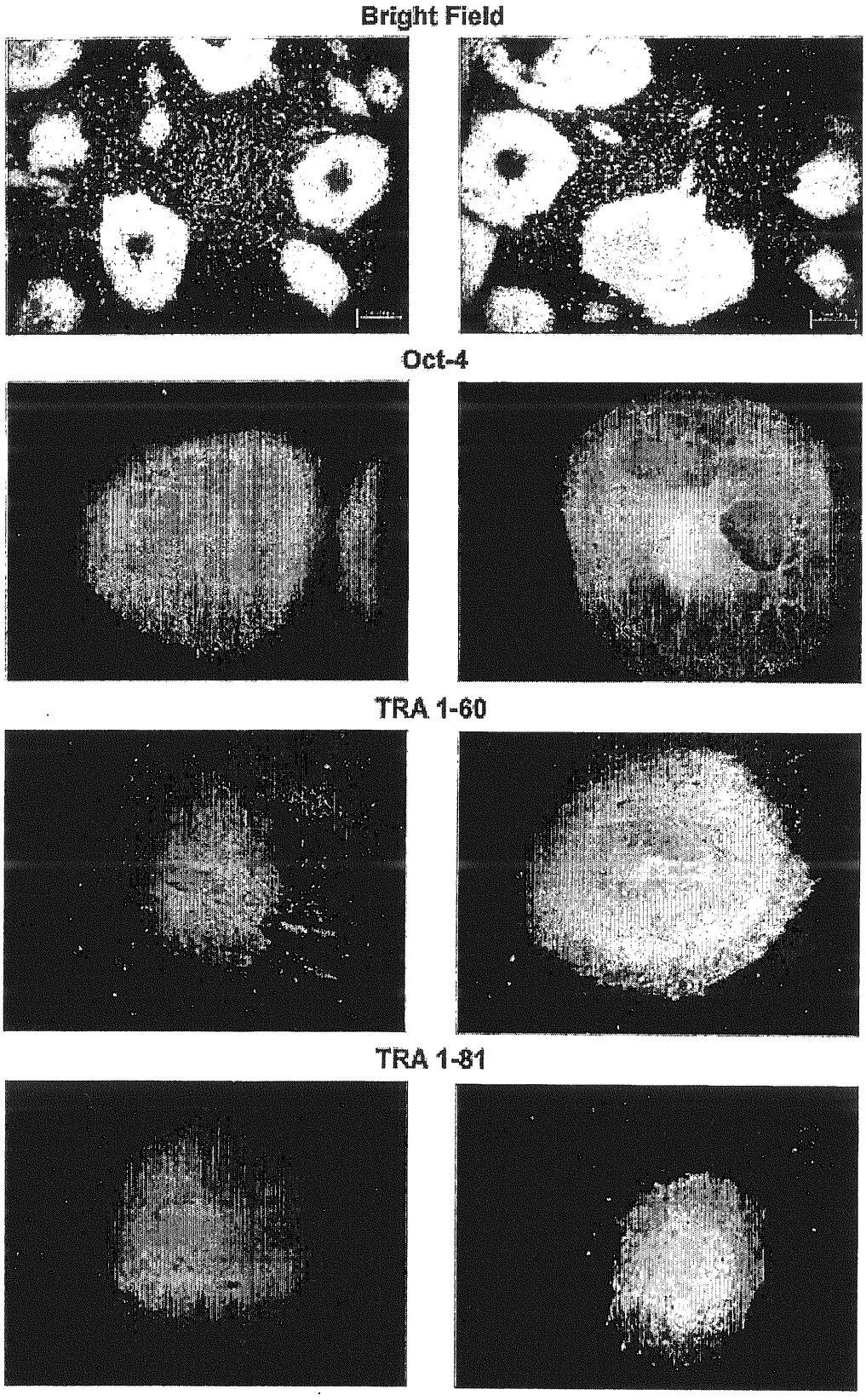



FIG 1

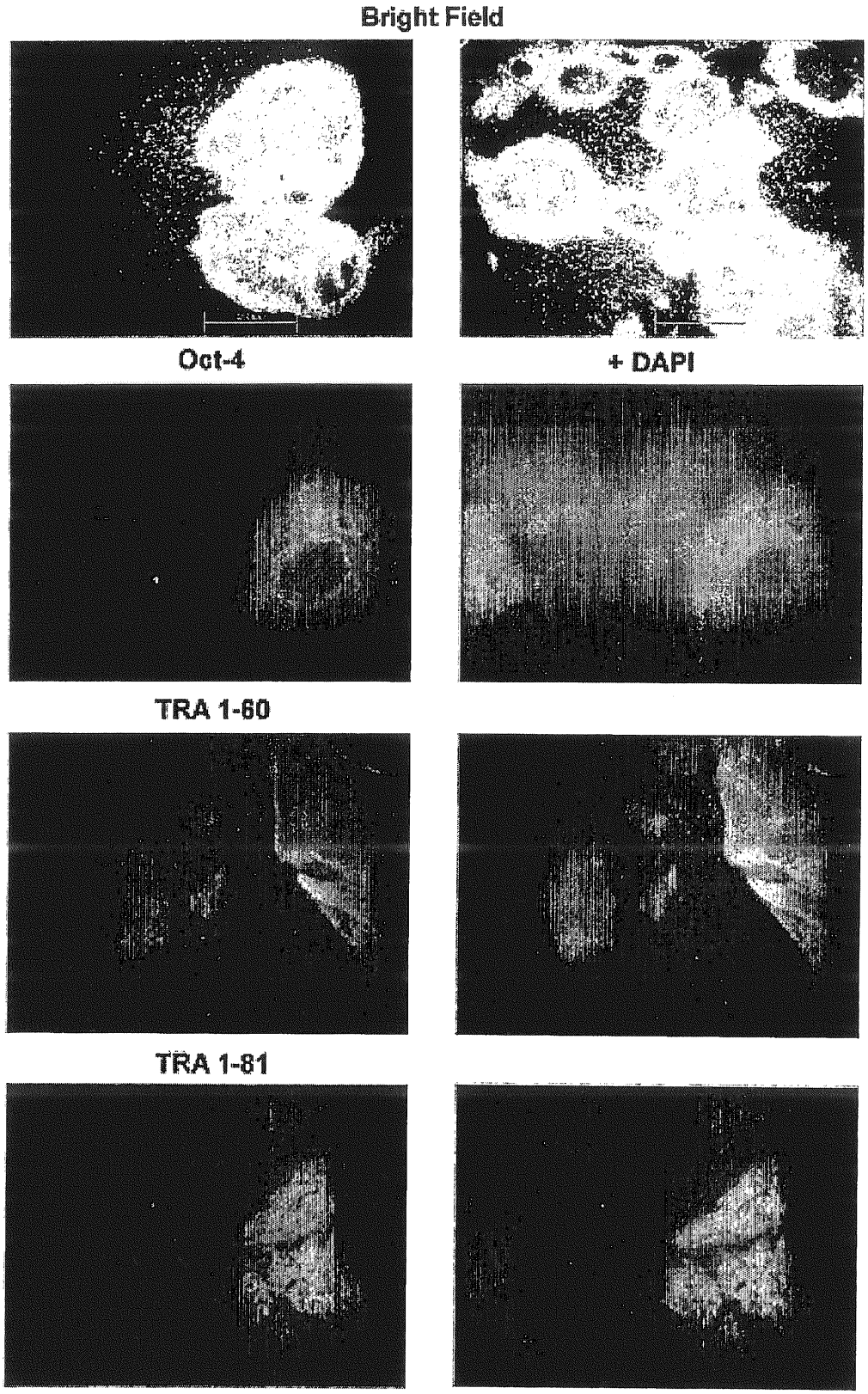



FIG 2

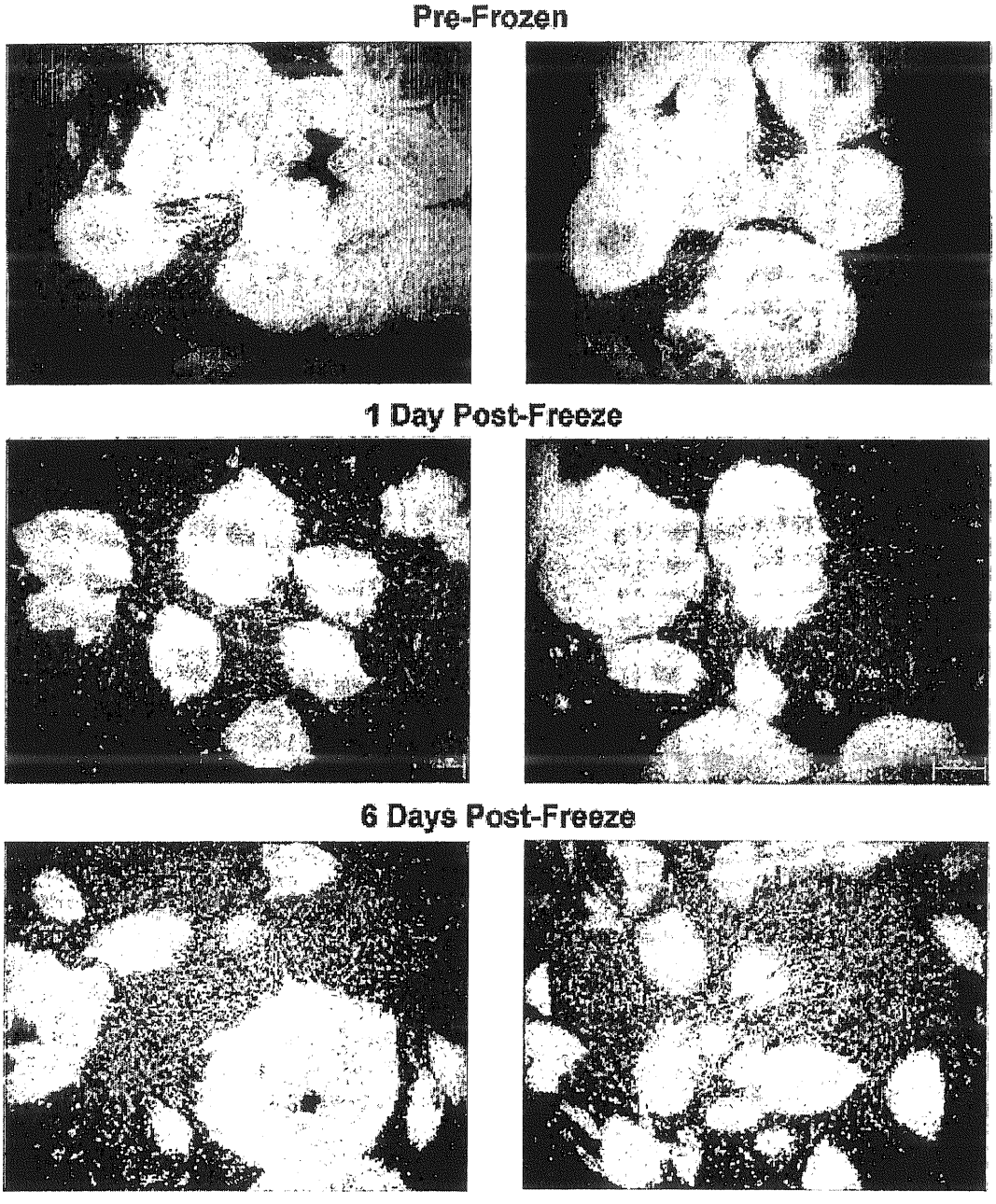



FIG 3

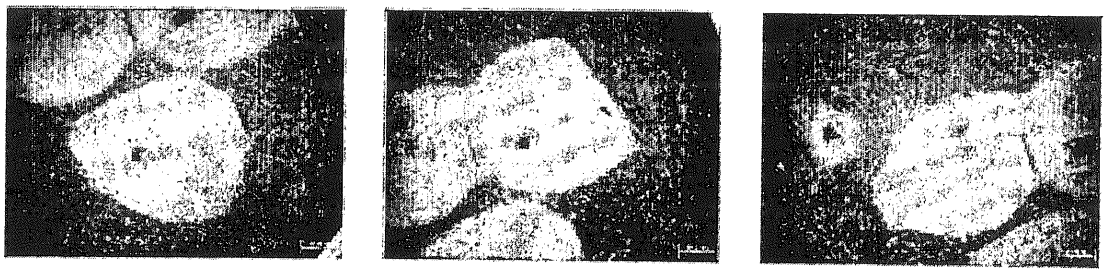


FIG 4

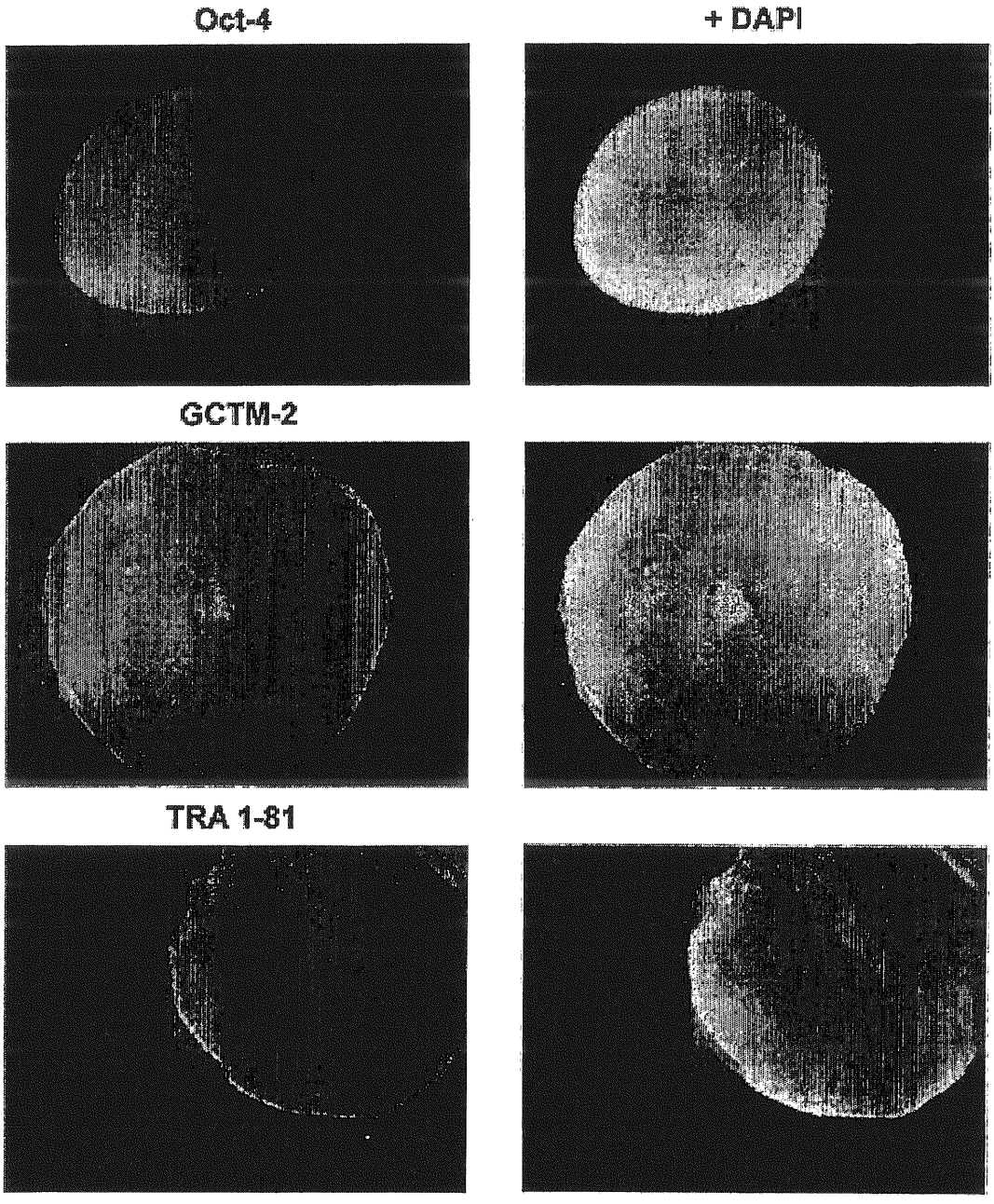



FIG 5

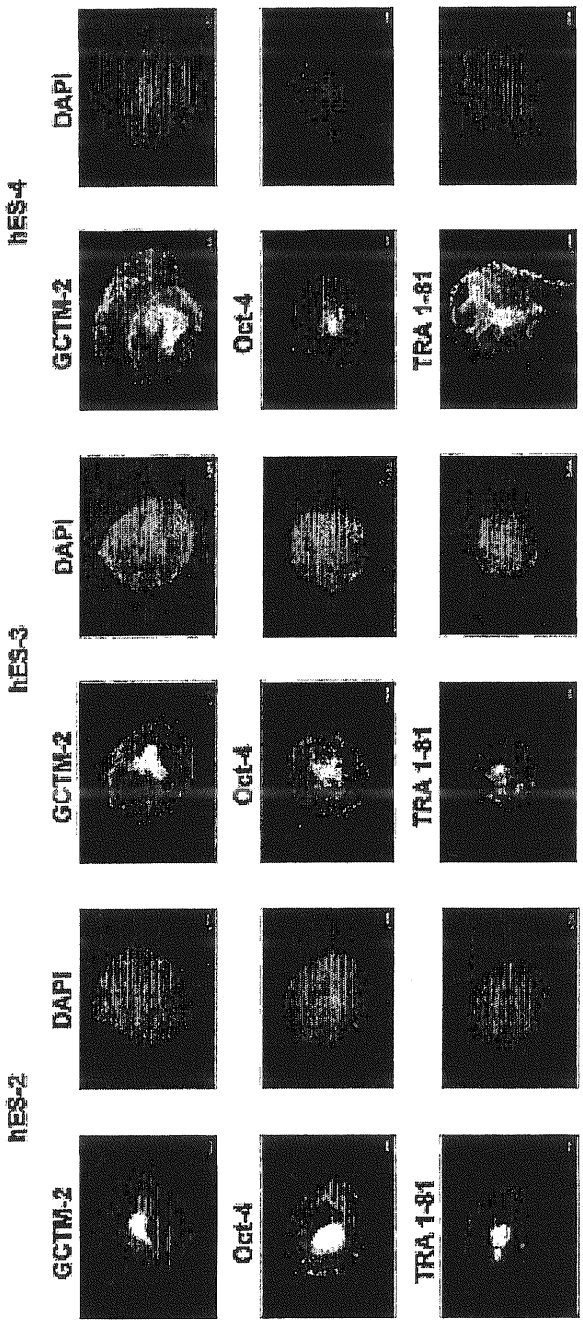

hES-2
GCTM-2
DAPI
Oct-4
TRA 1-81
hES-3
GCTM-2
DAPI
Oct-4
TRA 1-81
hES-4
GCTM-2
DAPI
Oct-4
TRA 1-81

FIG 6

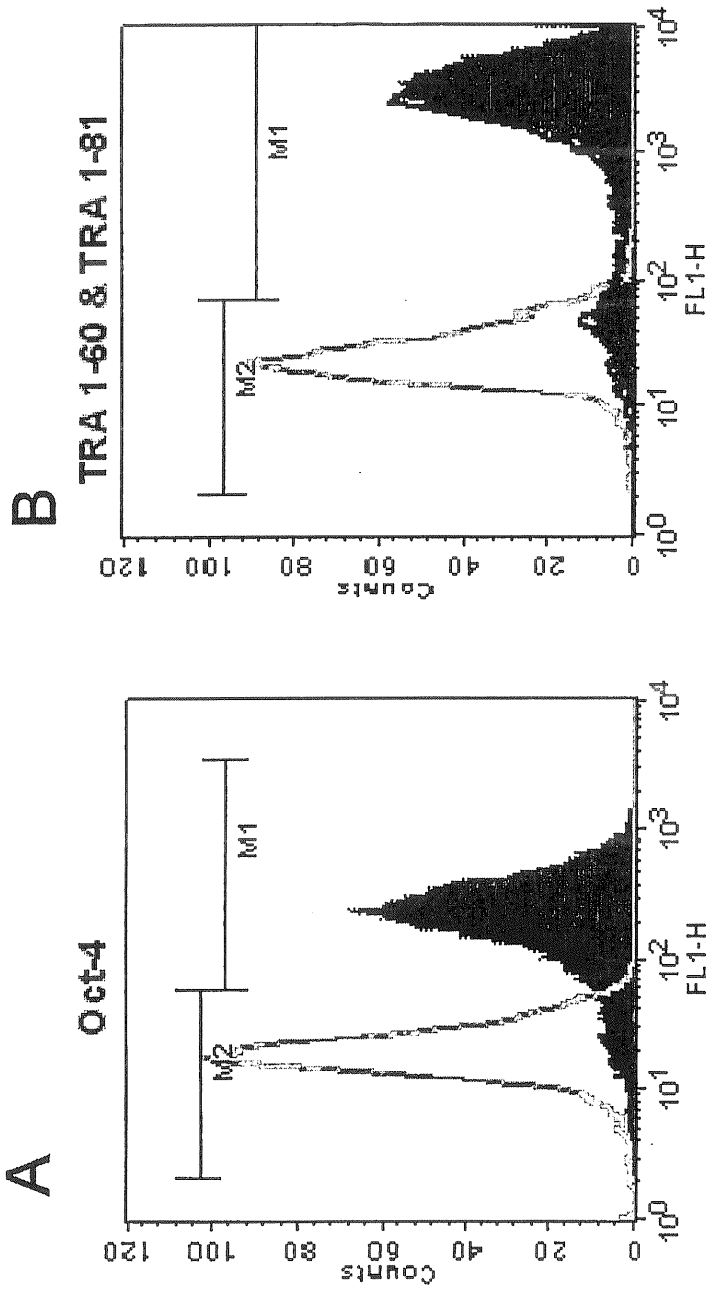



FIG 7

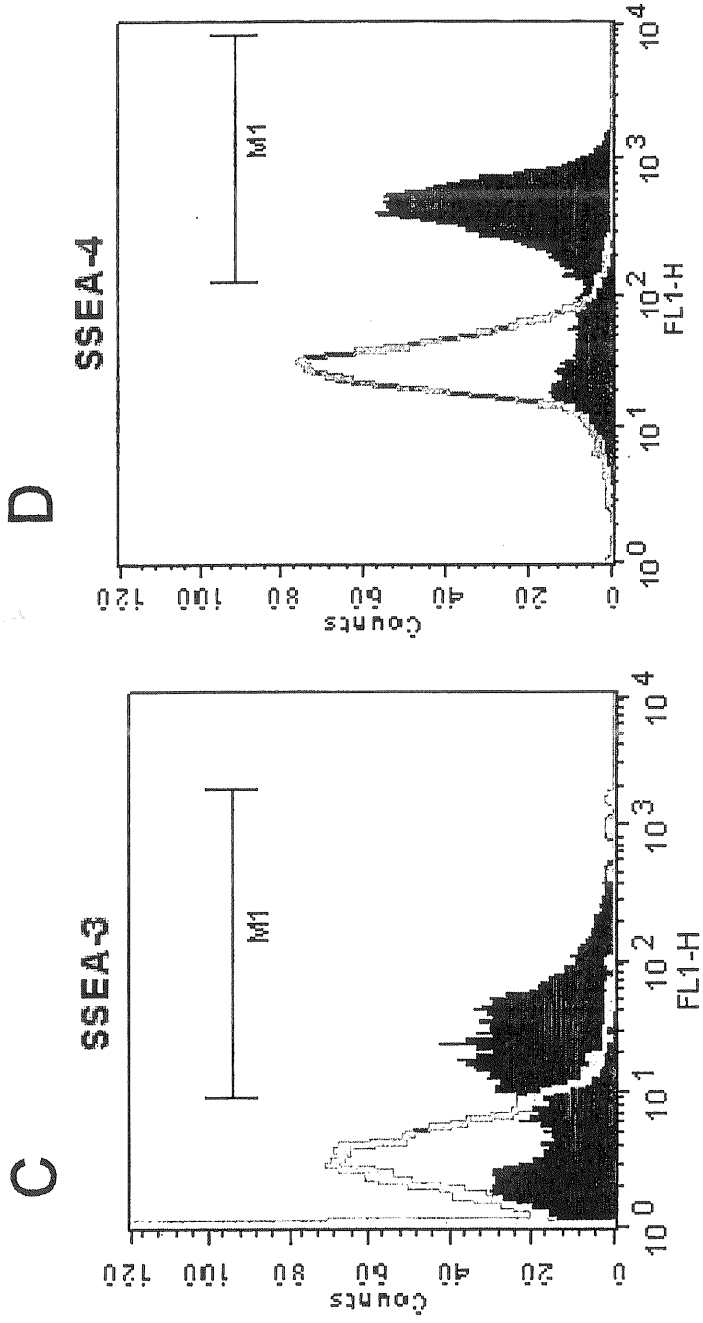



FIG 7

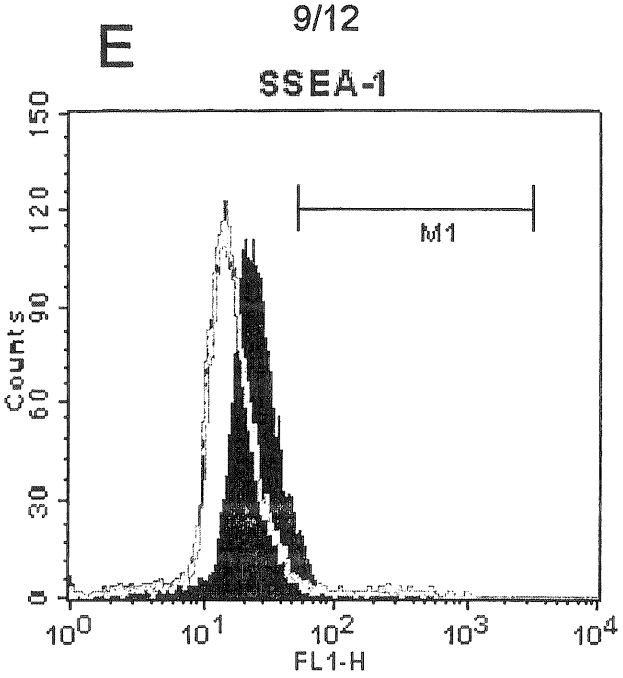

E
SSEA-1
M1
Counts
0
30
60
90
120
150
$10^0$
$10^1$
$10^2$
$10^3$
$10^4$
FL1-H

FIG 7

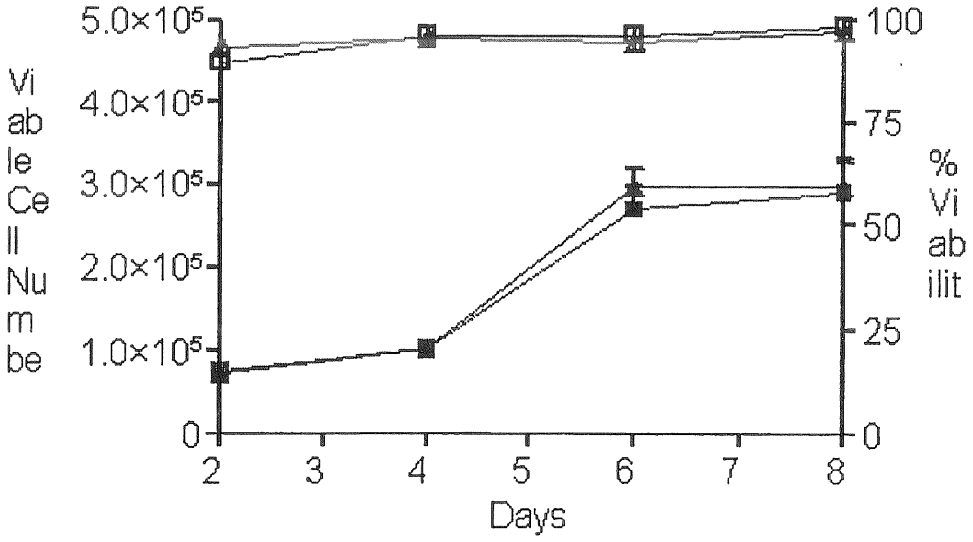

Viable Cell Number
5.0×10⁵
4.0×10⁵
3.0×10⁵
2.0×10⁵
1.0×10⁵
0
% Viability
100
75
50
25
0
2
3
4
5
6
7
8
Days

FIG 8

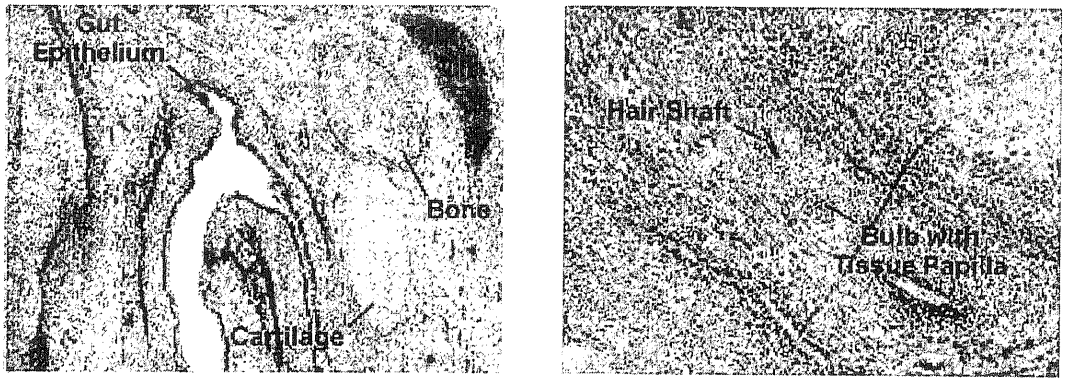

Gut
Epithelium
Bone
Cartilage
Hair Shaft
Bulb with
Tissue Papilla

FIG 9

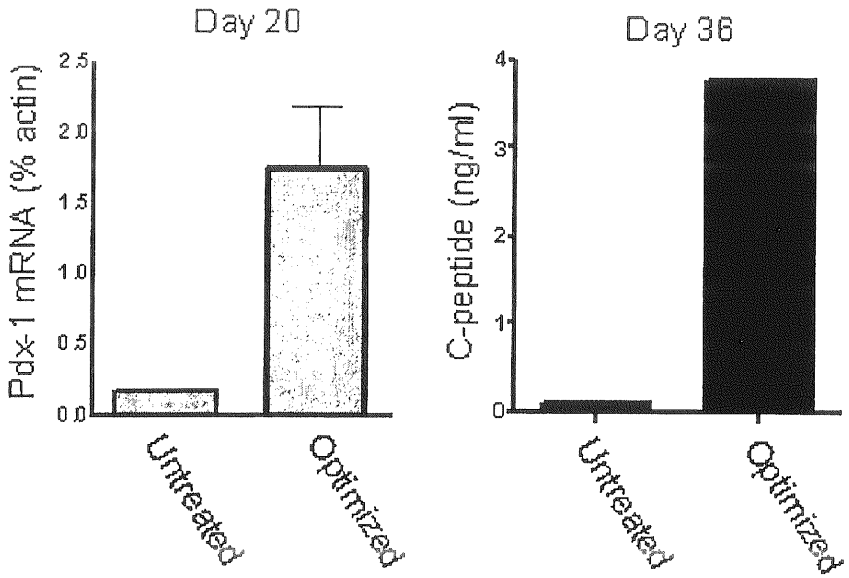

Day 20
Pdx-1 mRNA (% actin)
2.5
2.0
1.5
1.0
0.5
0.0
Untreated
Optimized
Day 36
C-peptide (ng/ml)
4
3
2
1
0
Untreated
Optimized

FIG 10

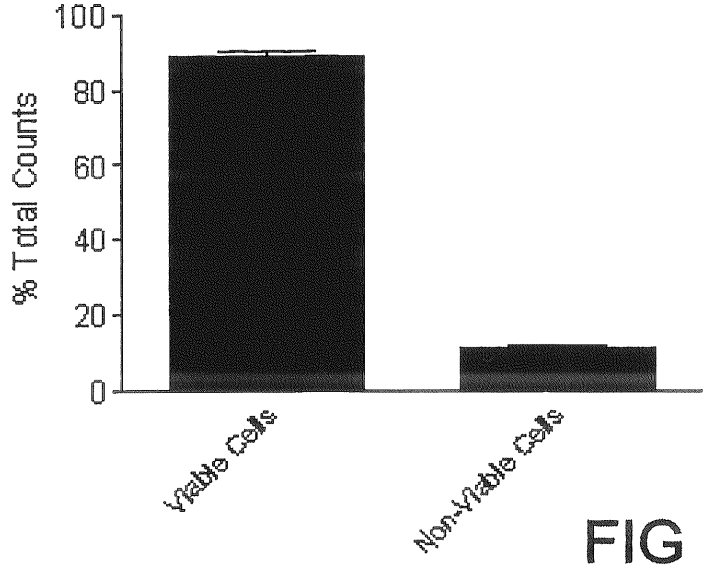

100
80
60
40
20
0
% Total Counts
Viable Cells
Non-Viable Cells

FIG 11

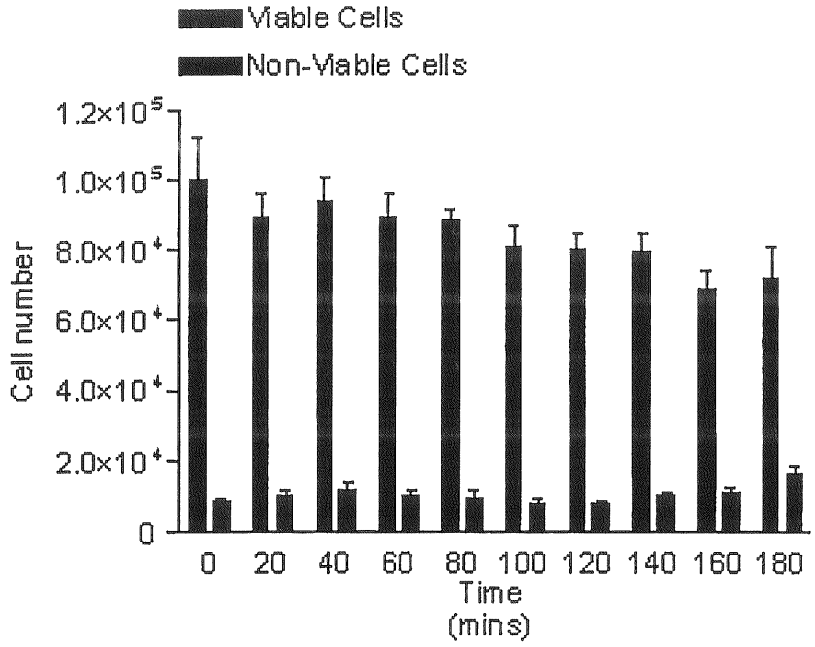

Viable Cells
Non-Viable Cells
1.2x10⁵
1.0x10⁵
8.0x10⁴
6.0x10⁴
4.0x10⁴
2.0x10⁴
0
Cell number
0 20 40 60 80 100 120 140 160 180
Time
(mins)

FIG 12