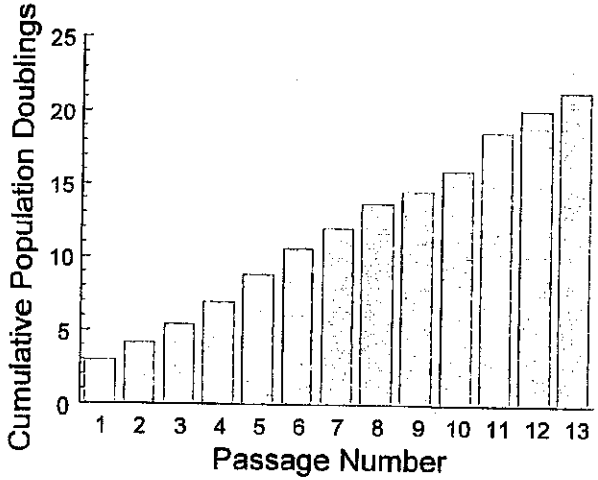
FIG. 1

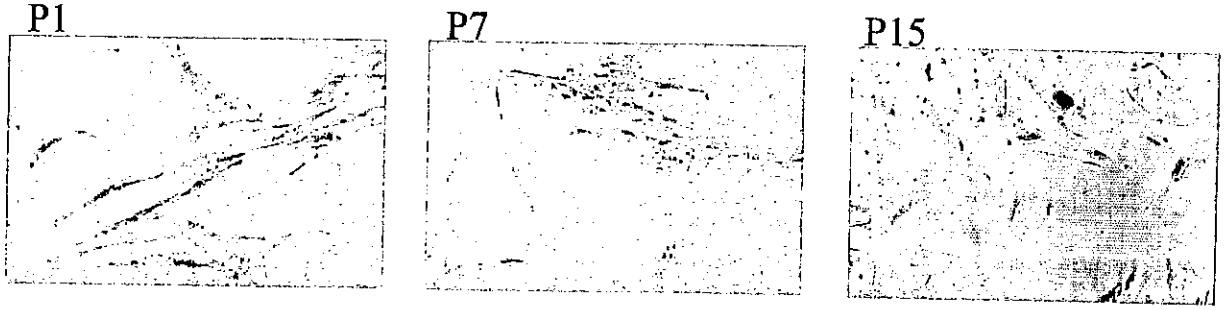
A.



B.



C.



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FIG. 2

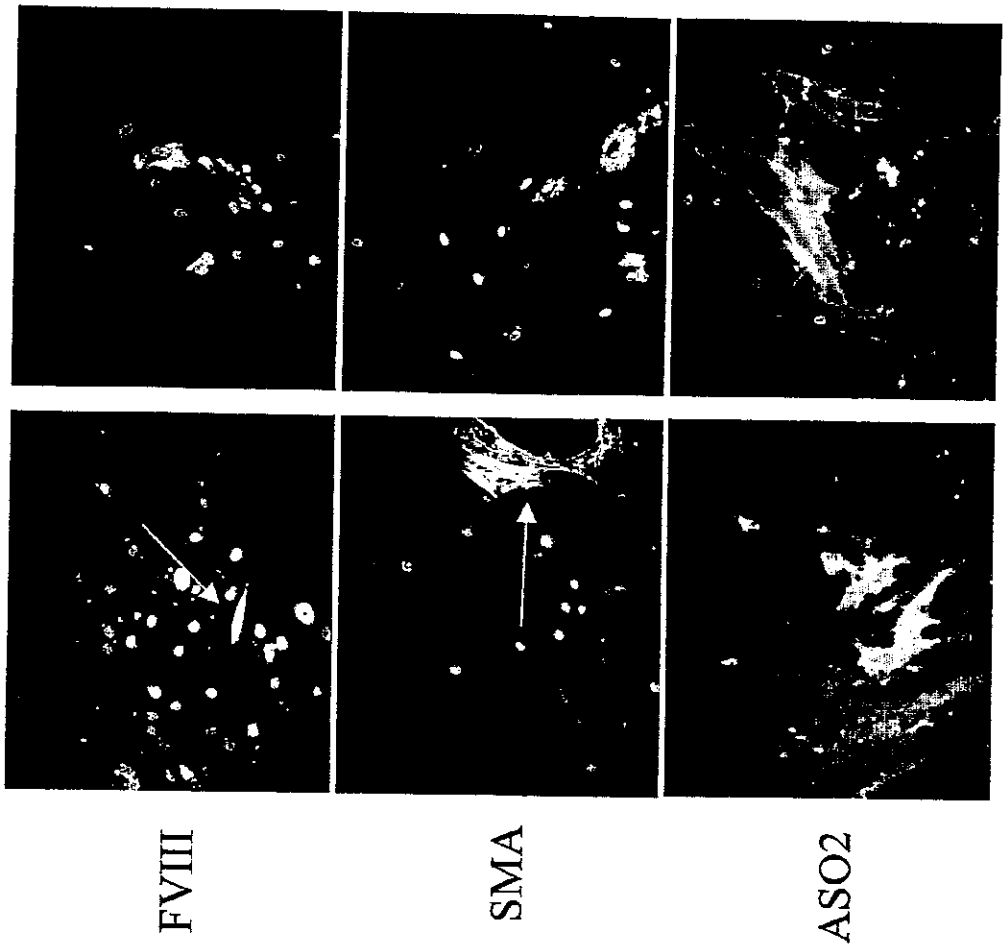
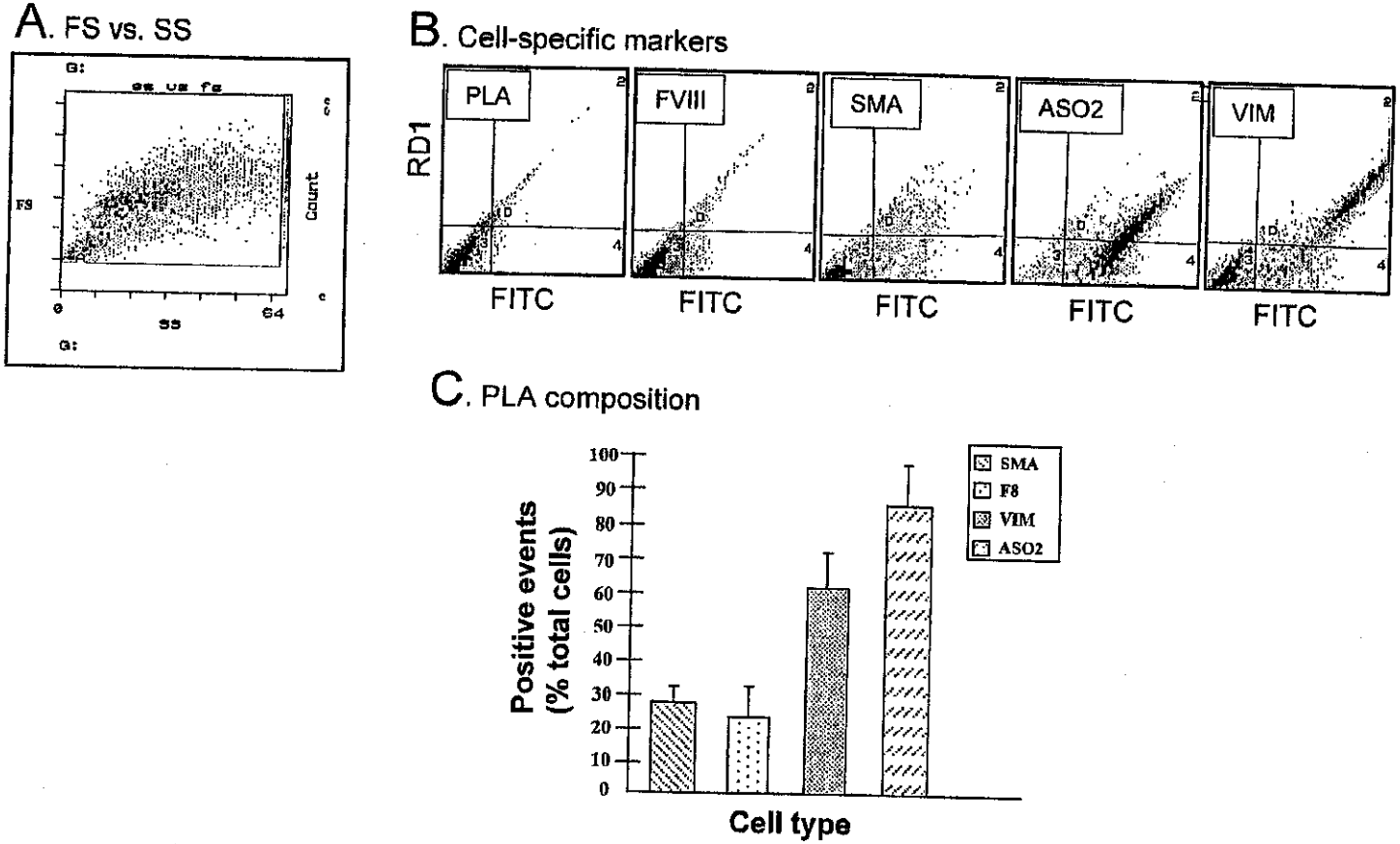


FIG. 3



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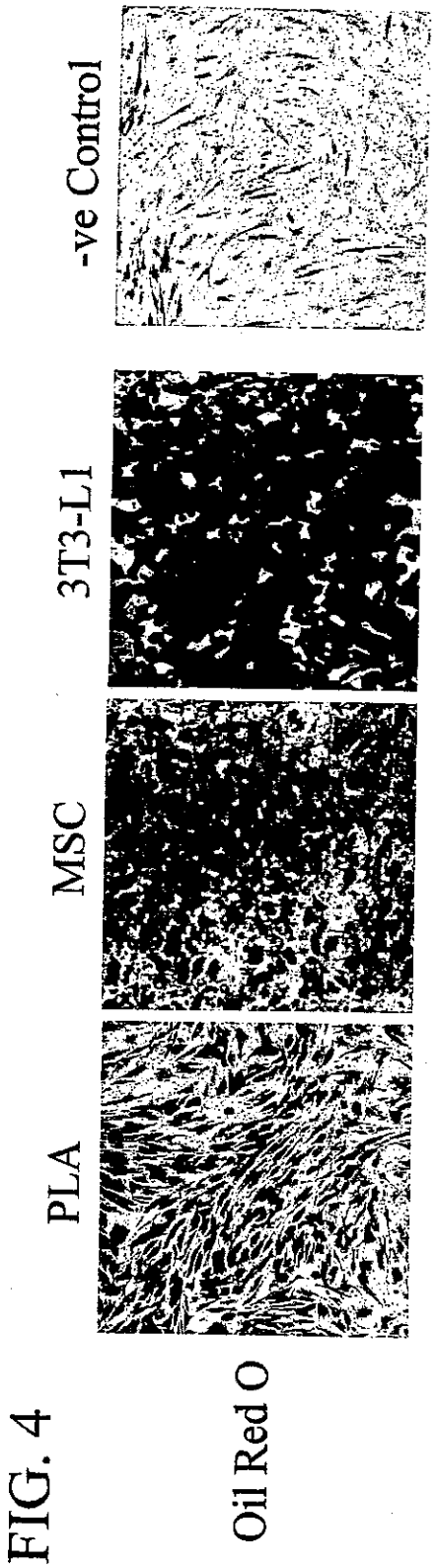


FIG. 4

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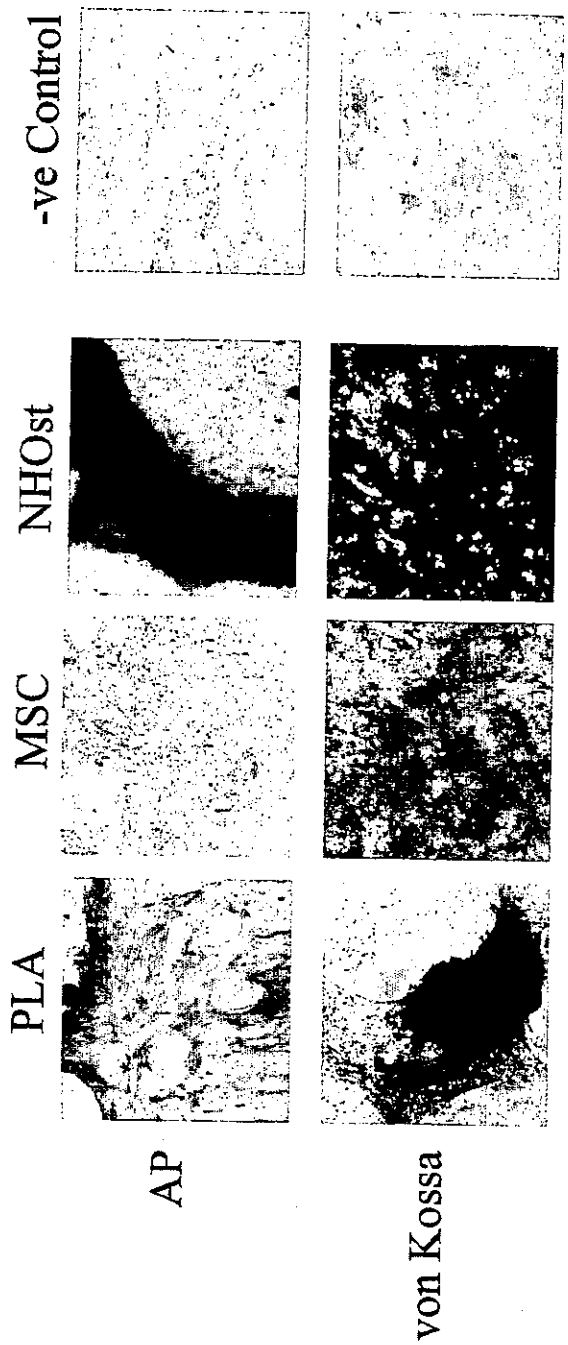
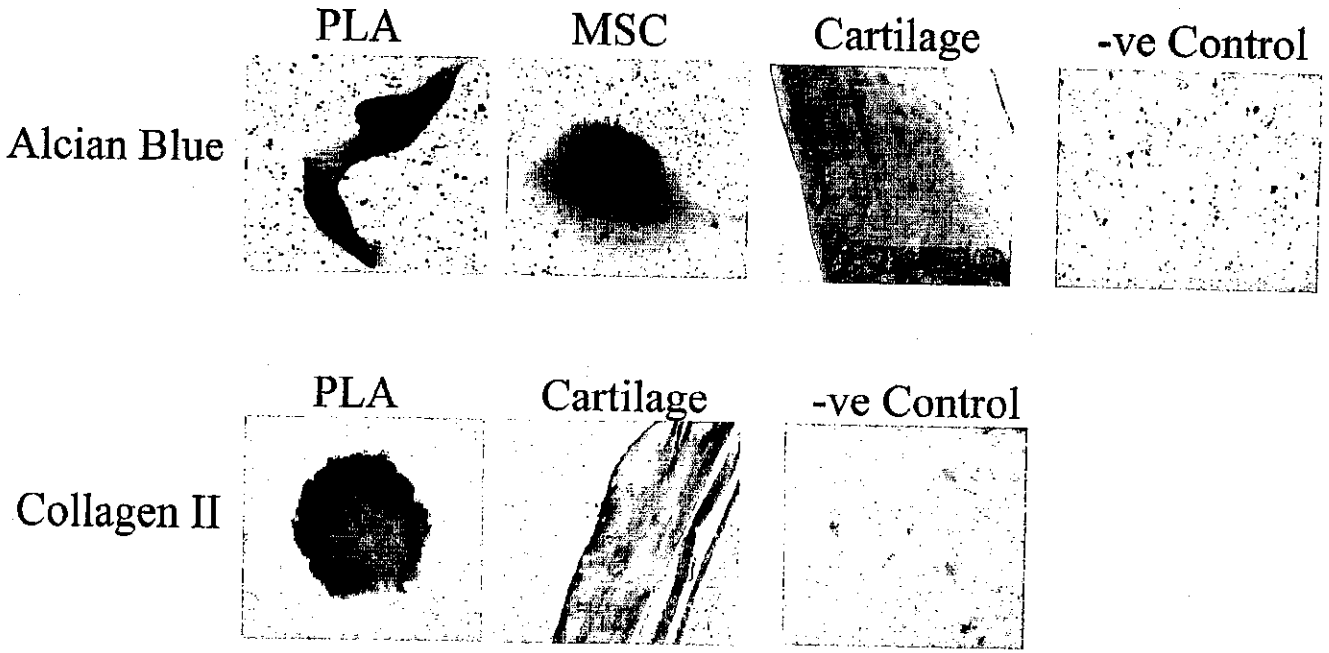


FIG. 5

FIG. 6



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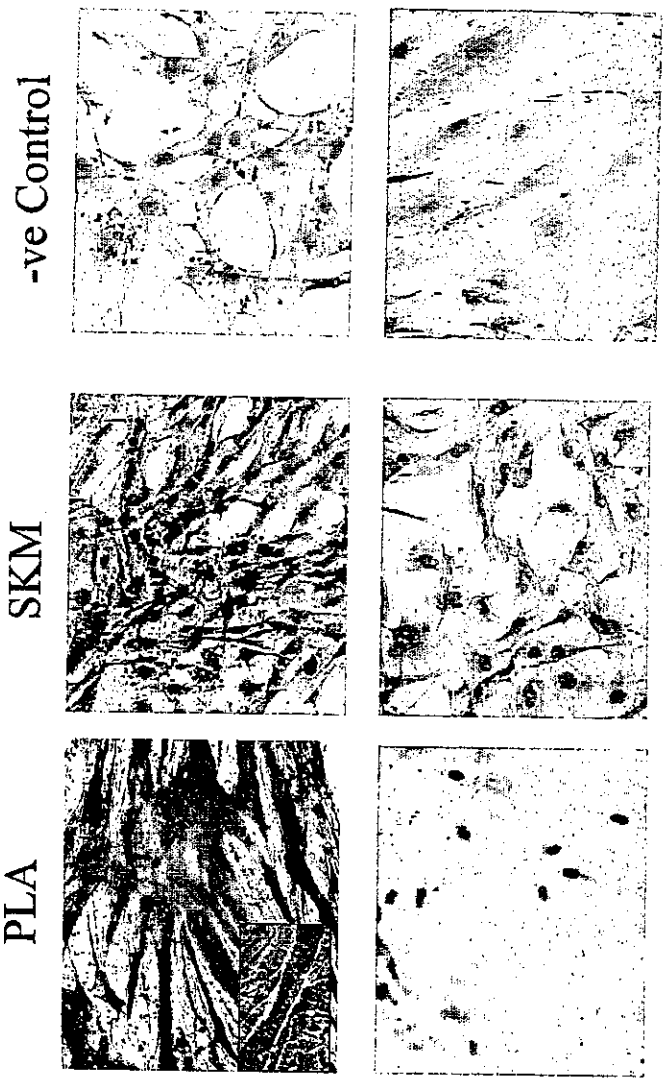
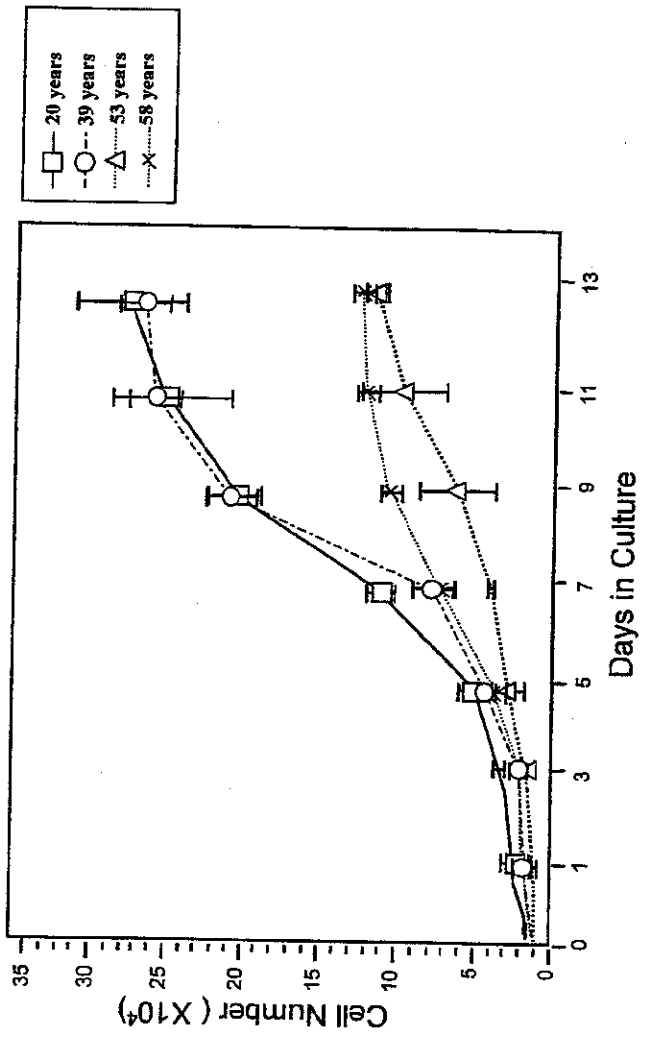


FIG. 7

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FIG. 8

A.



B.

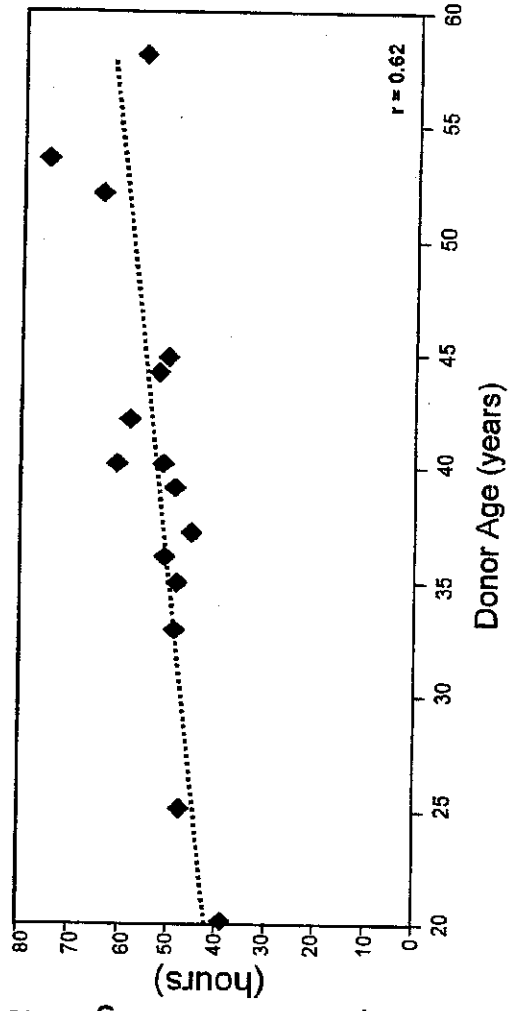
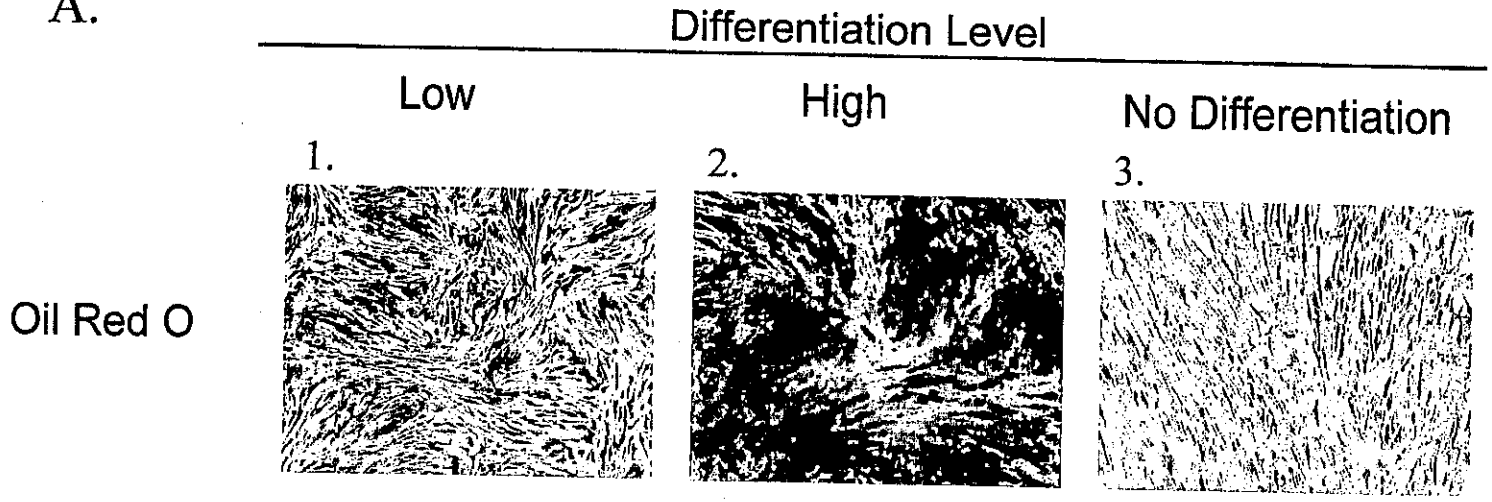
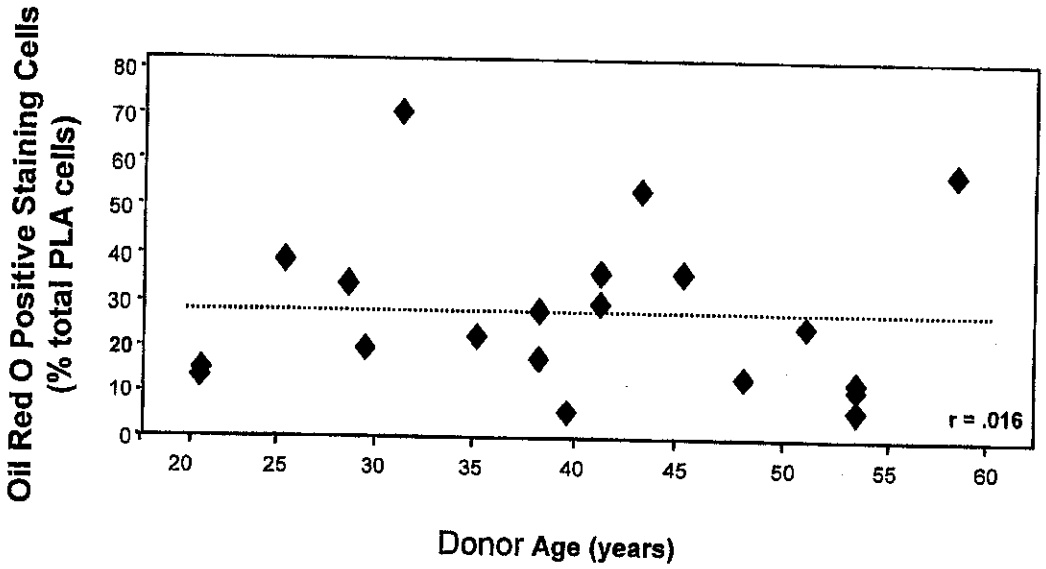


FIG. 9

A.

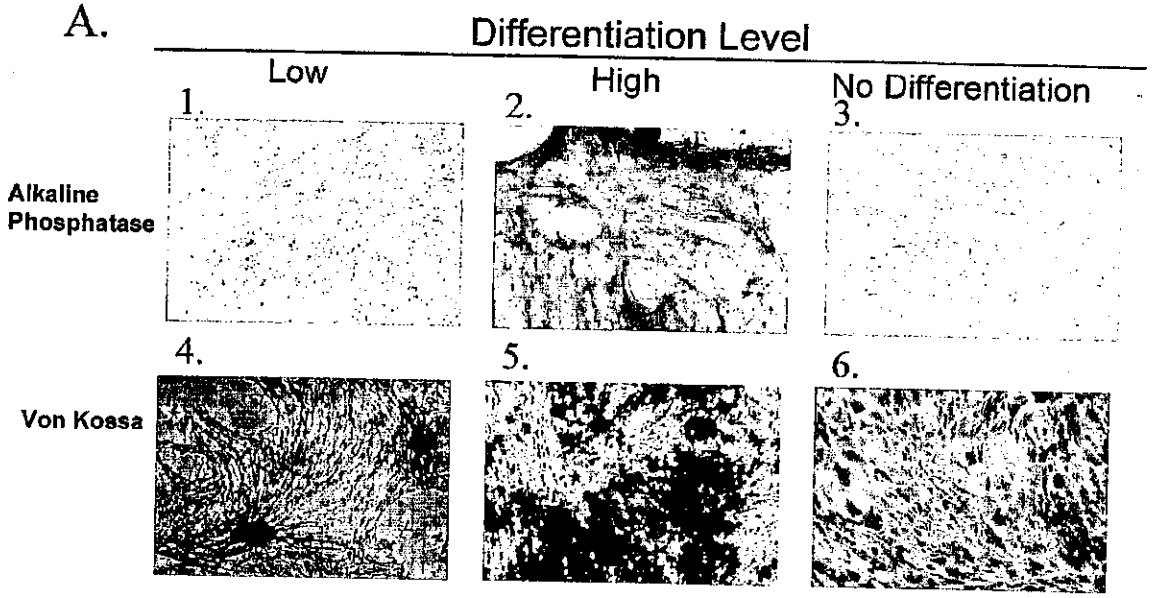


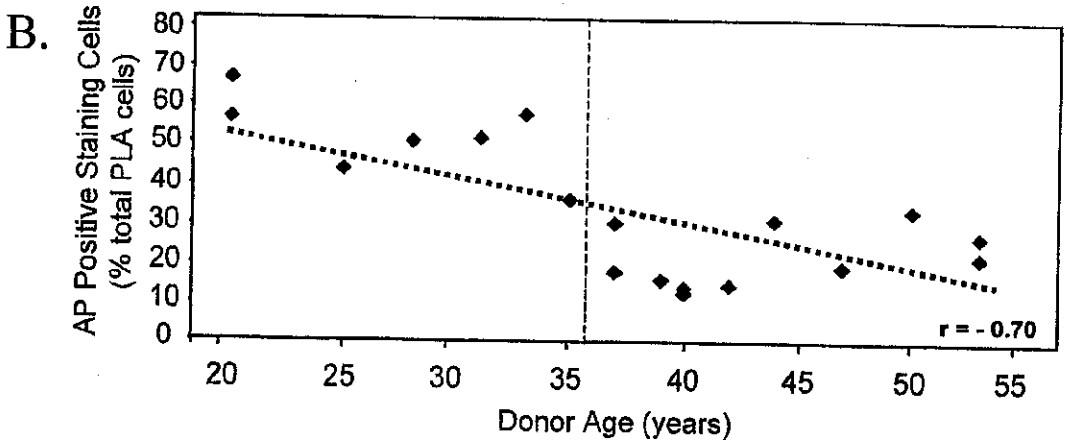
B.

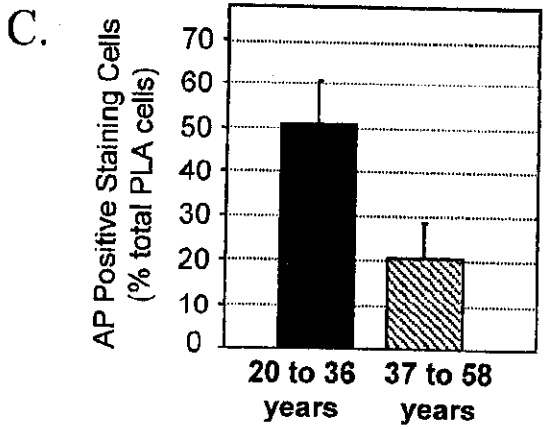


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FIG. 10







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FIG. 11

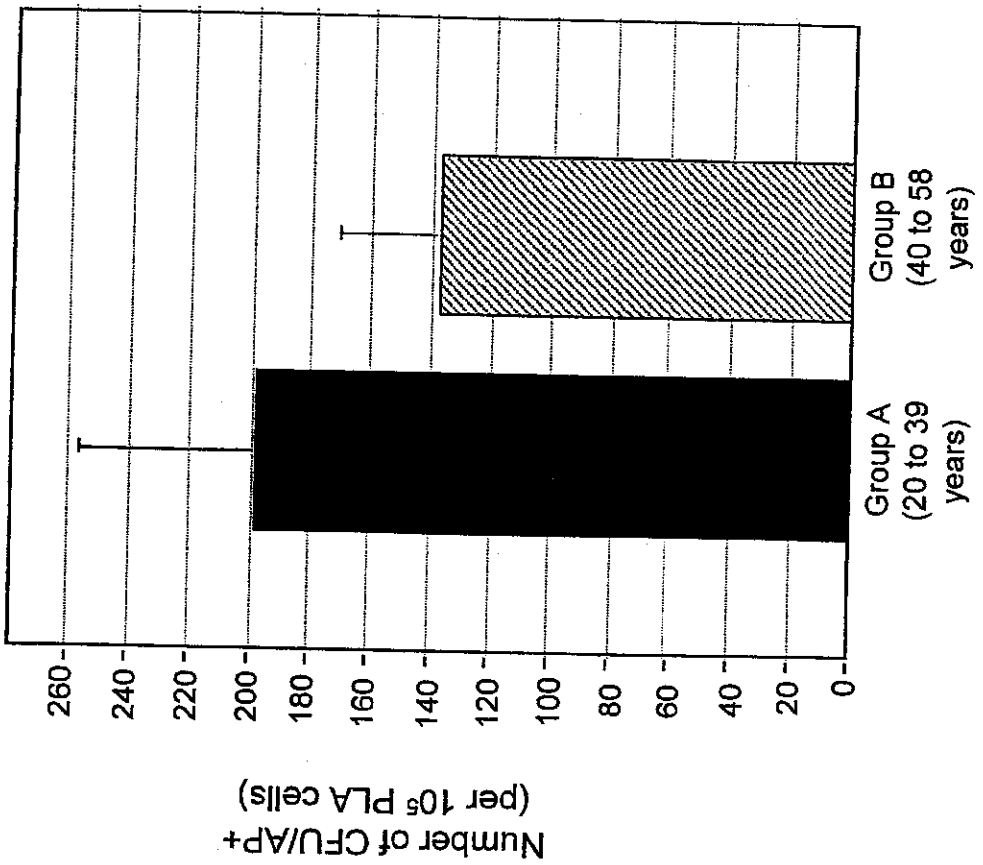
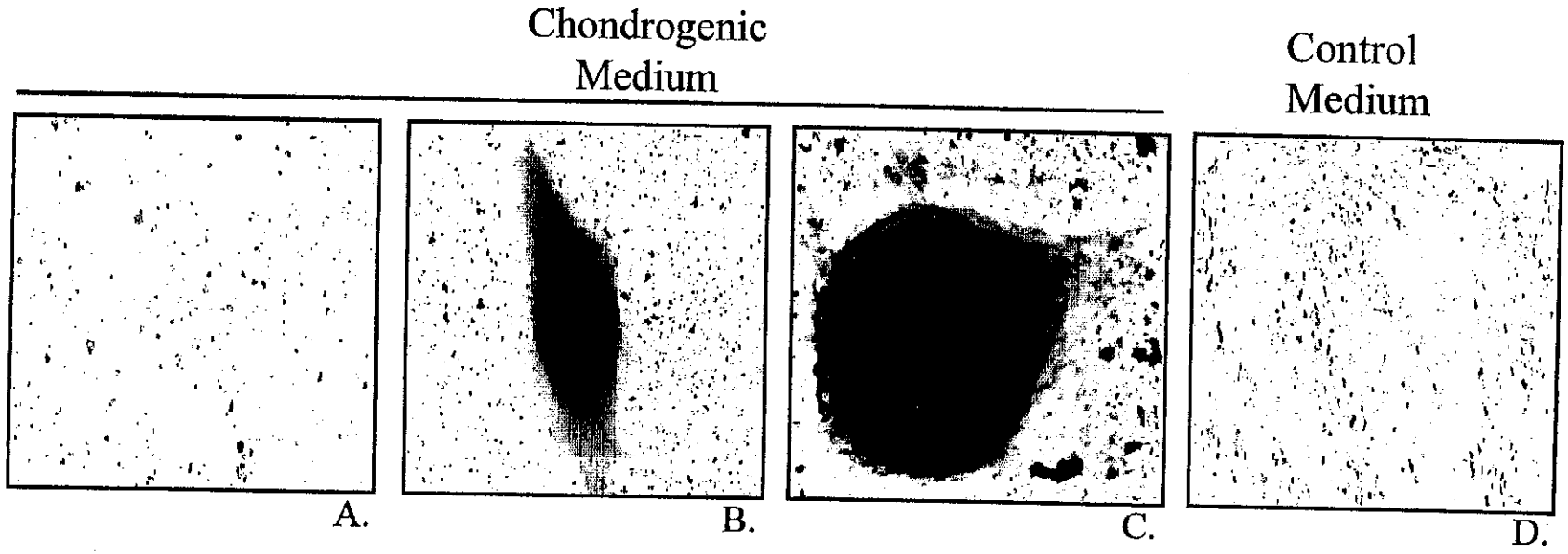

Number of CFU/AP+
(per 10⁵ PLA cells)
0
20
40
60
80
100
120
140
160
180
200
220
240
260
Group A
(20 to 39
years)
Group B
(40 to 58
years)

FIG. 12



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FIG. 13

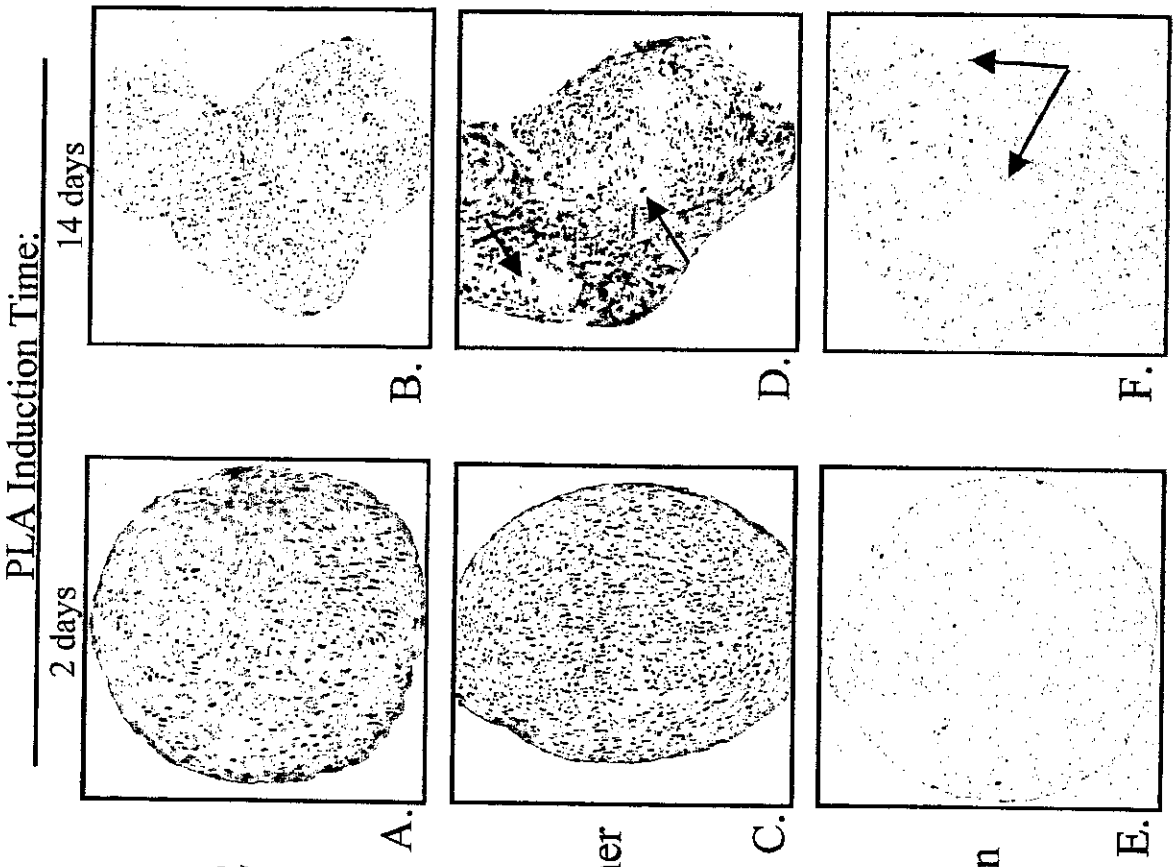
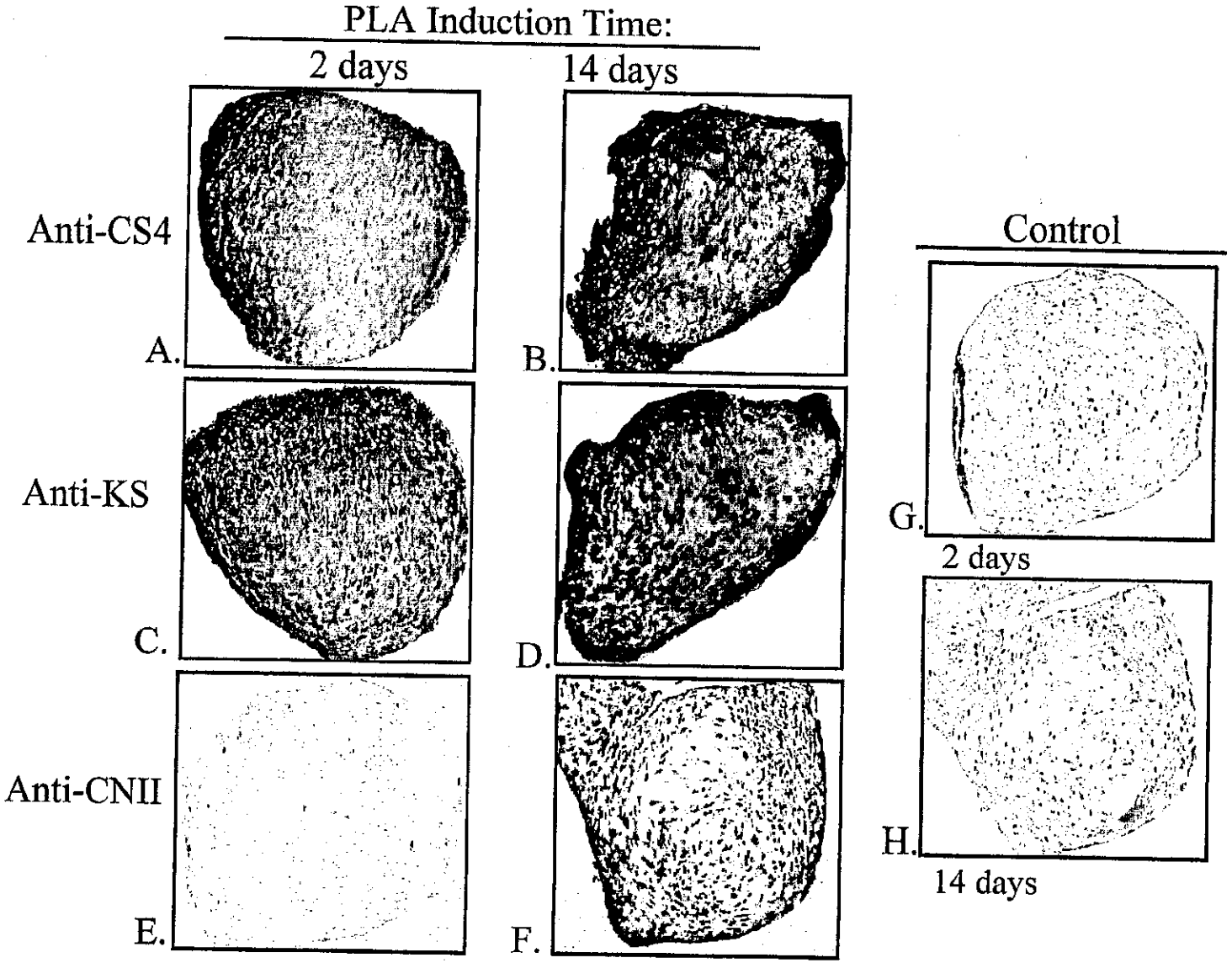


FIG. 14



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FIG. 15

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FIG. 16

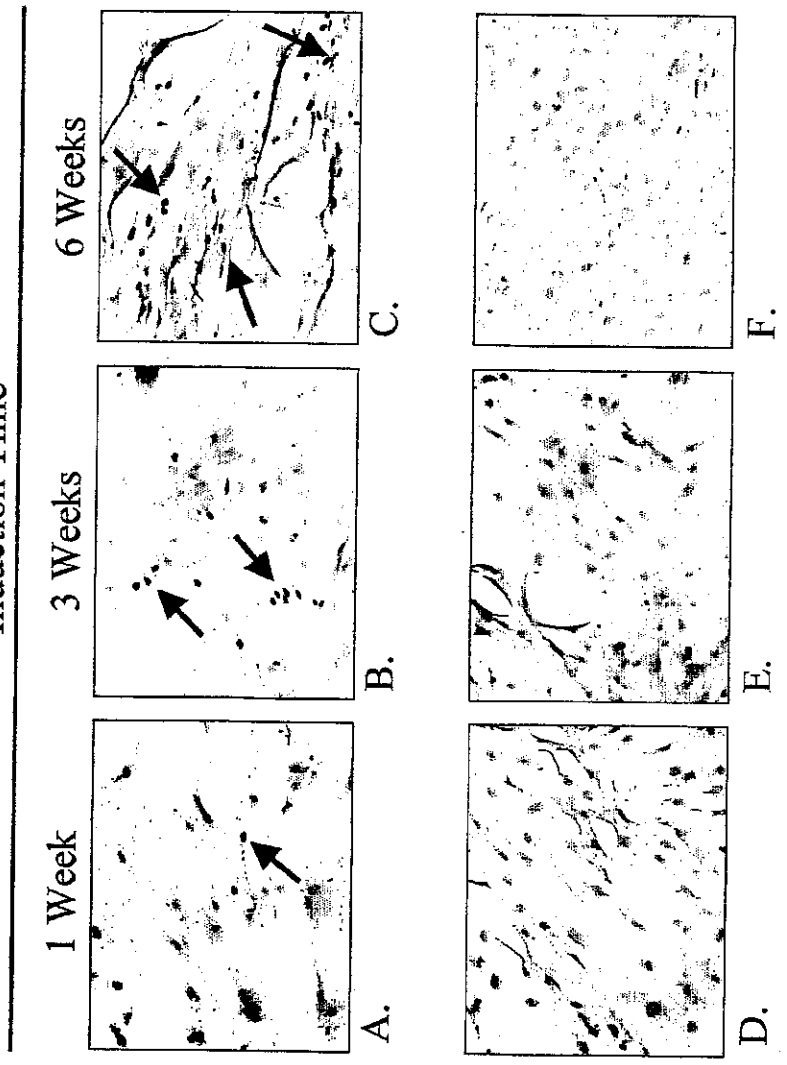
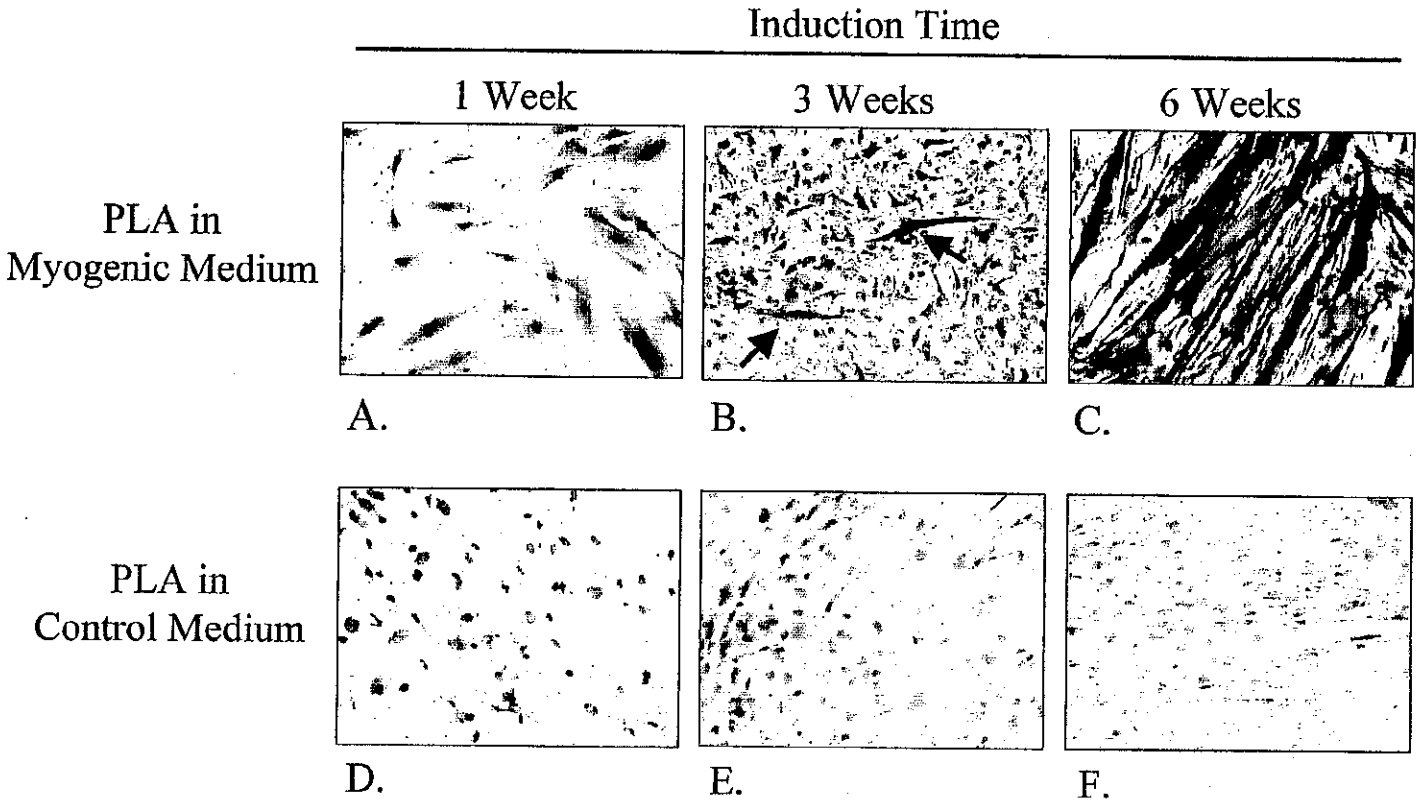
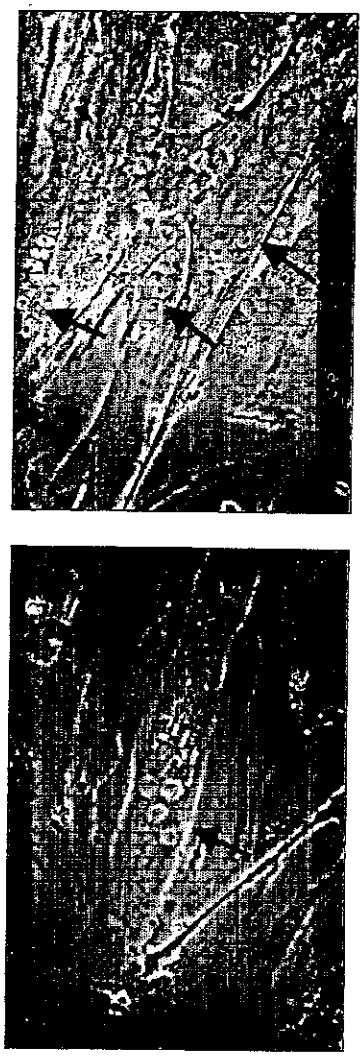


FIG. 17

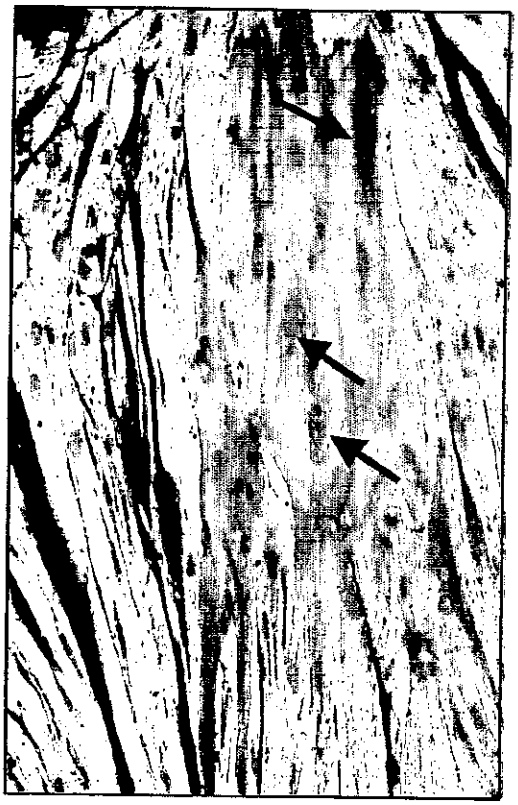


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A.

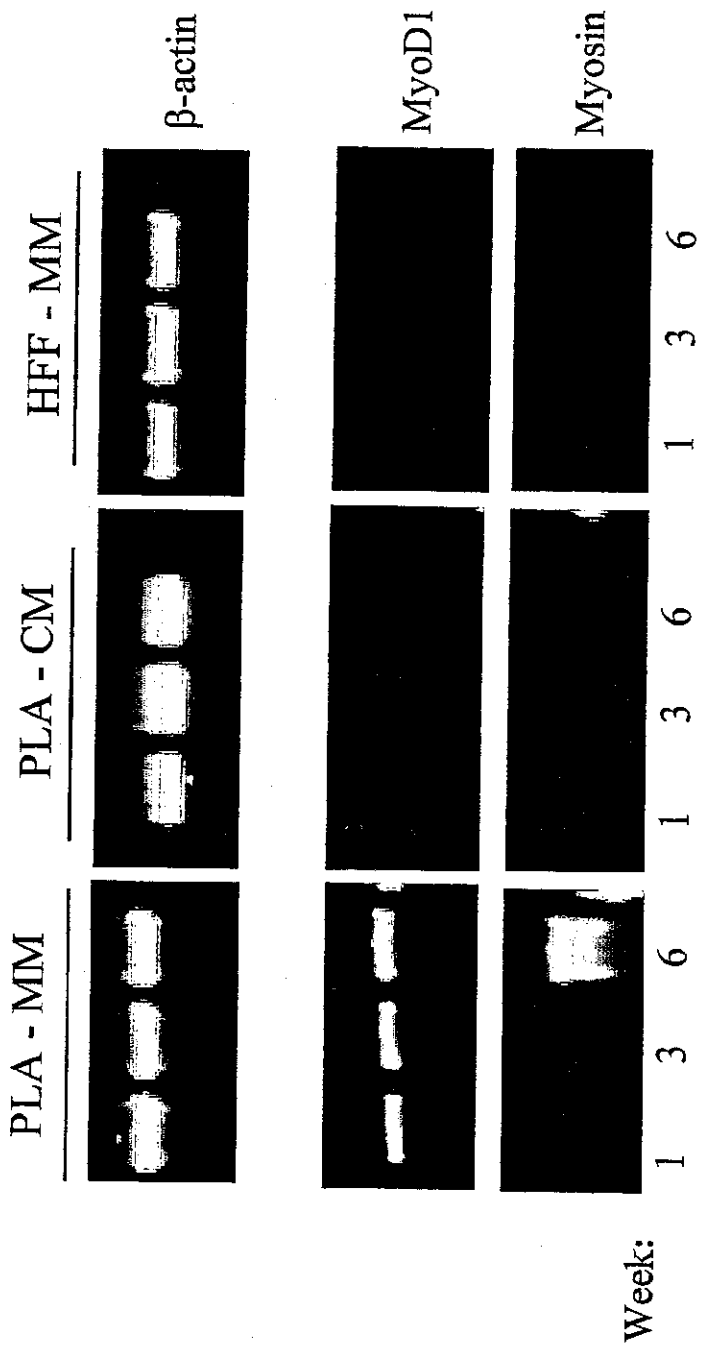


B.

FIG. 18

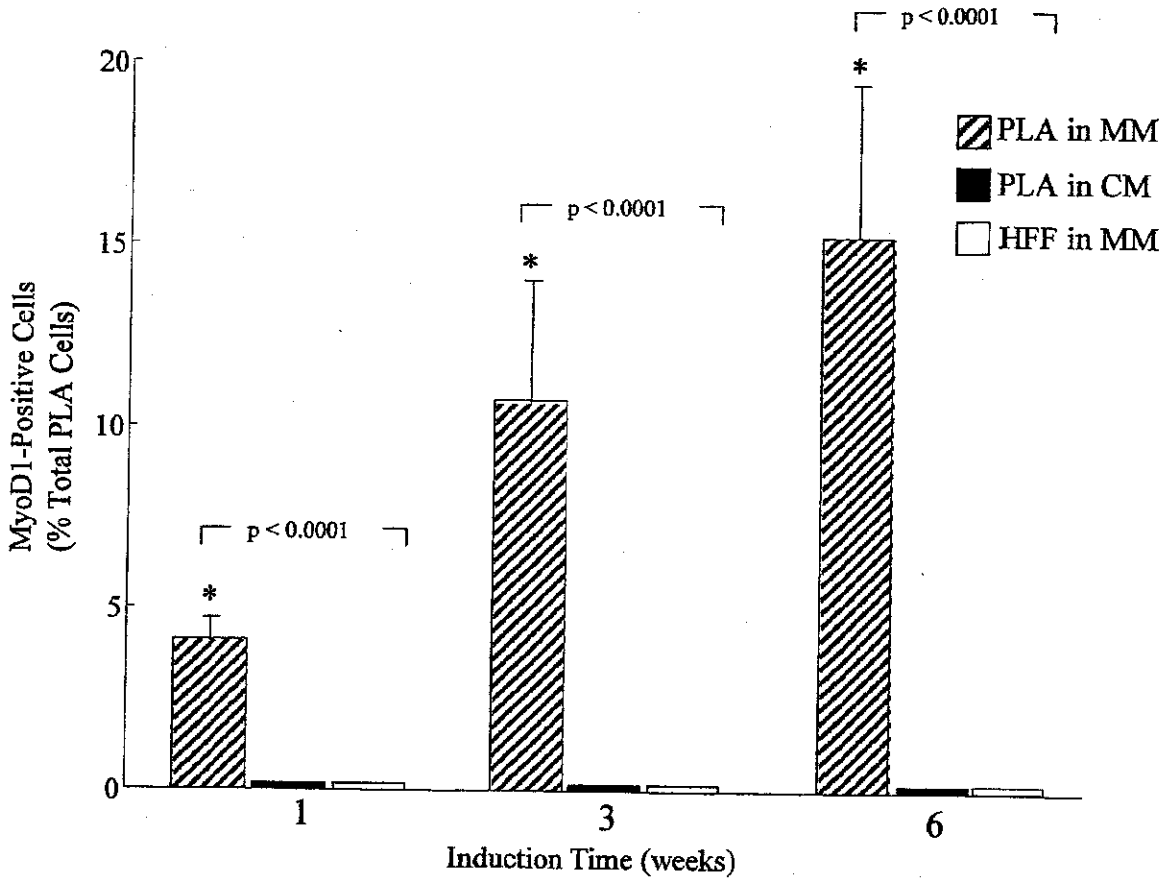
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FIG. 19



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FIG. 20

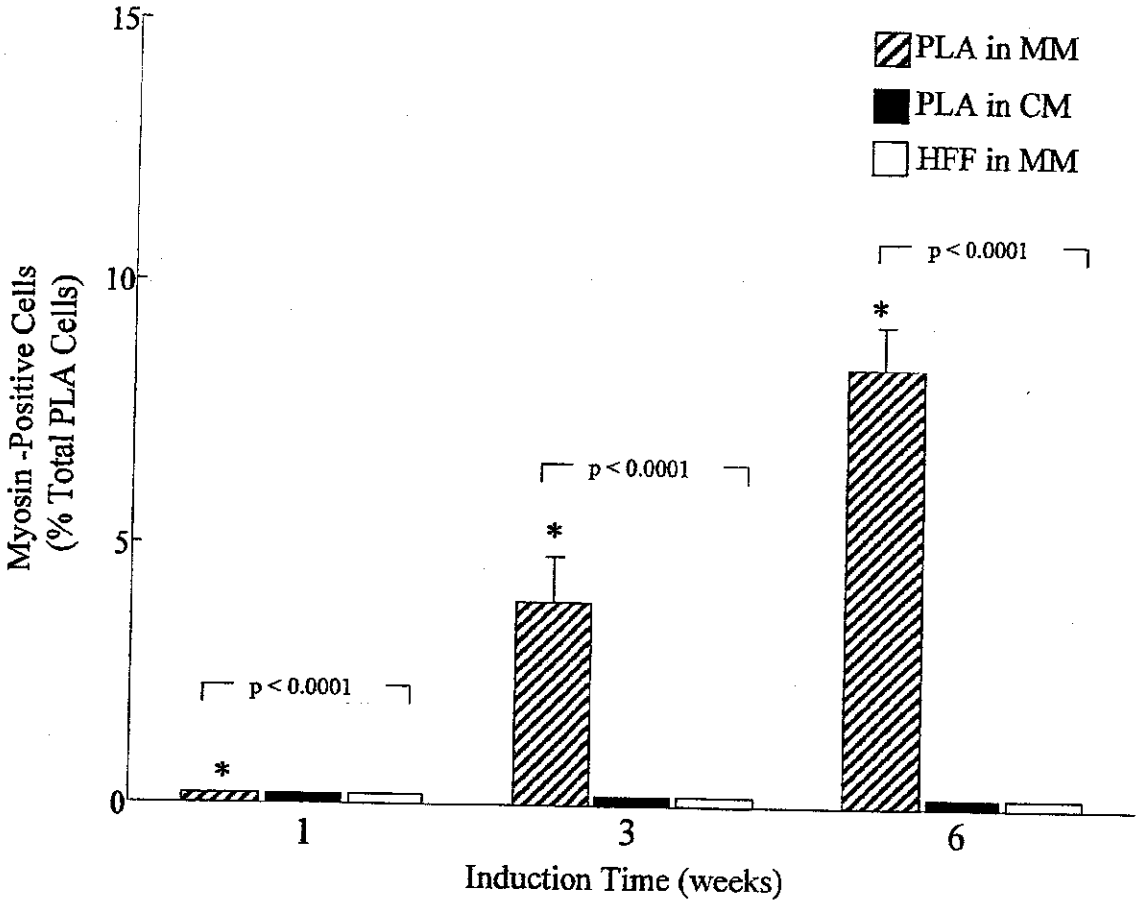


Induction Time		1 WEEK	3 WEEK	6 WEEK
	Cell Type/Media			
MyoD1-positive cells (% total PLA cells ± SEM)	PLA/MM	4.11 ± 0.51%	10.11 ± 3.85%	15.37 ± 4.33%
	PLA/CM	not observed	not observed	not observed
	HFF/CM	not observed	not observed	not observed

* $P < 0.001$, $F = 18.9$
one-way ANOVA comparing experimental (MyoD1) values from 1, 3 and 6 week differentiation.

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FIG. 21

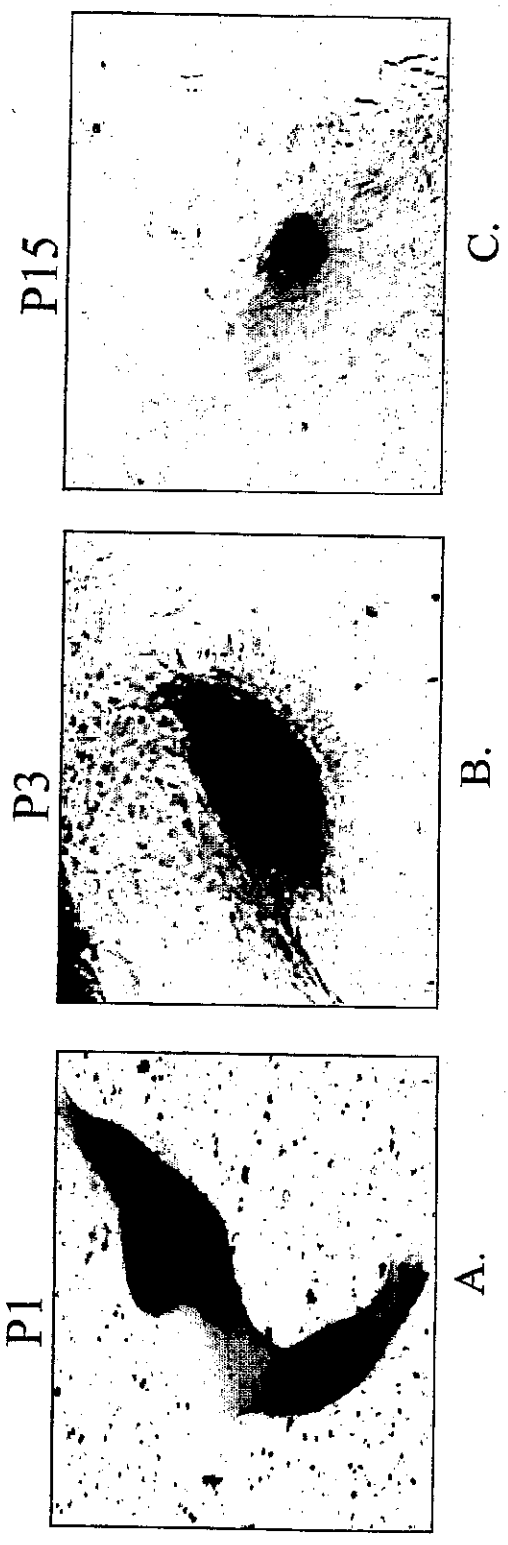


Induction Time		1 WEEK	3 WEEK	6 WEEK
	Cell Type/Media			
Myosin-positive cells (% total PLA cells ±SEM)	PLA/MM	not observed	3.88 ± 0.46%	8.42 ± 0.71%
	PLA/CM	not observed	not observed	not observed
	HFF/CM	not observed	not observed	not observed

* $P < 0.0001$, $F = 75.5$
one-way ANOVA comparing experimental (myosin) values from 1, 3 and 6 week differentiation.

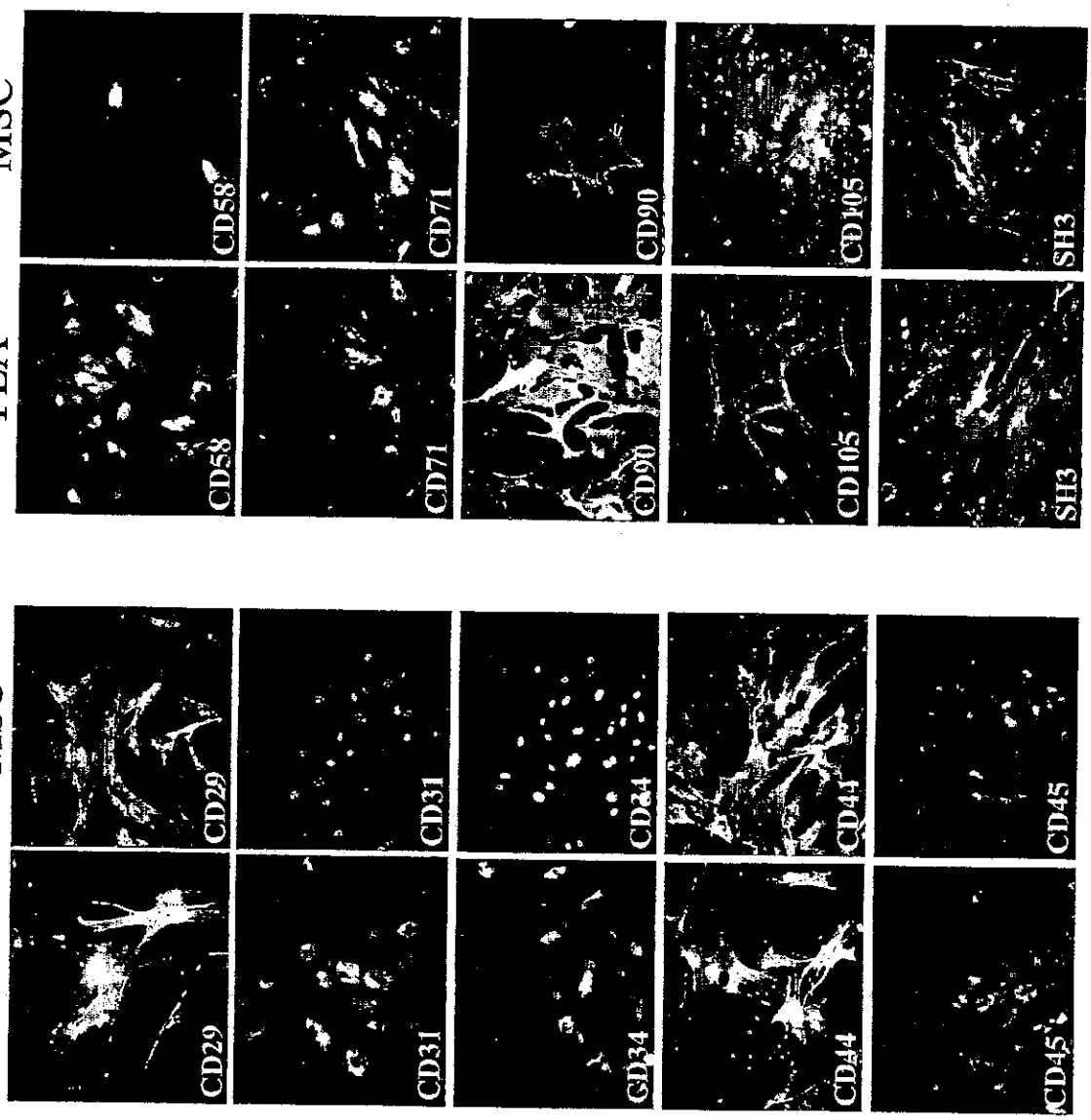
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FIG. 22



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FIG. 23



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FIG. 24

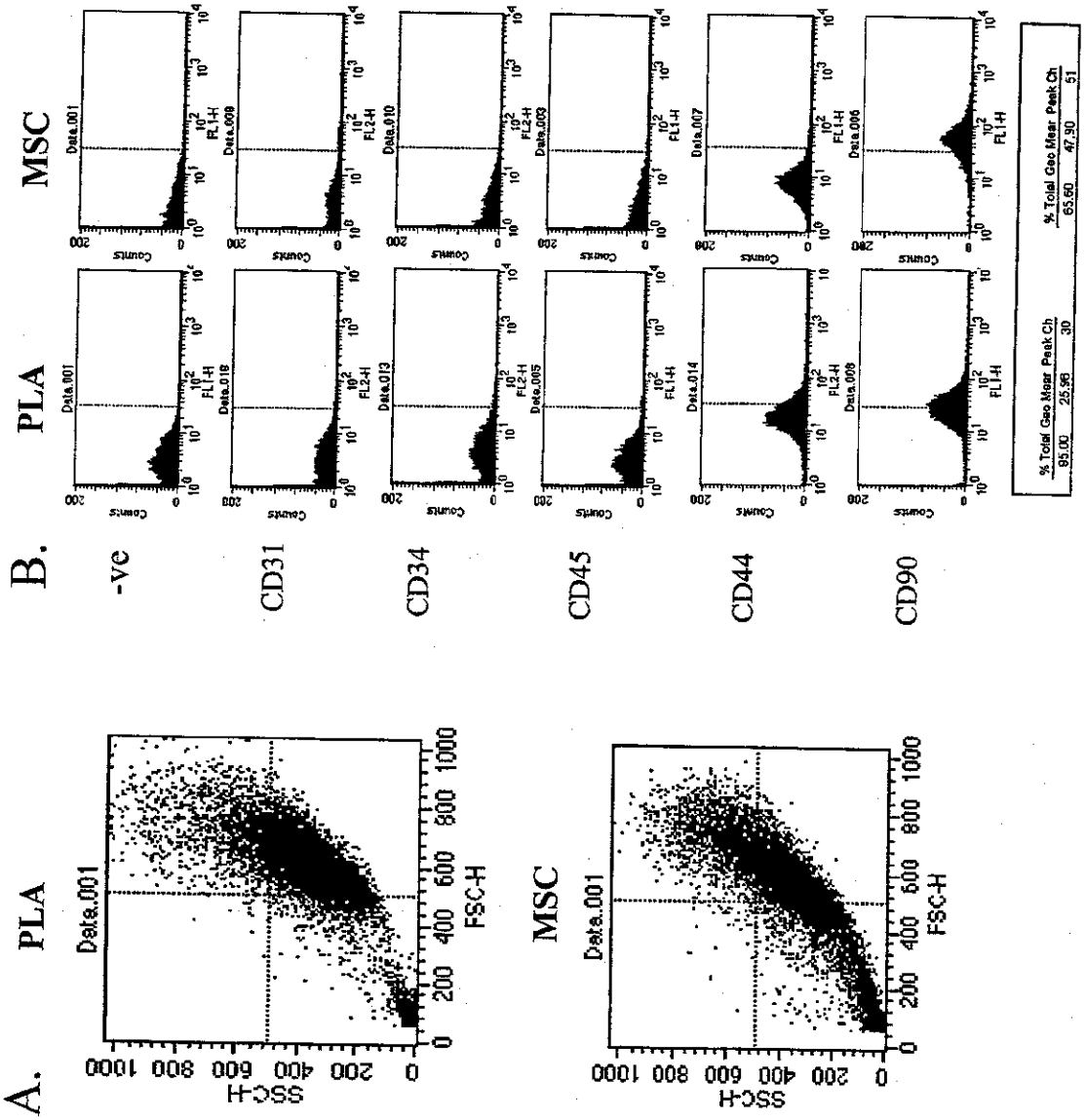
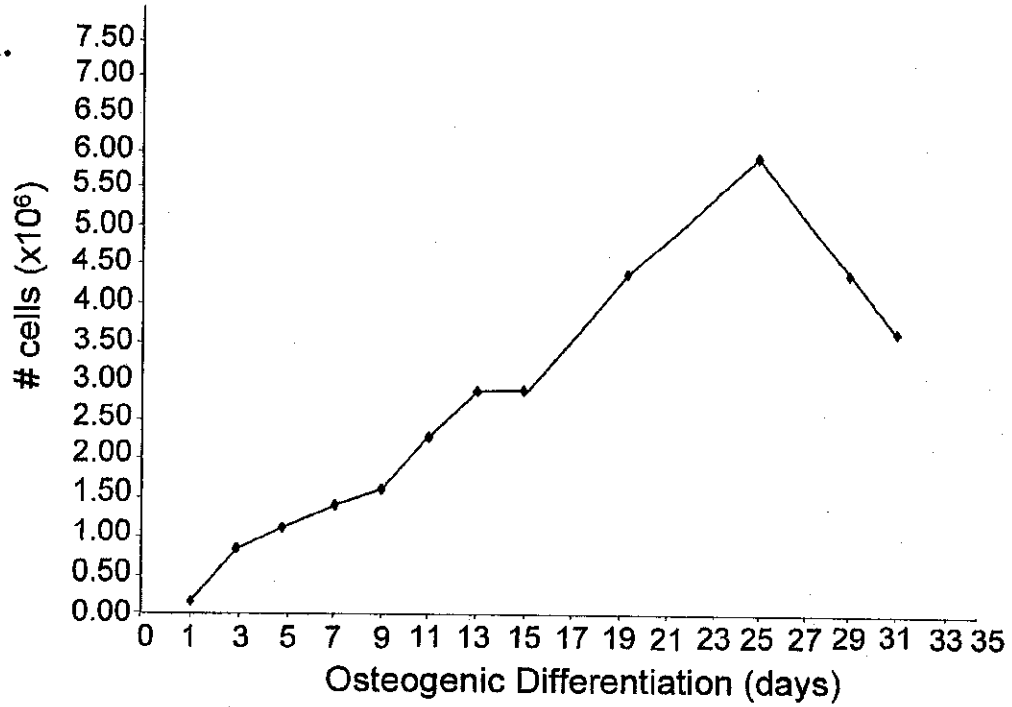
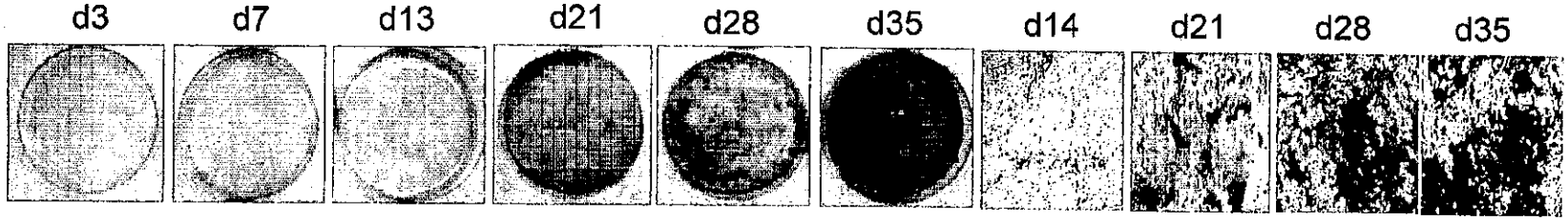


FIG. 25

A.



B.



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FIG. 26

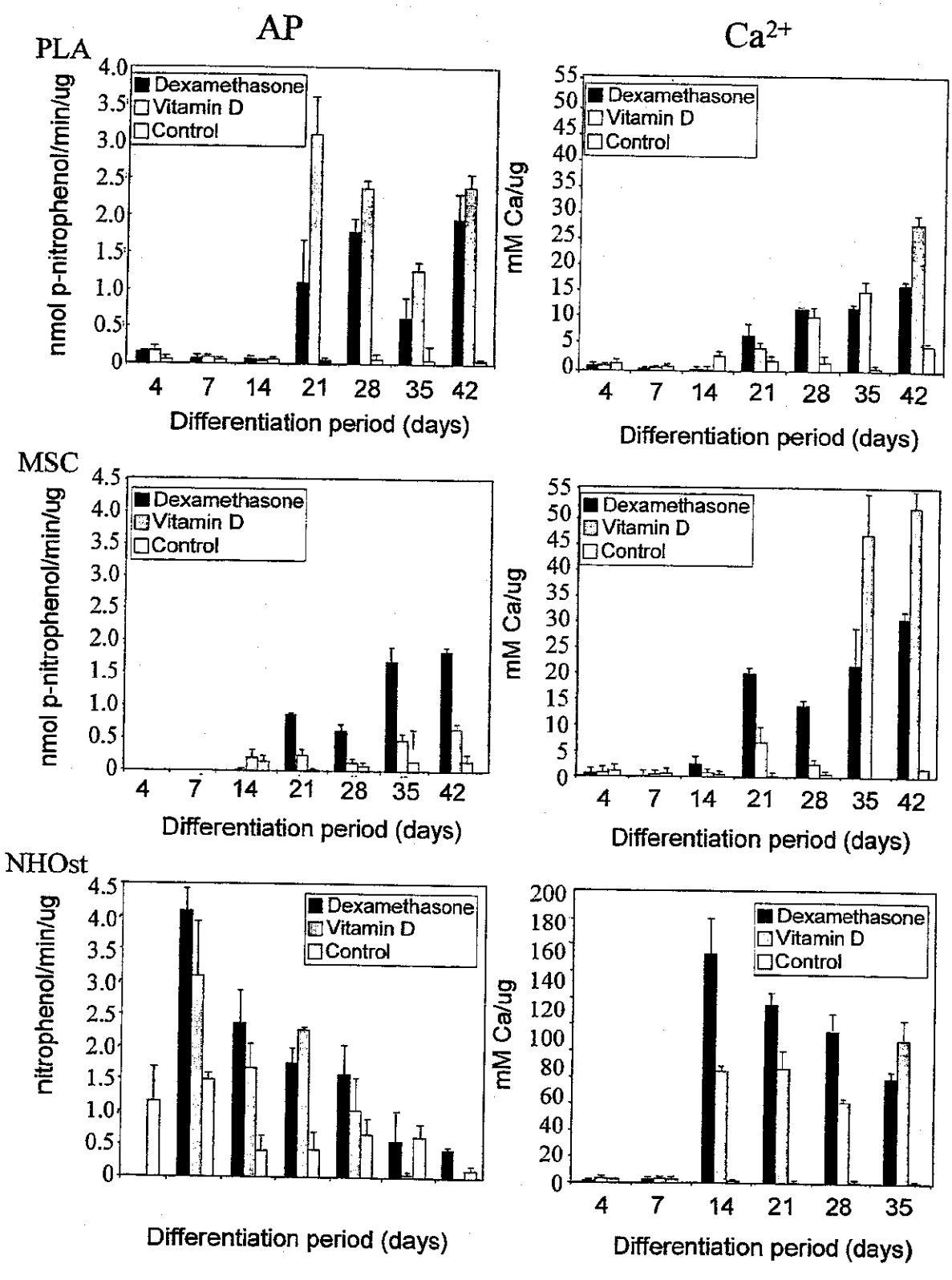
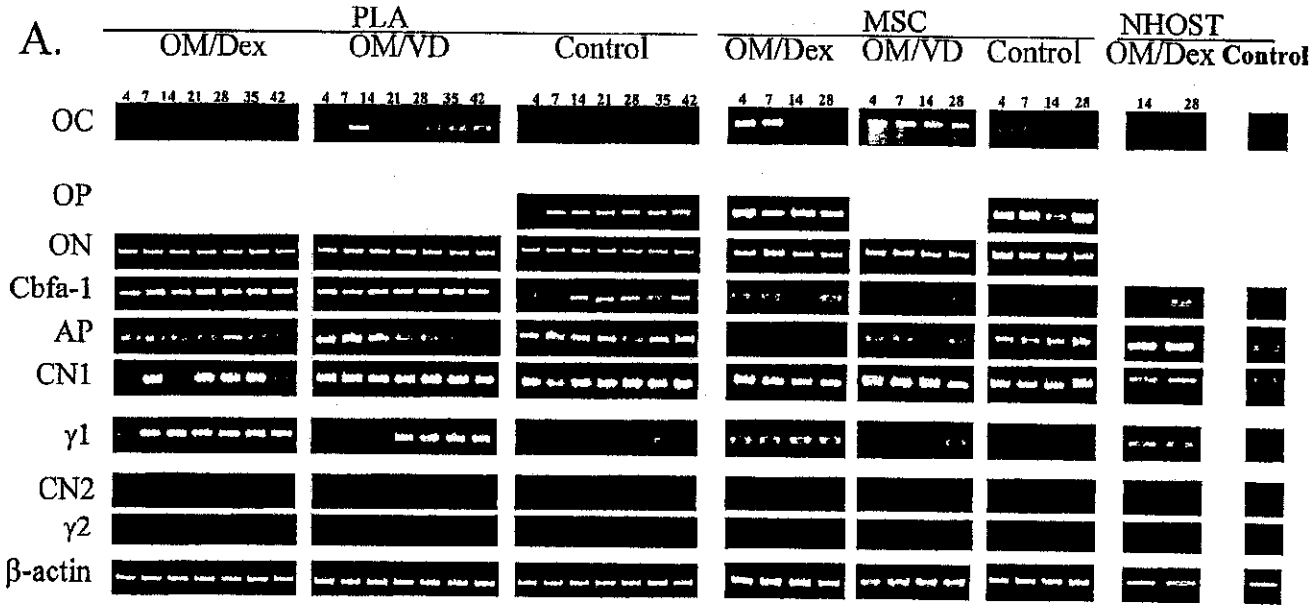


FIG. 27

A.



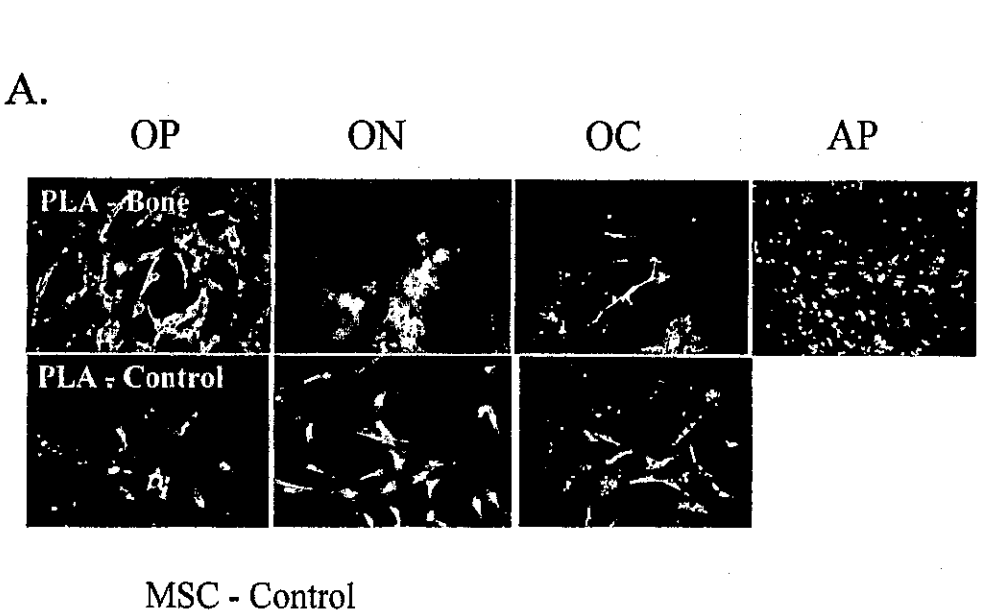
B. Gene expression level in Osteo-induced PLA samples vs. non-induced PLA controls

Gene	PLA69	PLA70	PLA71
OP	-37.3	-10.4	-12.2
ON	-3.7	-3.1	-2.8
CN1 α1	-4.5	-3.1	-4.9
BSP	+2.2	NS	NS
OC	+2.3	NS	NS
CBFA1	+2.0	+2.0	NS

"+" gene upregulated vs. controls
"-" gene downregulated vs. controls
NS no significant difference observed vs. controls

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FIG. 28

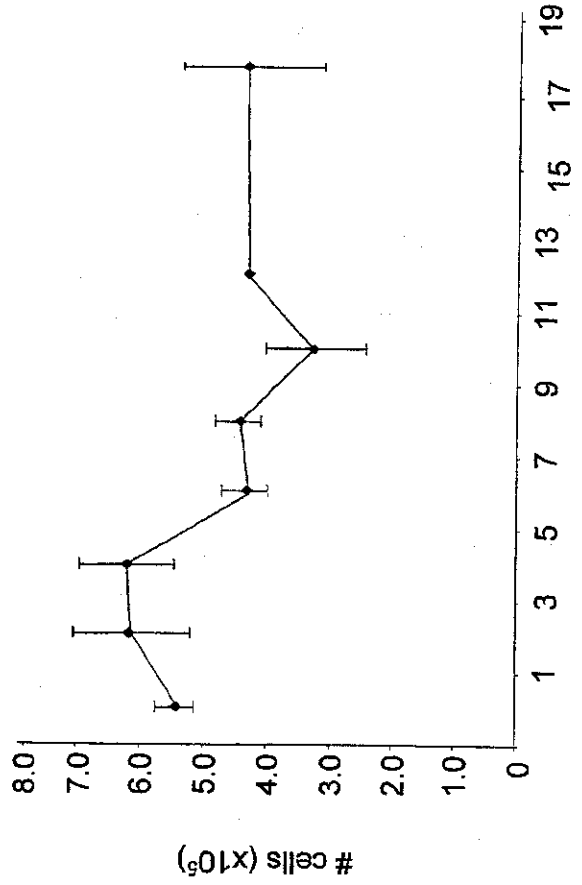


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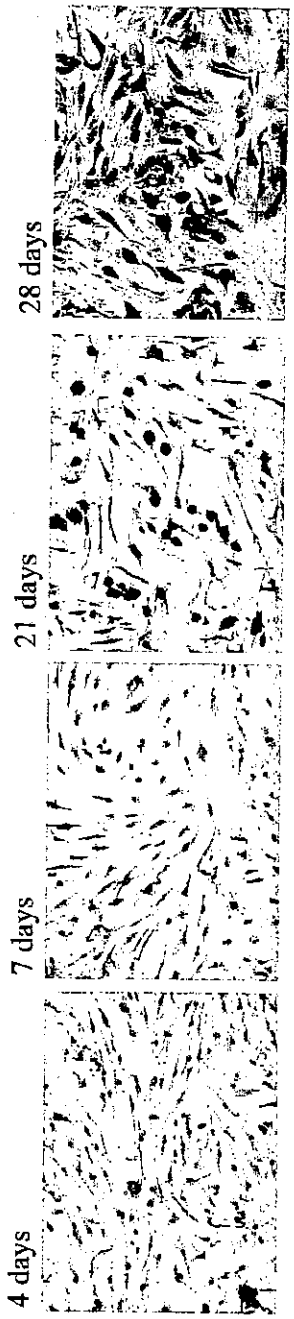
- 8 MAR 2006

FIG. 29

A.



B.



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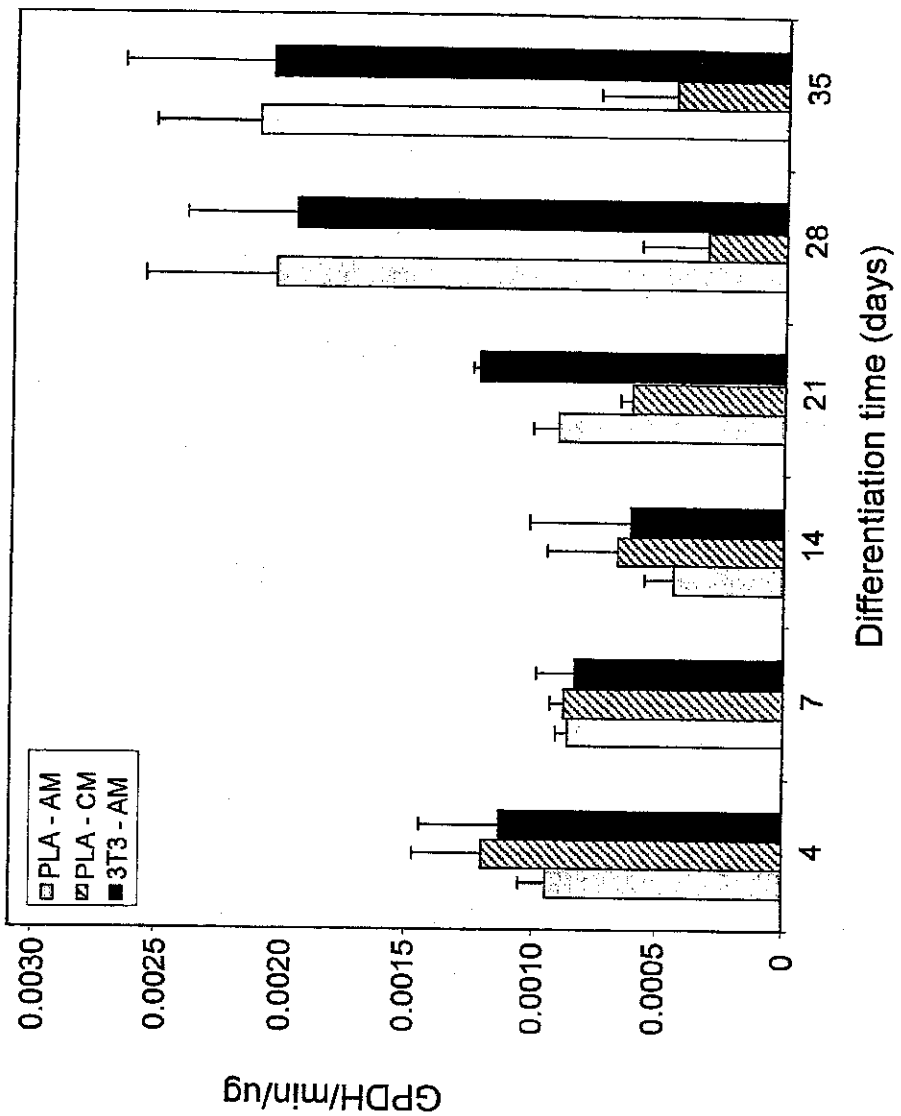


FIG. 30

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FIG. 31

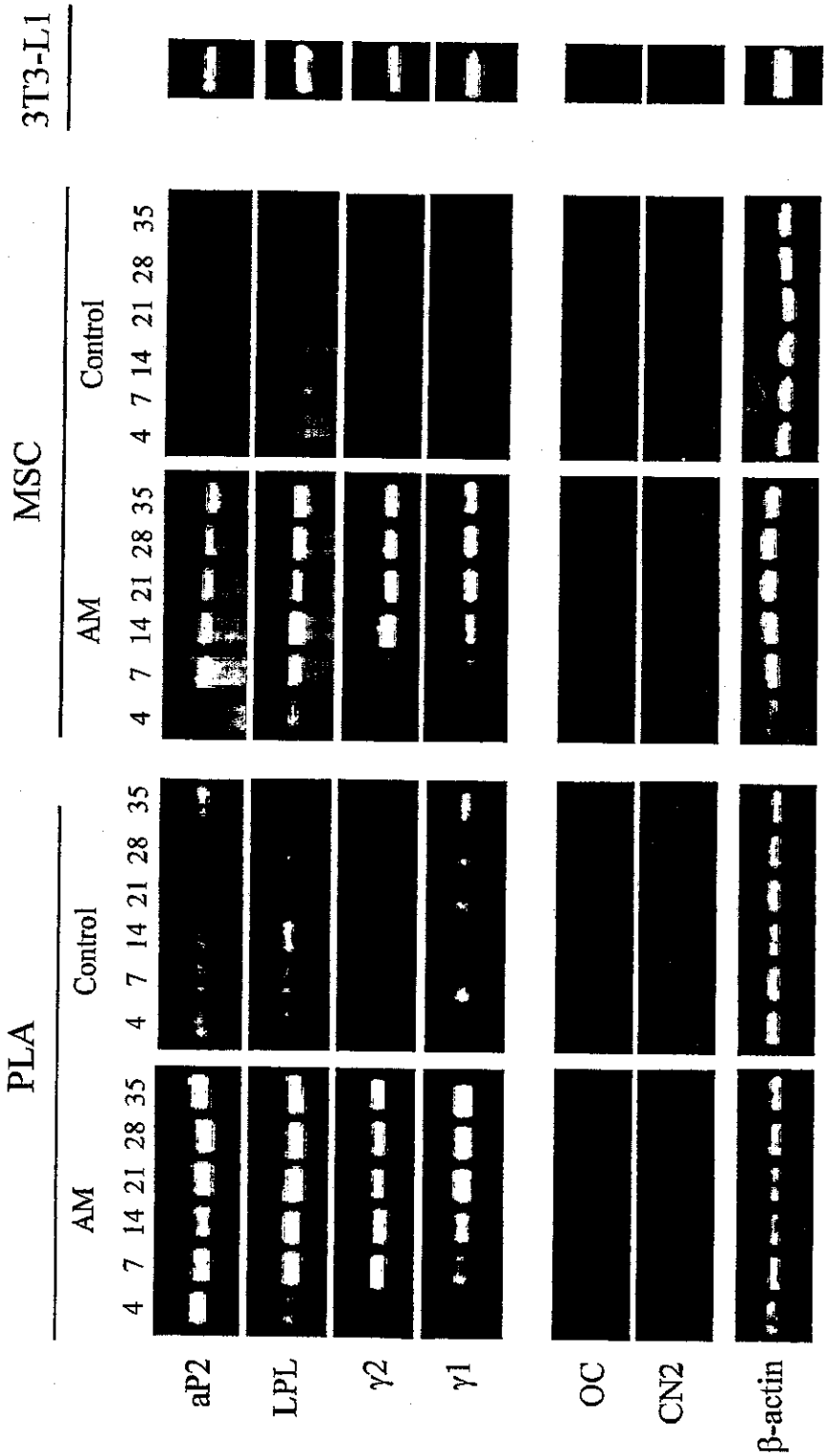
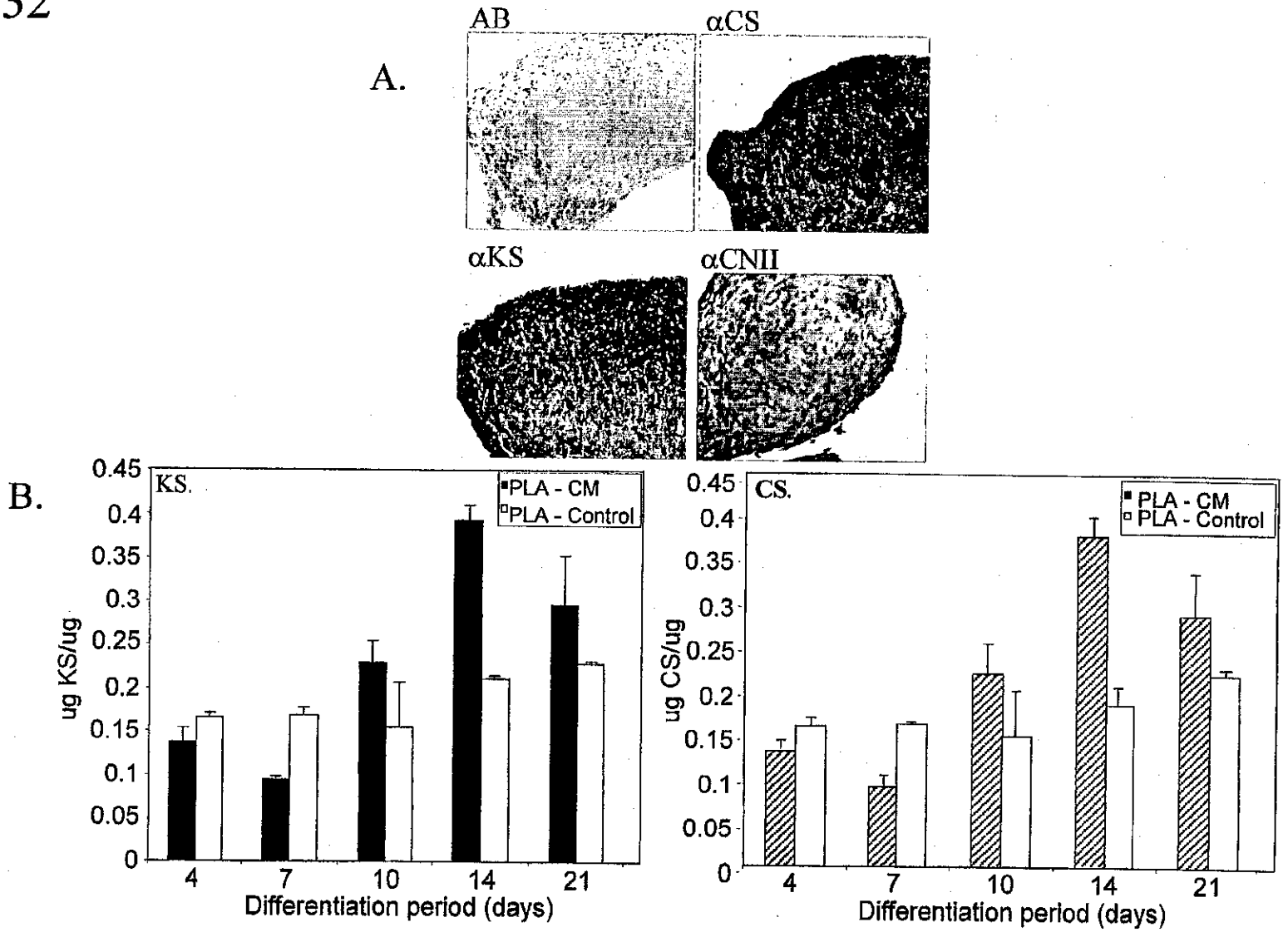


FIG. 32

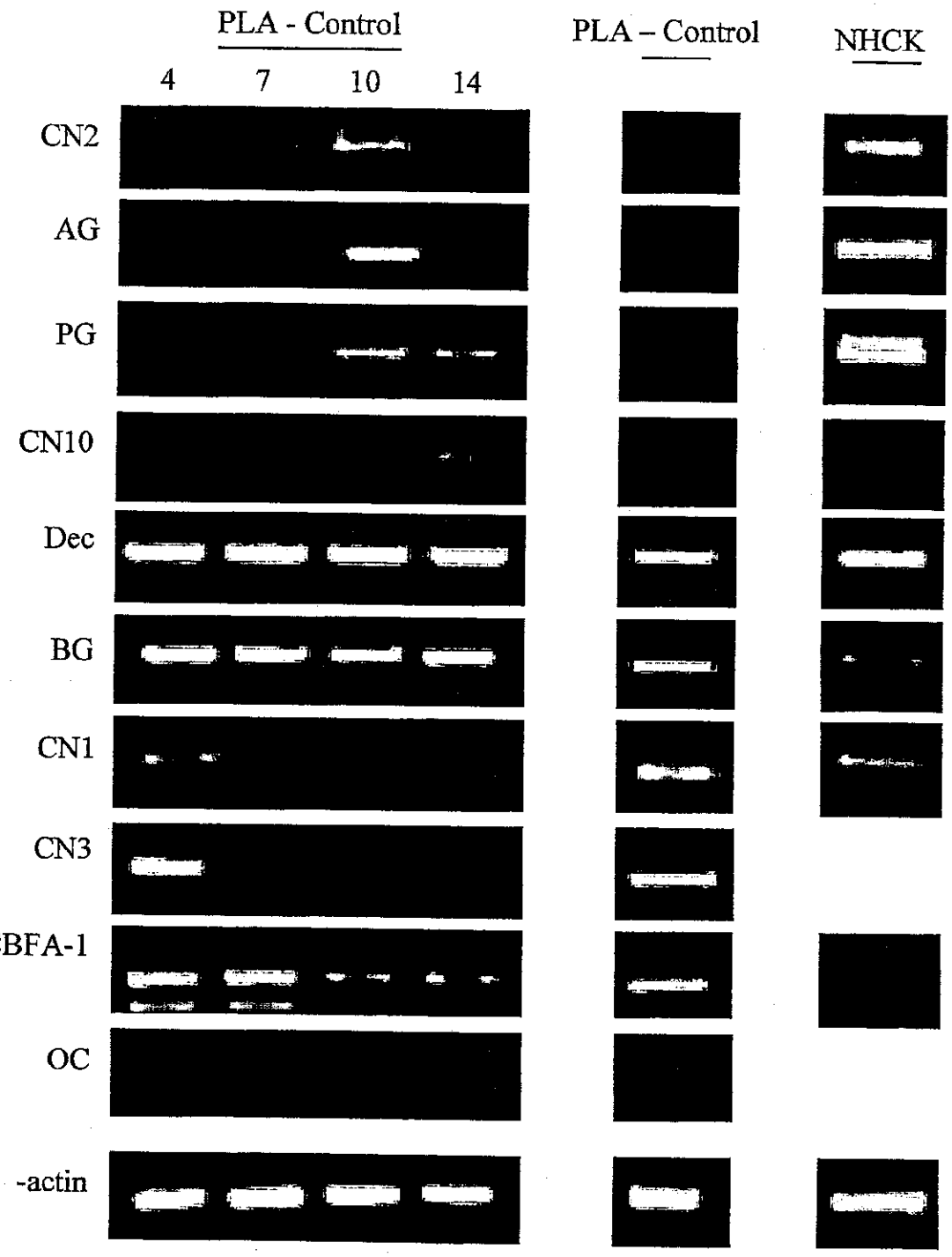


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FIG. 33



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FIG. 34

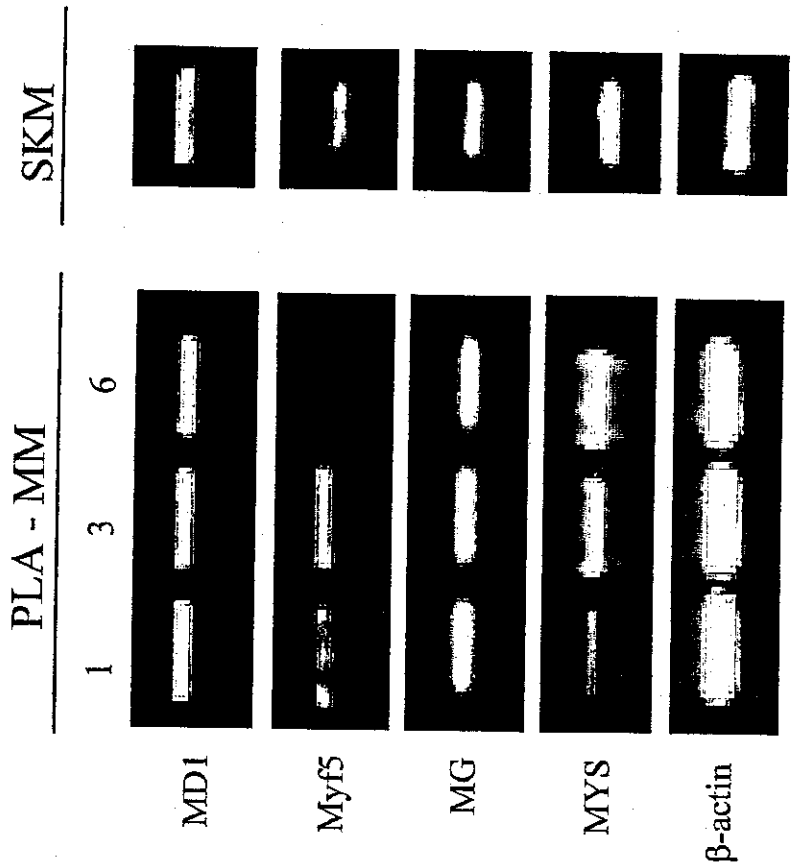


FIG. 35

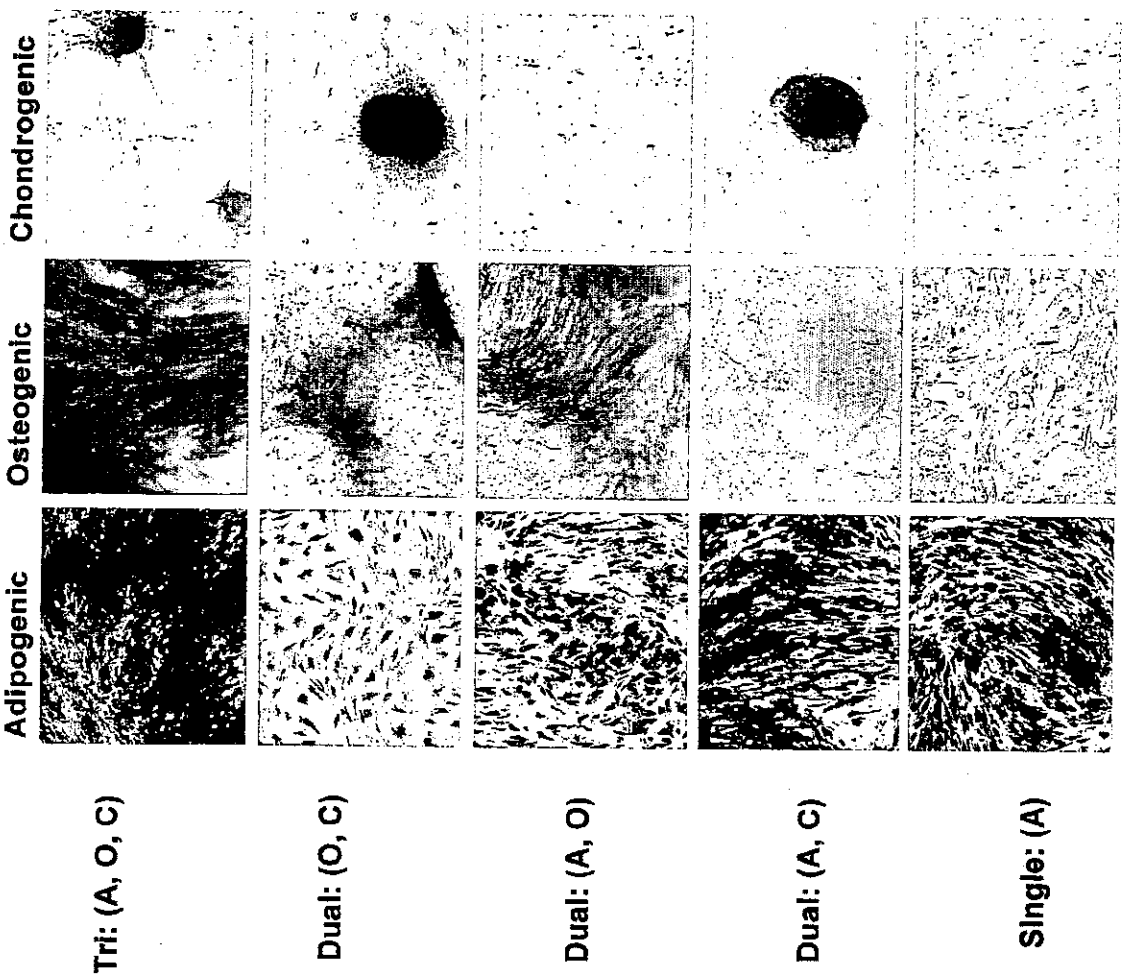

Chondrogenic
Osteogenic
Adipogenic
Tri: (A, O, C)
Dual: (O, C)
Dual: (A, O)
Dual: (A, C)
Single: (A)

FIG. 36

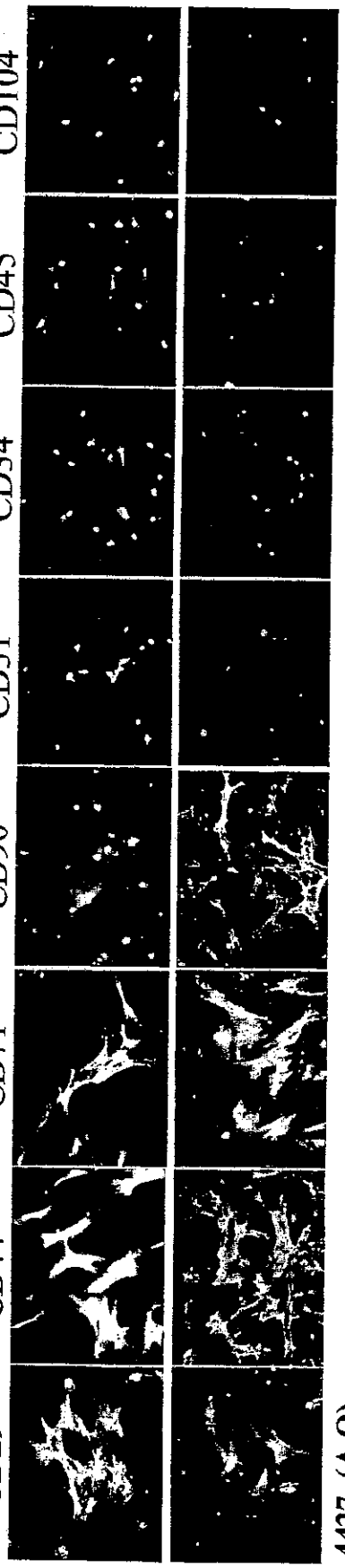
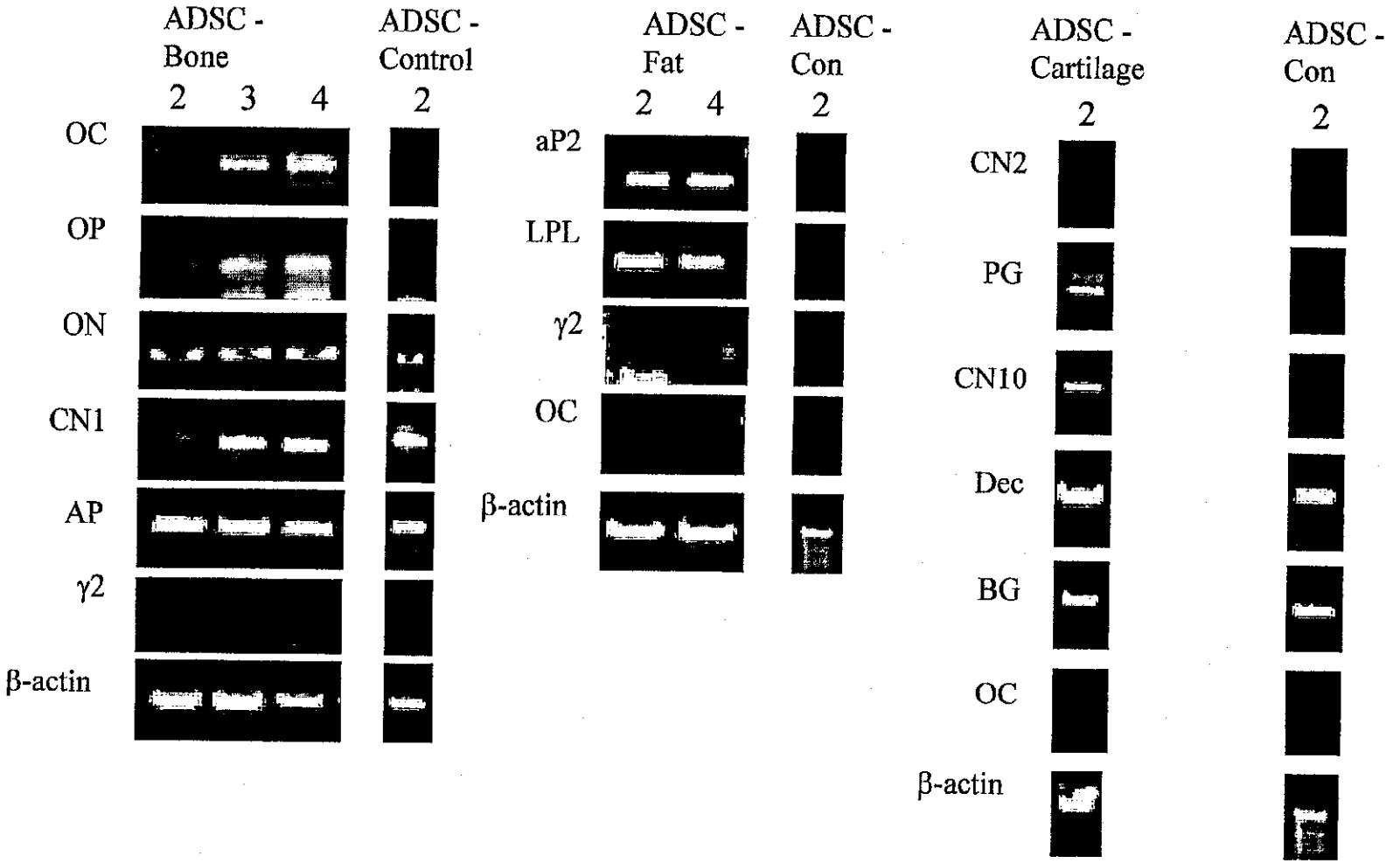


FIG. 37

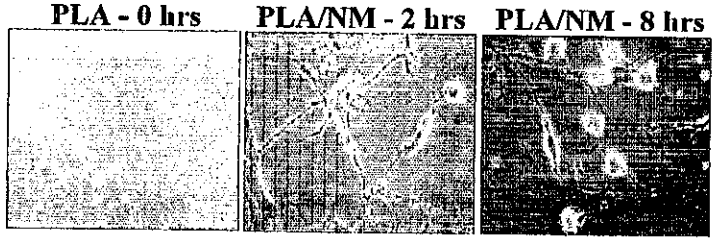


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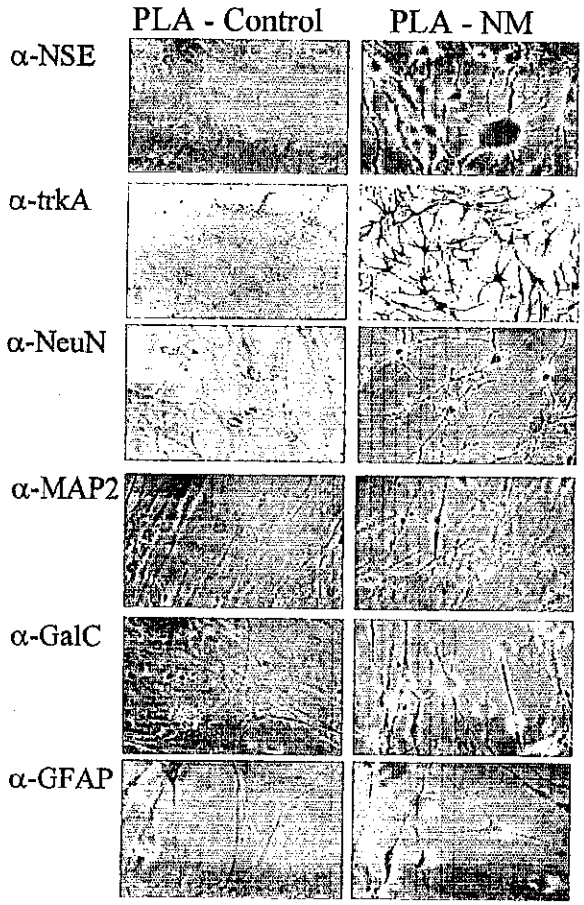
- 8 MAR 2006

FIG. 38

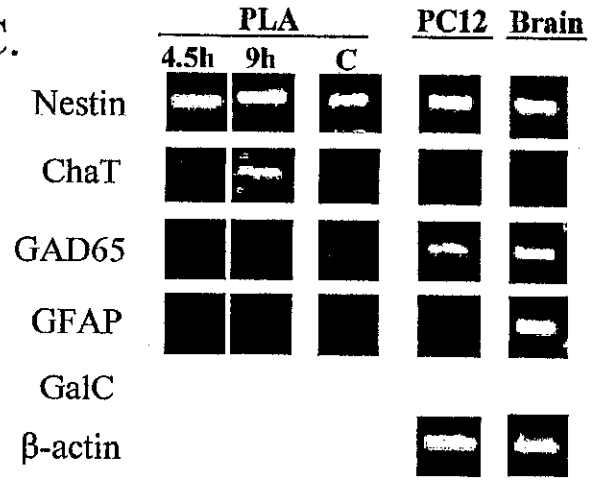
A.



B.



C.



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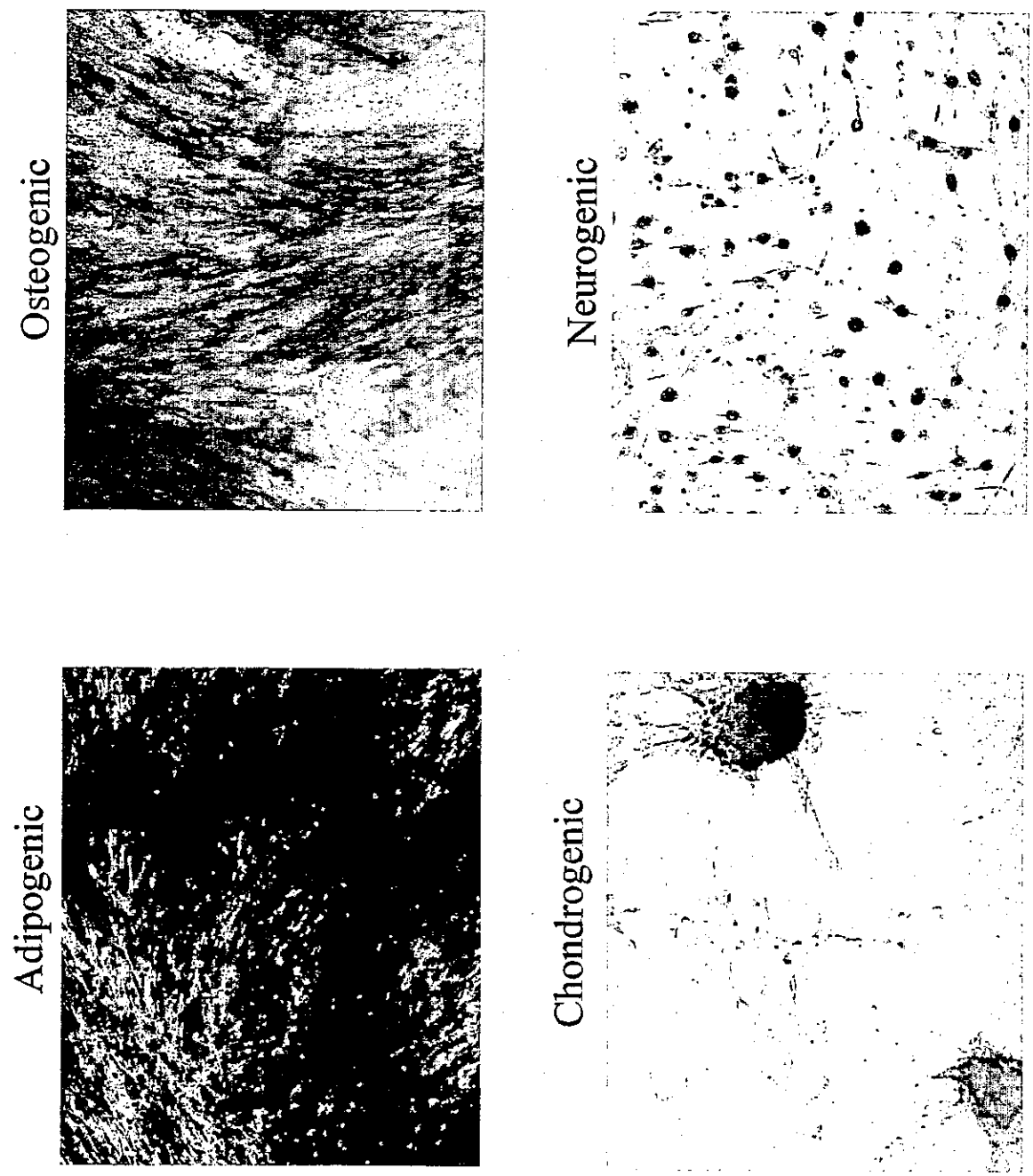
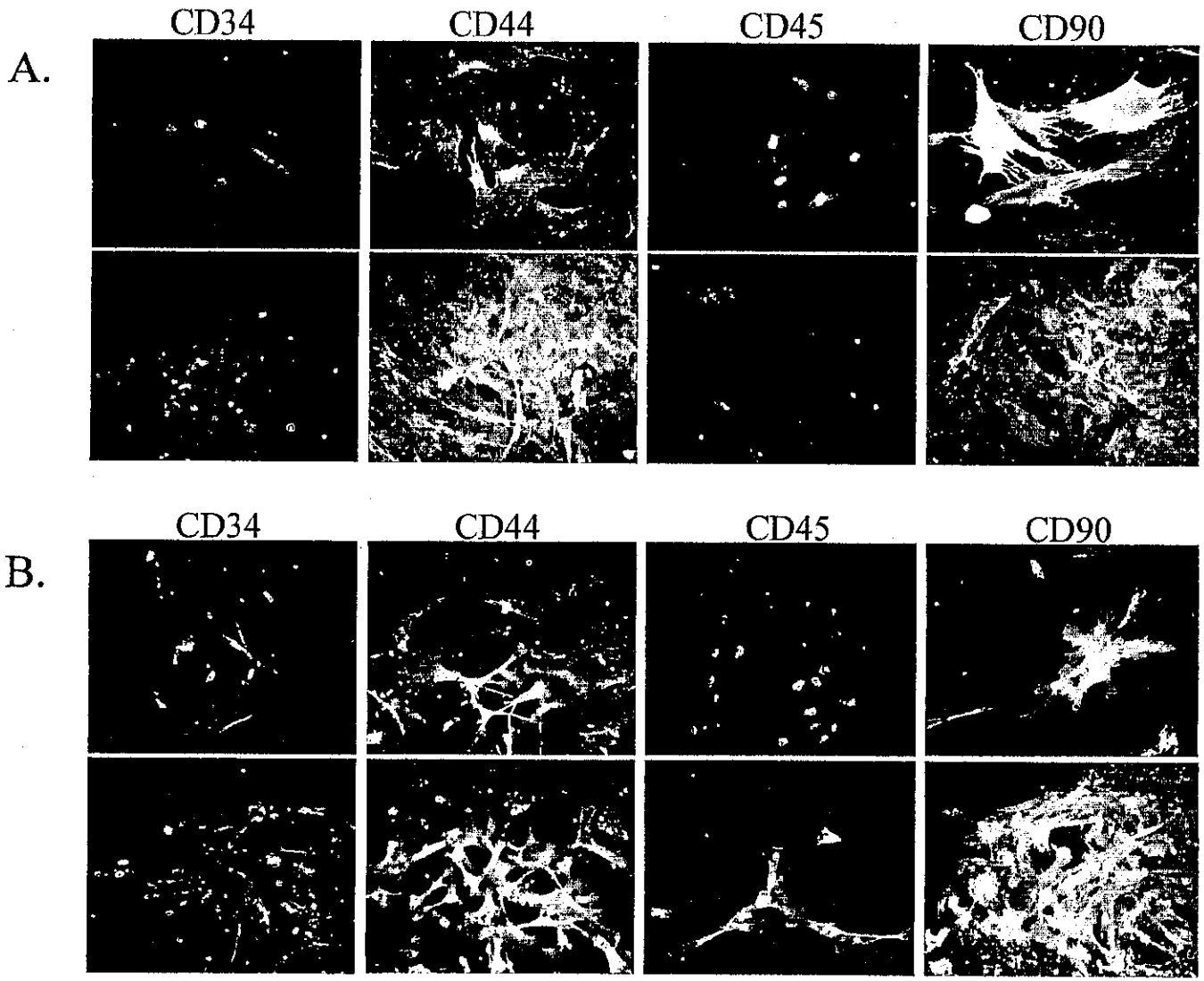


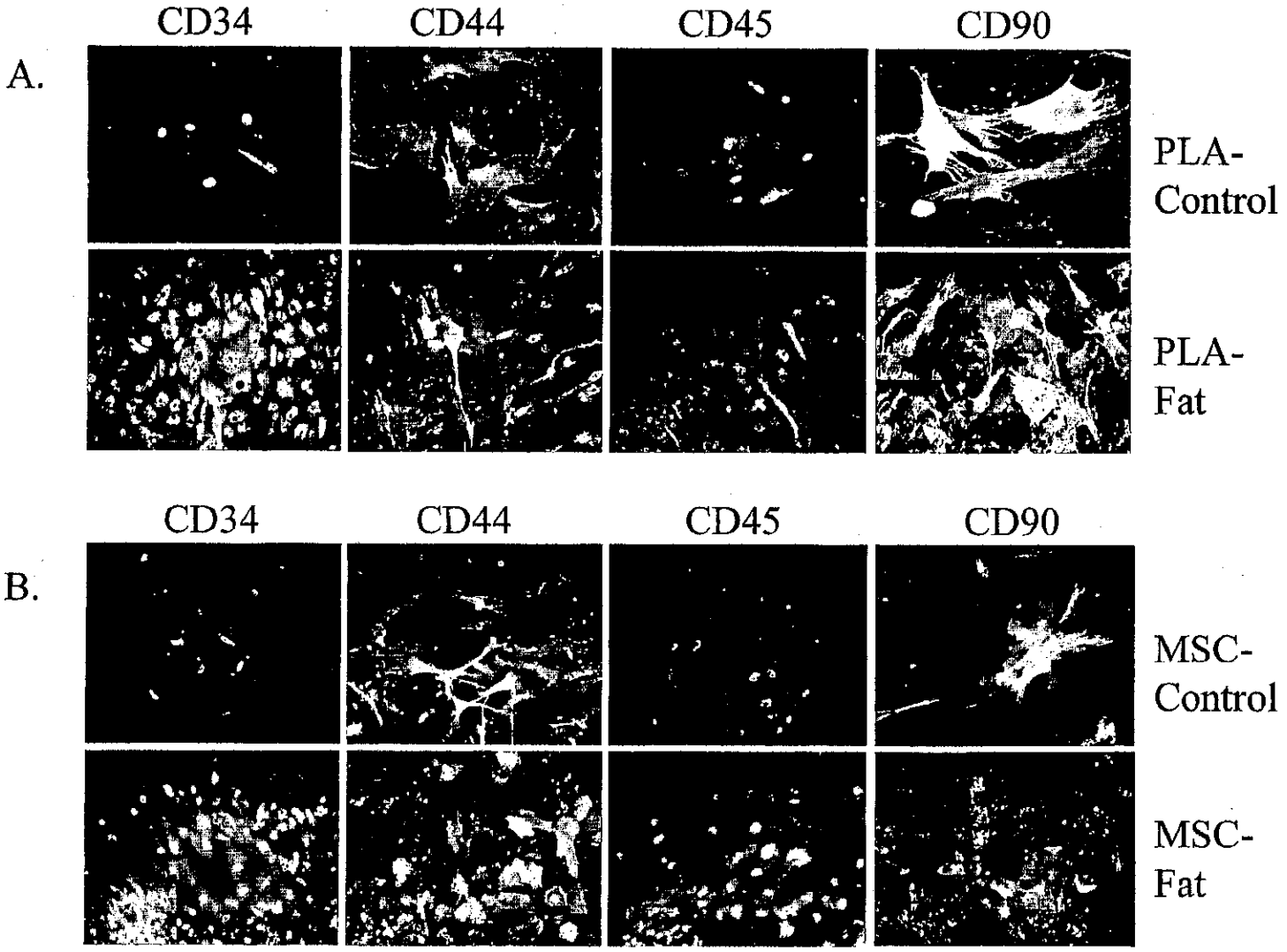
FIG. 39

FIG. 40



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FIG. 41



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FIG. 42

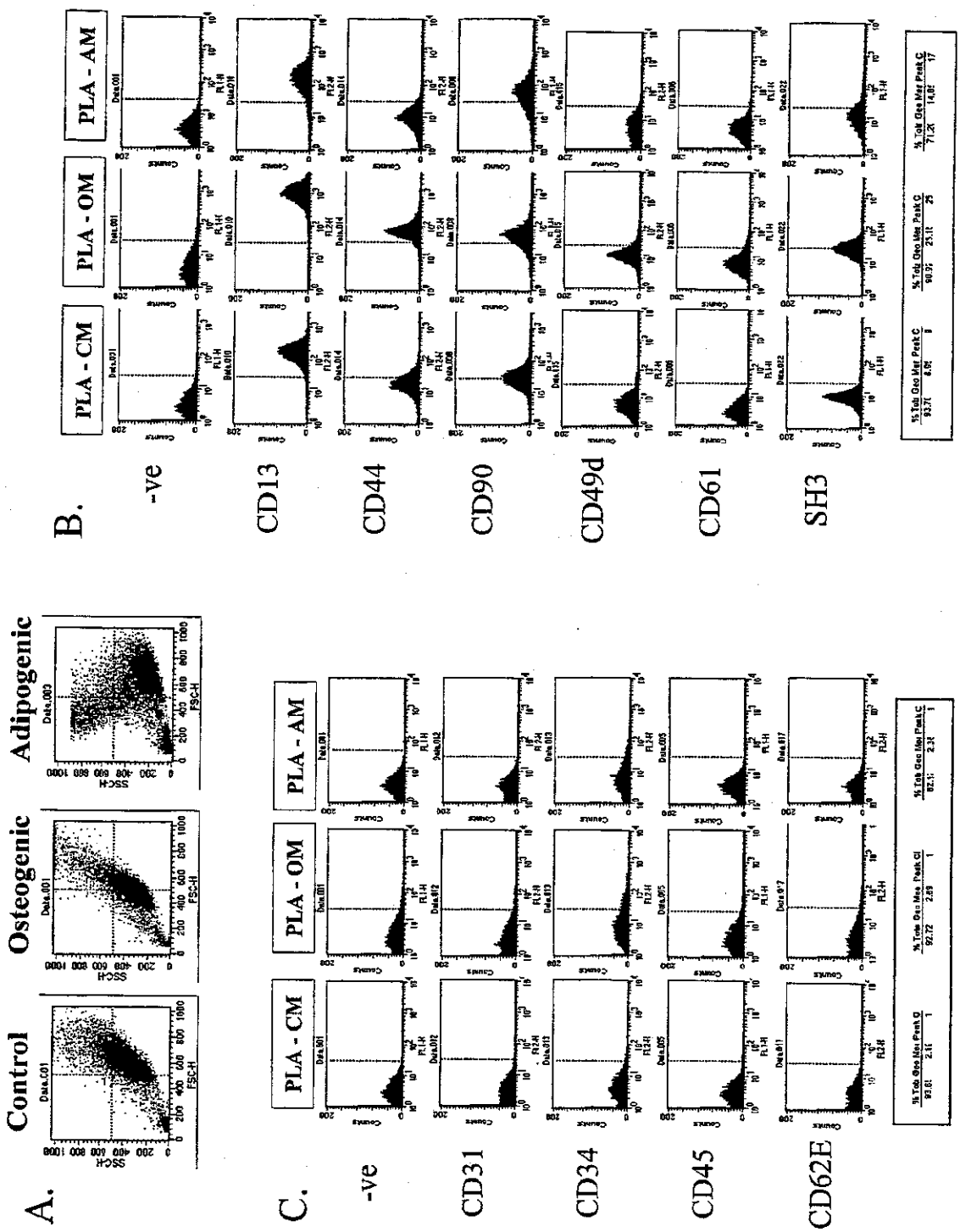
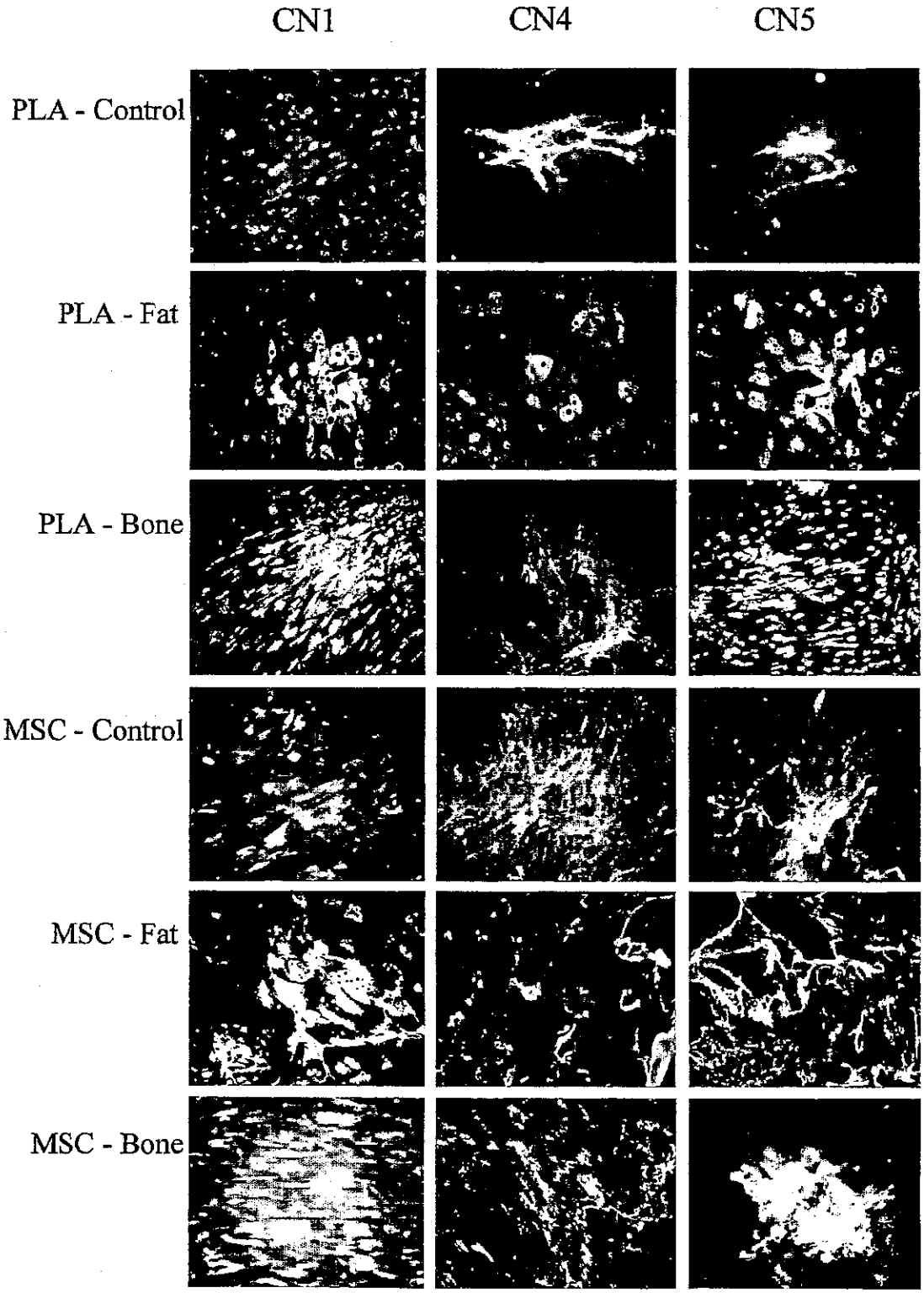


FIG. 43


CN1
CN4
CN5
PLA - Control
PLA - Fat
PLA - Bone
MSC - Control
MSC - Fat
MSC - Bone