Fig. 1

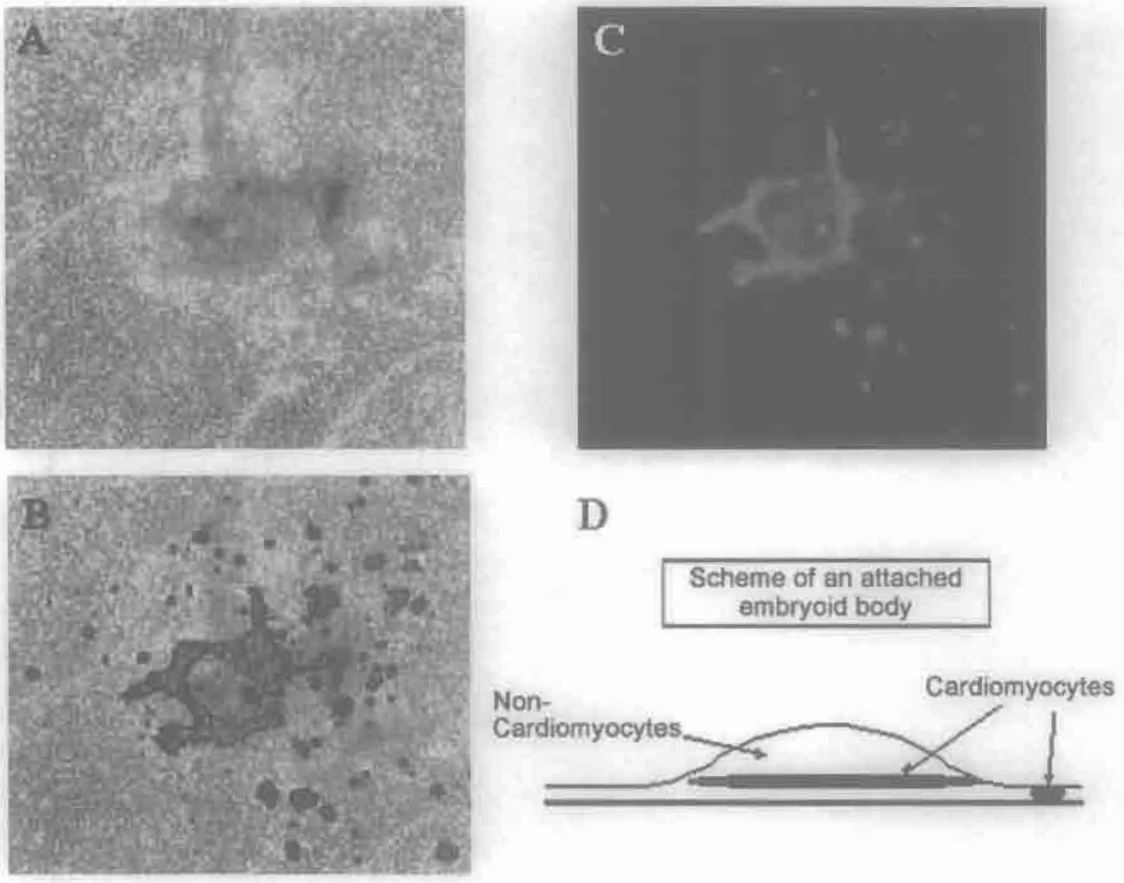

A
B
C
D
Scheme of an attached embryoid body
Non-Cardiomyocytes
Cardiomyocytes

Fig. 2

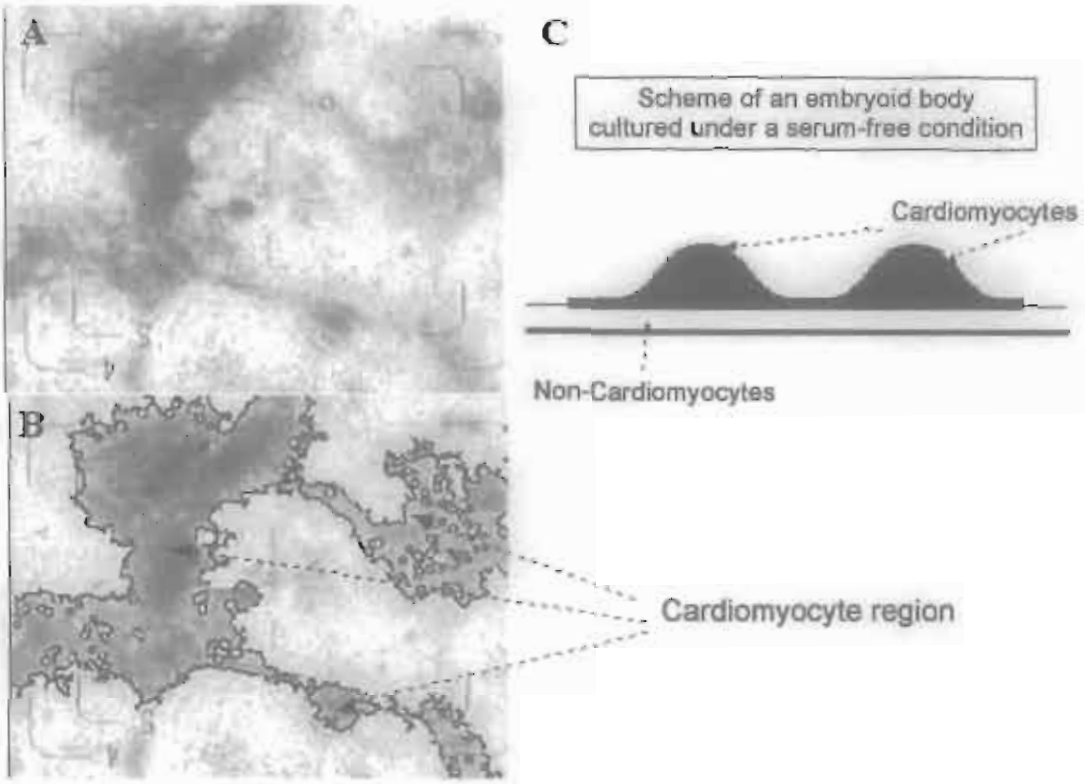

A
B
C
Scheme of an embryoid body cultured under a serum-free condition
Cardiomyocytes
Non-Cardiomyocytes
Cardiomyocyte region

Fig. 3

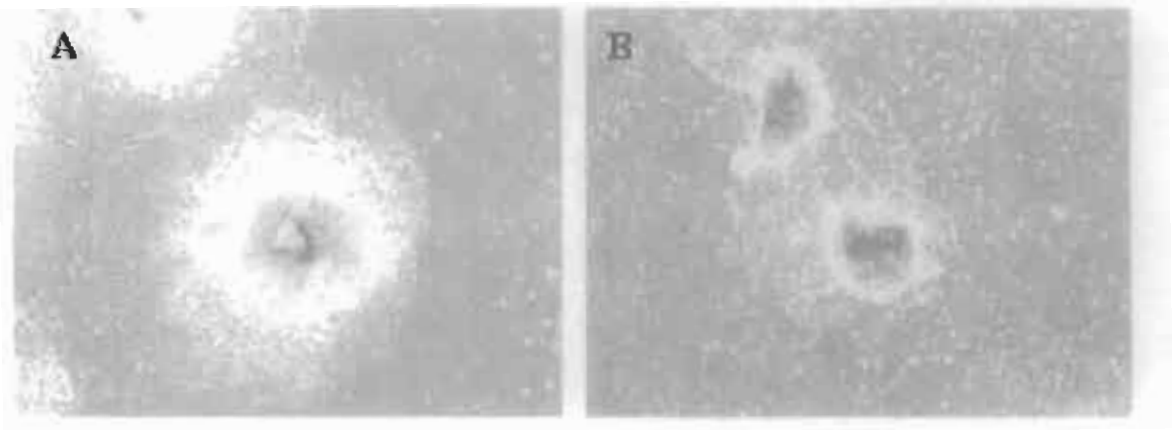

A
B

Fig. 4

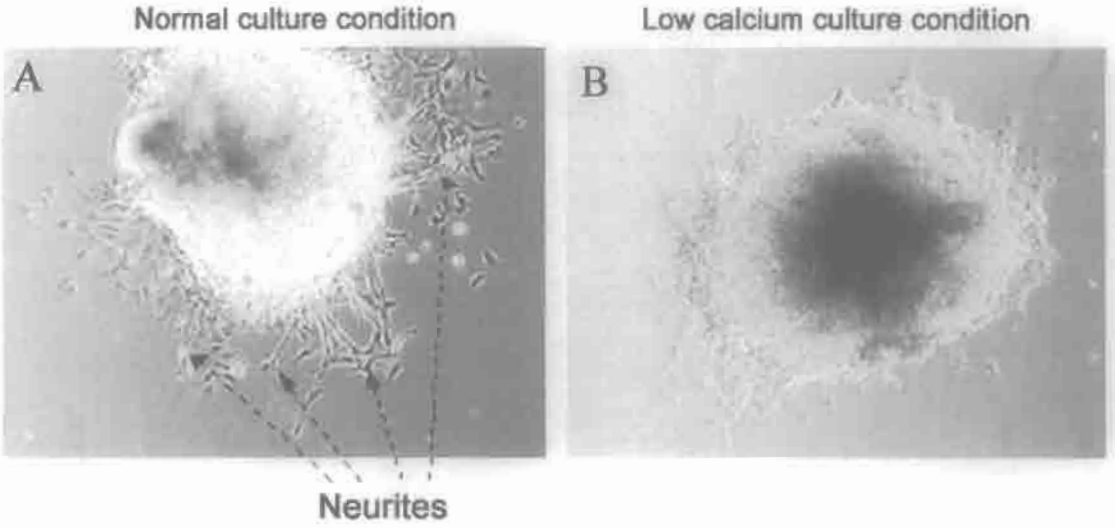

Normal culture condition
Low calcium culture condition
A
B
Neurites

Fig. 5

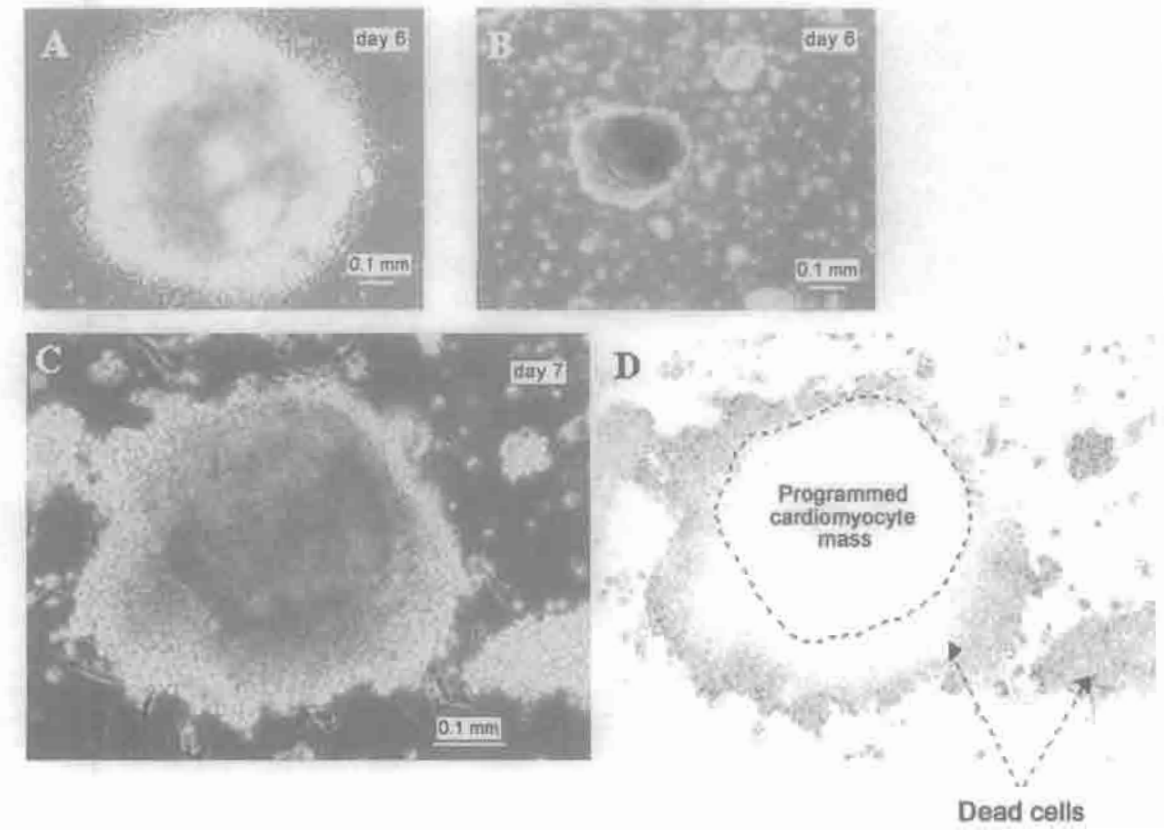

A
day 6
0.1 mm
B
day 6
0.1 mm
C
day 7
0.1 mm
D
Programmed cardiomyocyte mass
Dead cells

Fig. 6-1

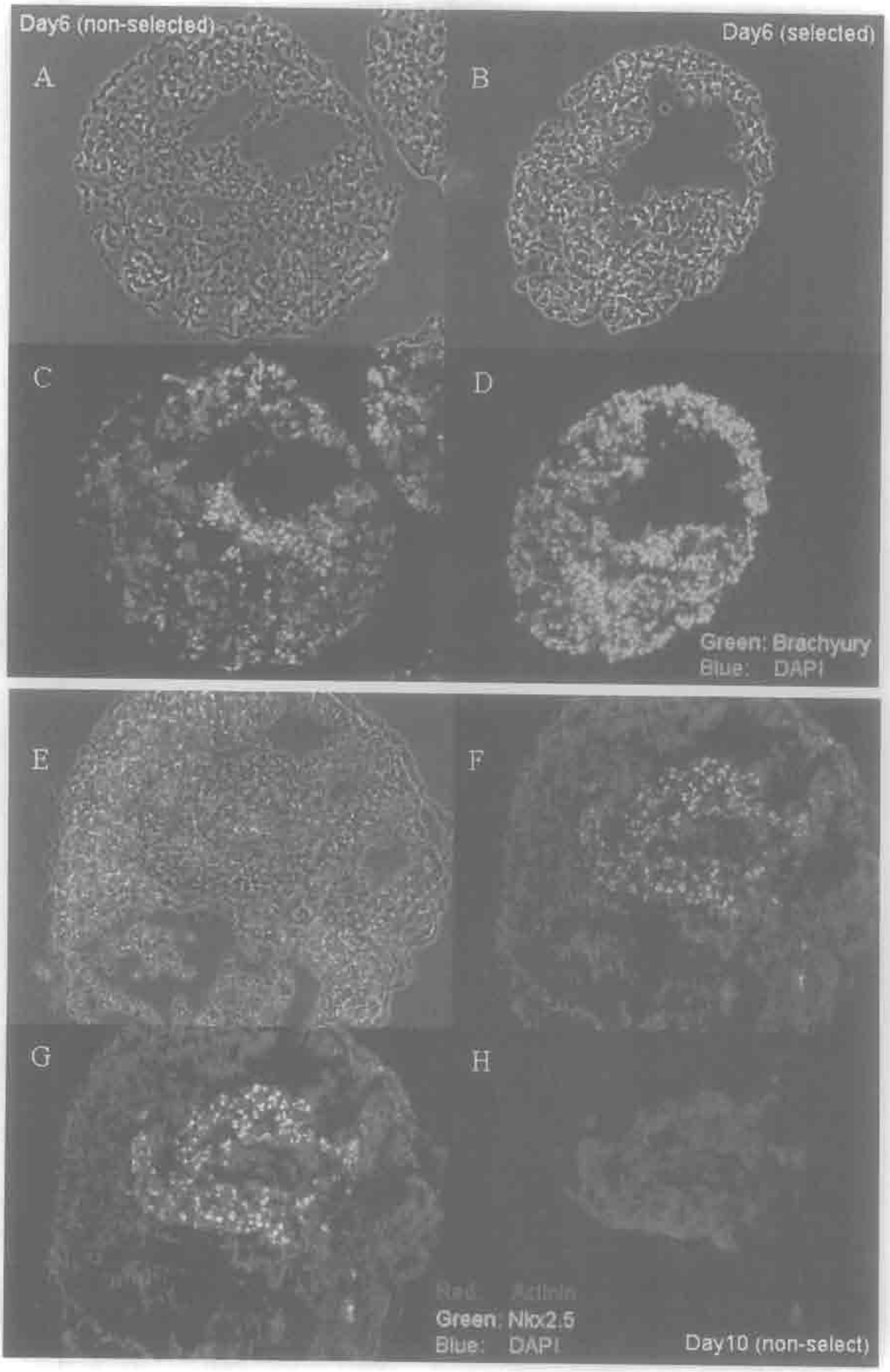
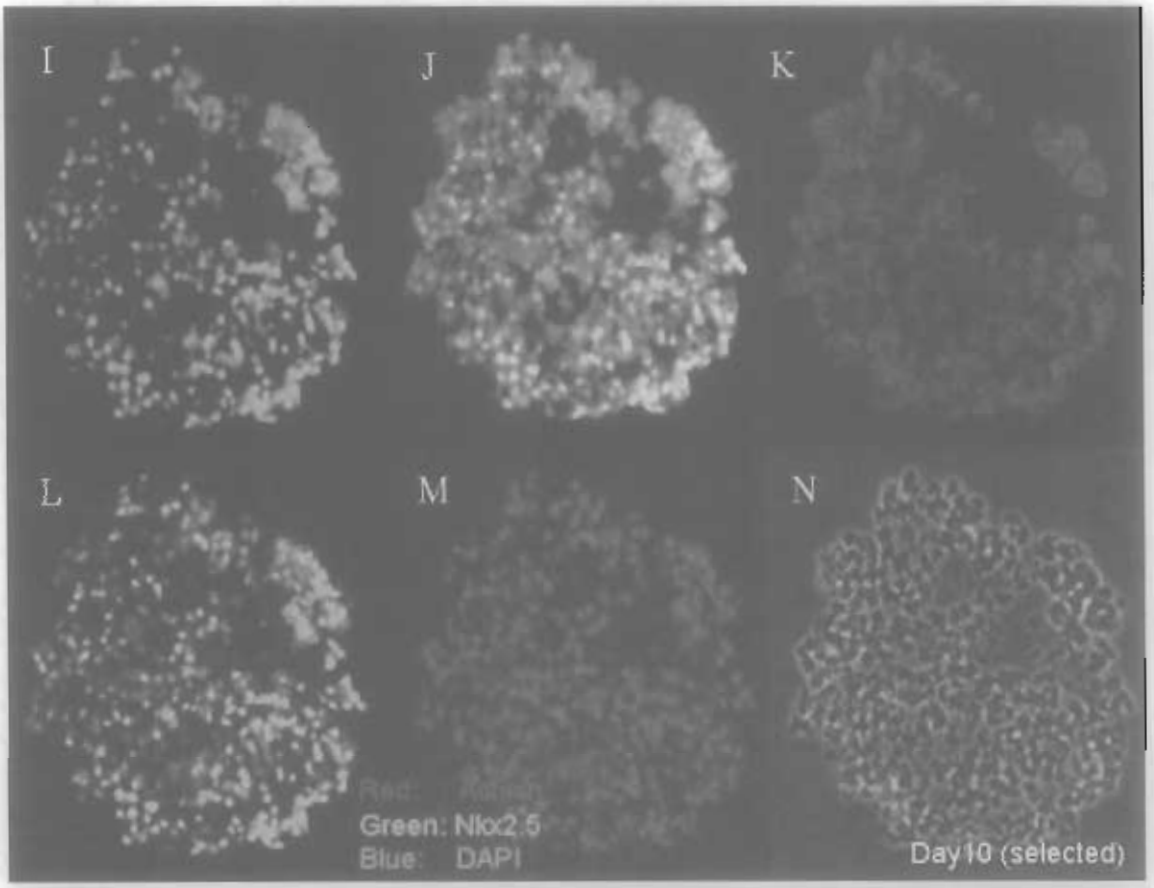

Day6 (non-selected)
A
Day6 (selected)
B
C
D
Green: Brachyury
Blue: DAPI
E
F
G
H
Red: Actinin
Green: Nkx2.5
Blue: DAPI
Day10 (non-select)

Fig. 6-2


I
J
K
L
M
N
Green: Nkx2.5
Blue: DAPI
Day10 (selected)

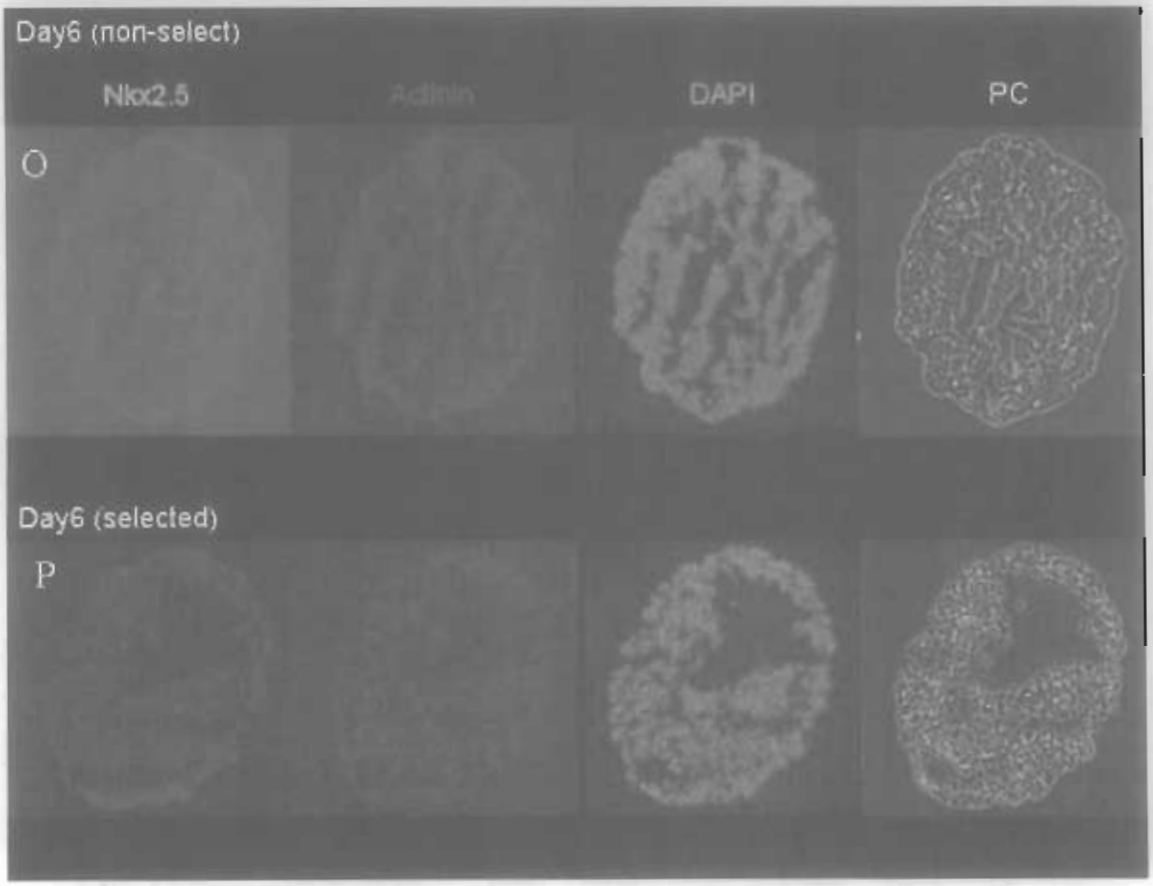

Day6 (non-select)
Nkx2.5
DAPI
PC
O
Day6 (selected)
P

Fig. 7

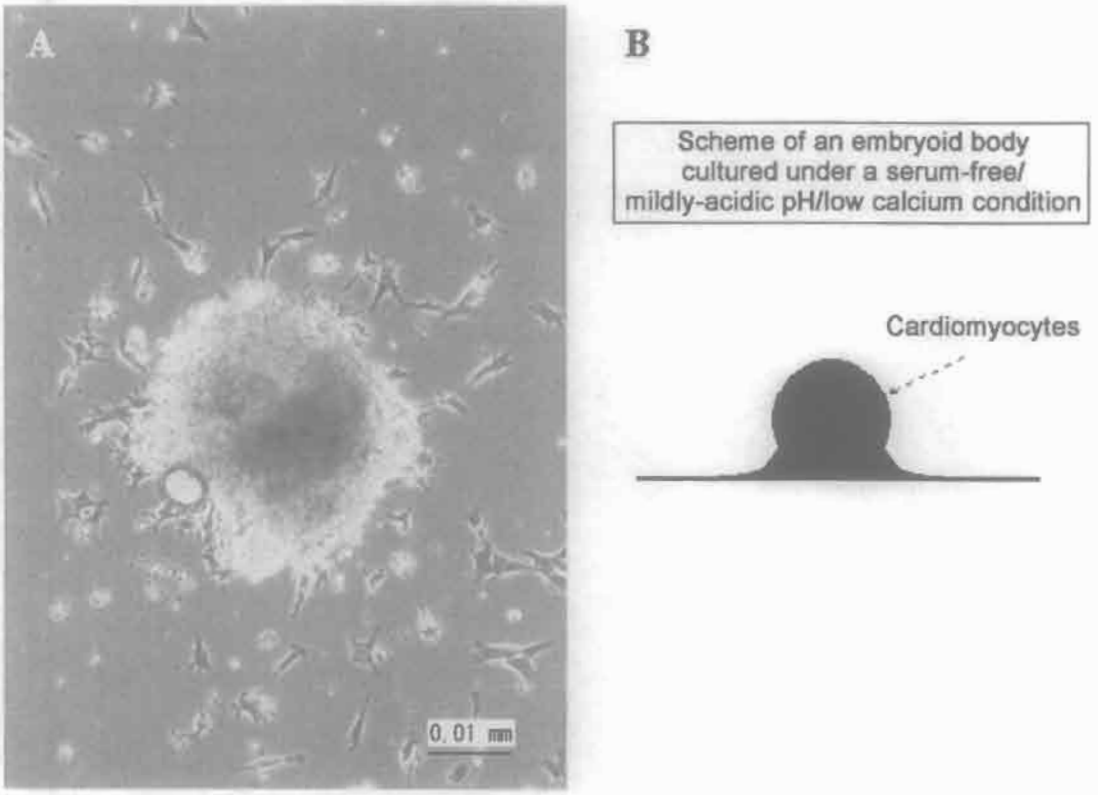

A
0.01 mm
B
Scheme of an embryoid body cultured under a serum-free/ mildly-acidic pH/low calcium condition
Cardiomyocytes

Fig. 8

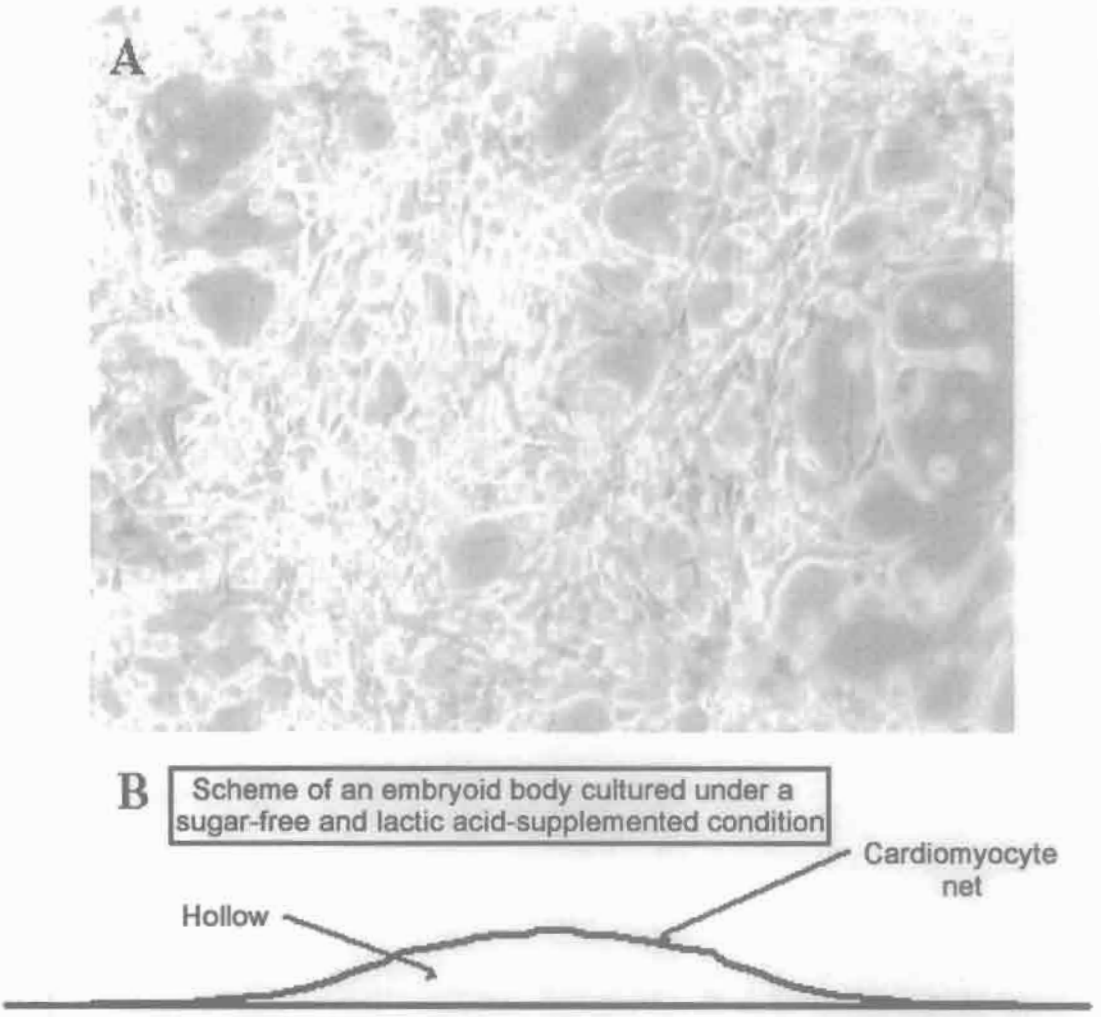

A
B
Scheme of an embryoid body cultured under a sugar-free and lactic acid-supplemented condition
Cardiomyocyte net
Hollow

Fig. 9

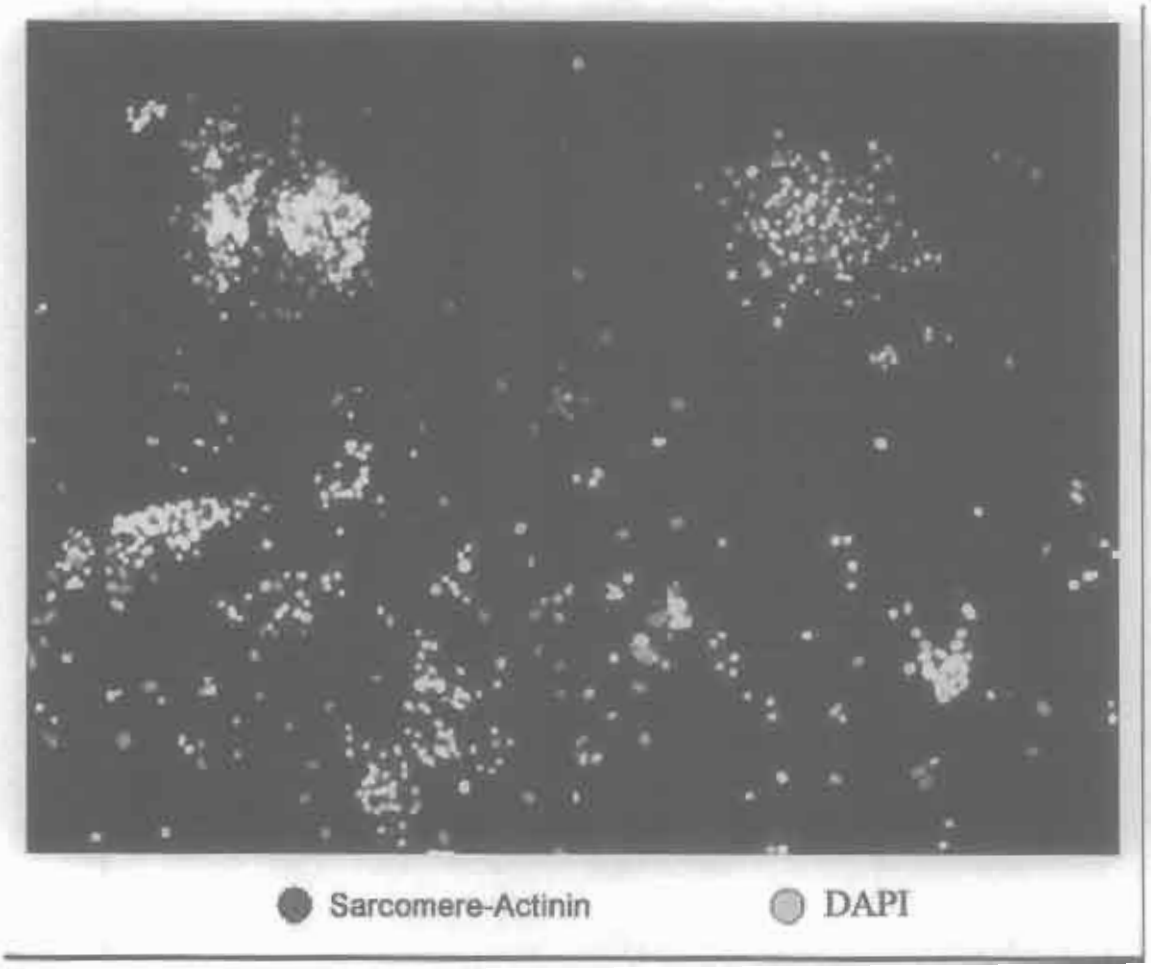


Fig. 10

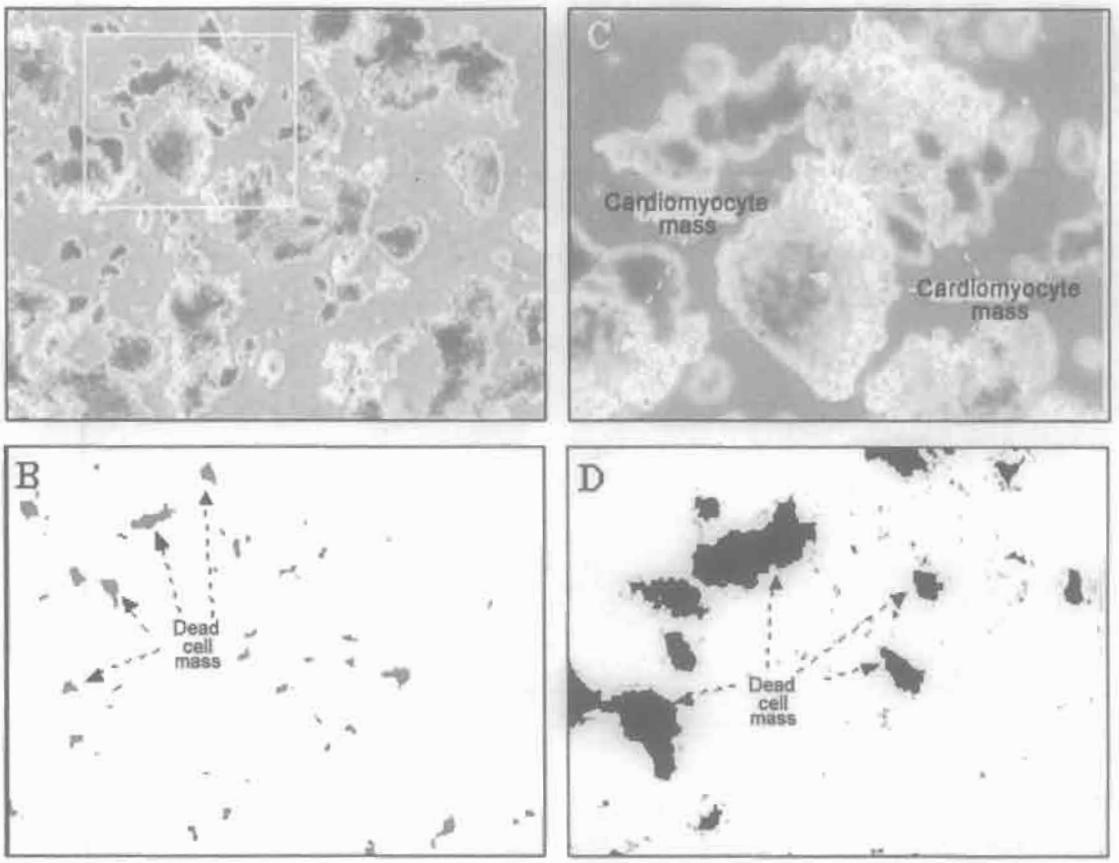

C
Cardiomyocyte mass
Cardiomyocyte mass
B
Dead cell mass
D
Dead cell mass

Fig. 11

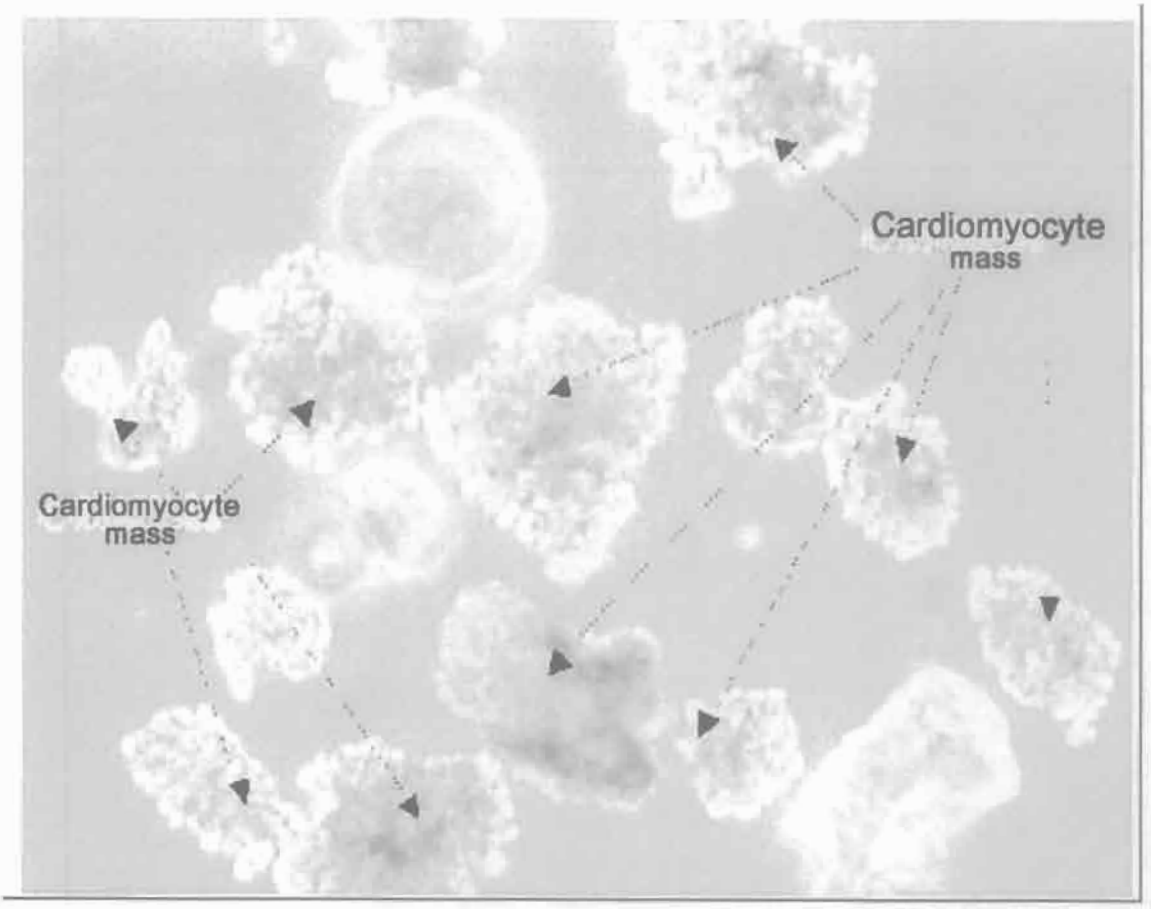


Fig. 12-1

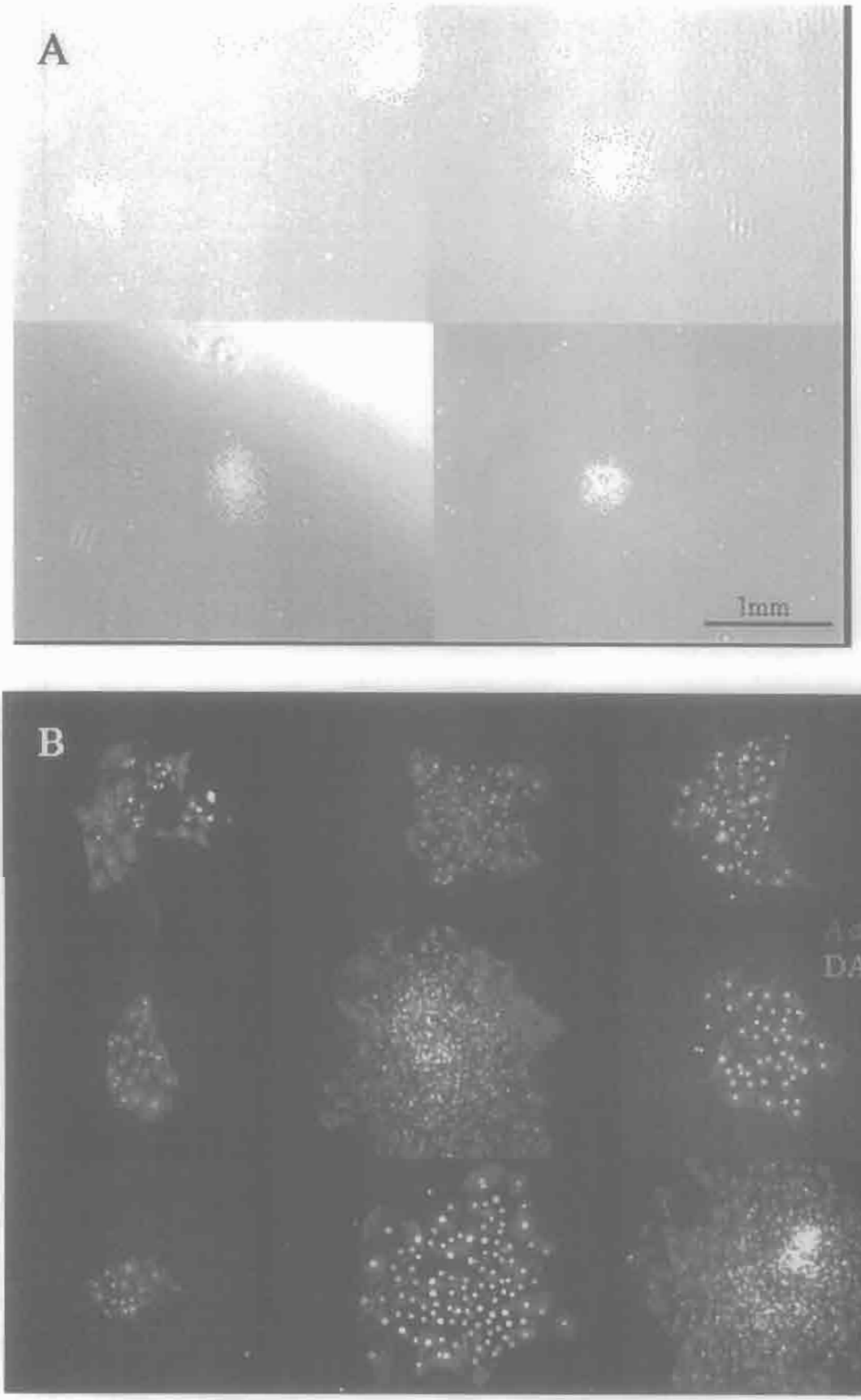


Fig. 12-2

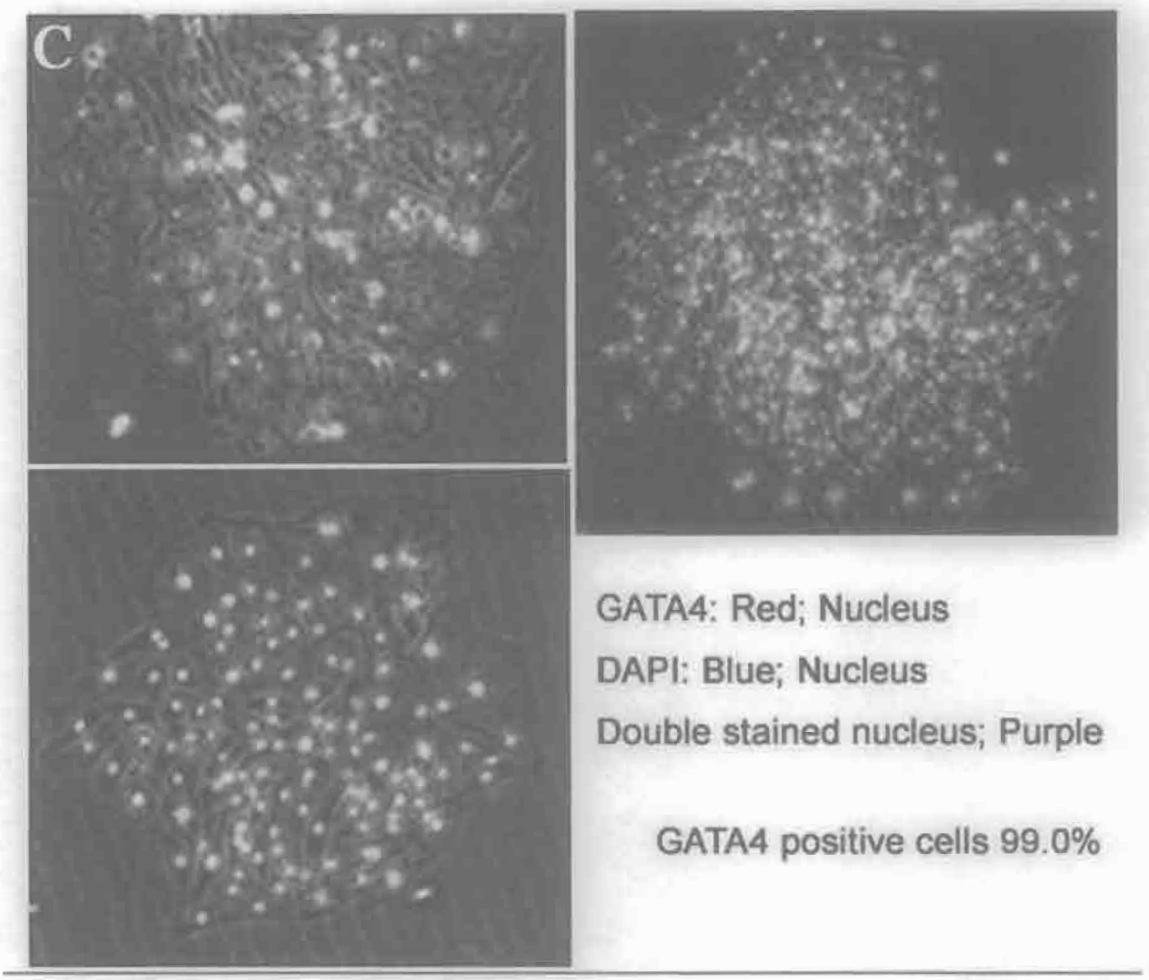

C
GATA4: Red; Nucleus
DAPI: Blue; Nucleus
Double stained nucleus; Purple
GATA4 positive cells 99.0%

Fig. 13

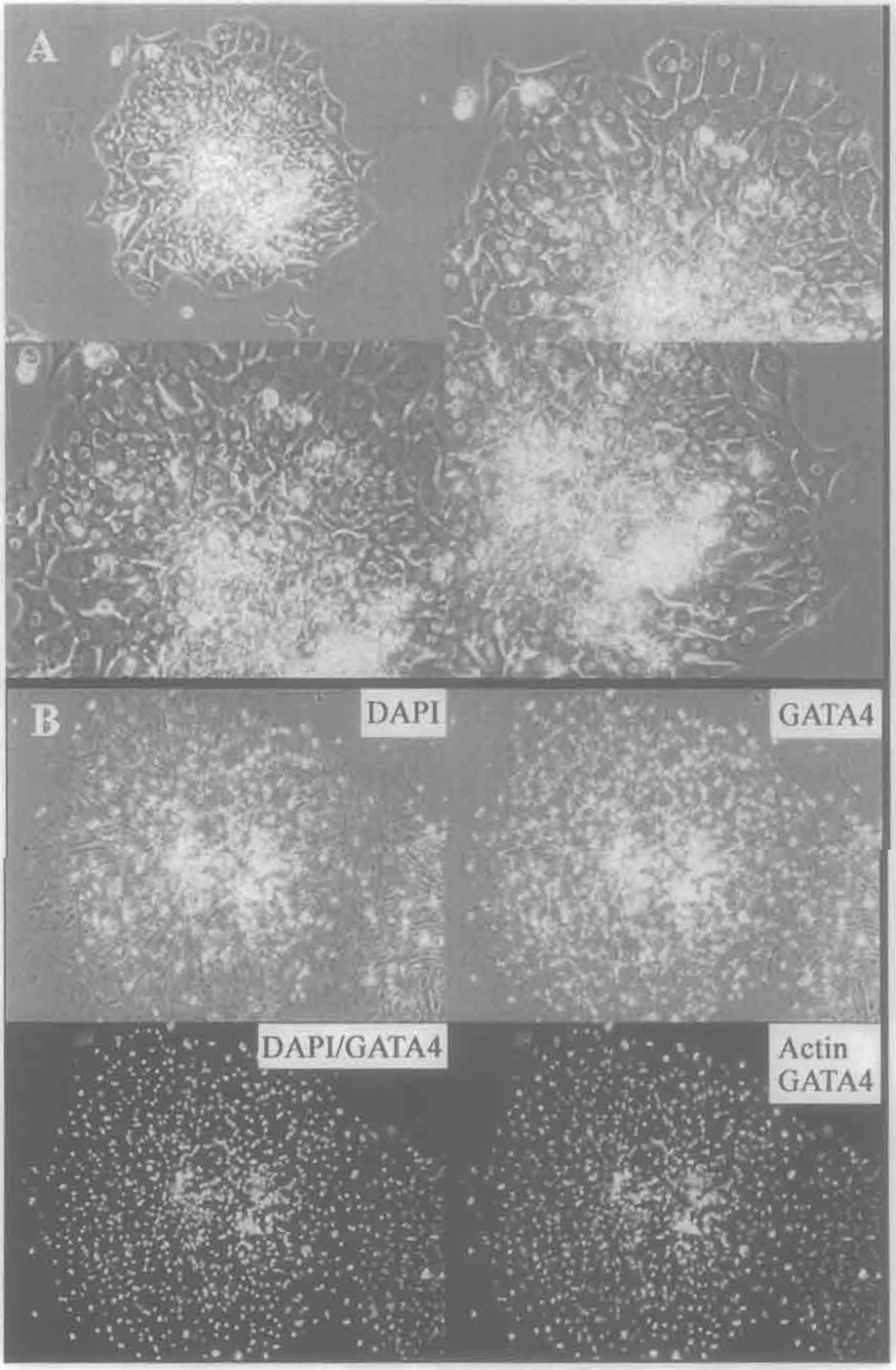
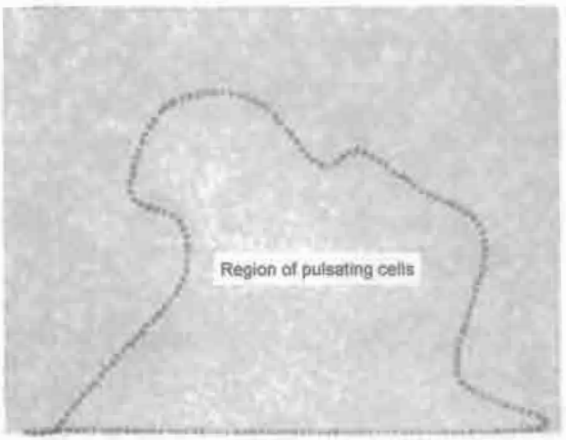


Fig. 14

A. Before selection



B. After selection: Bright field image



C. After selection:
Sarcomere-Actinin fluorescent immunostaining image



Fig. 15

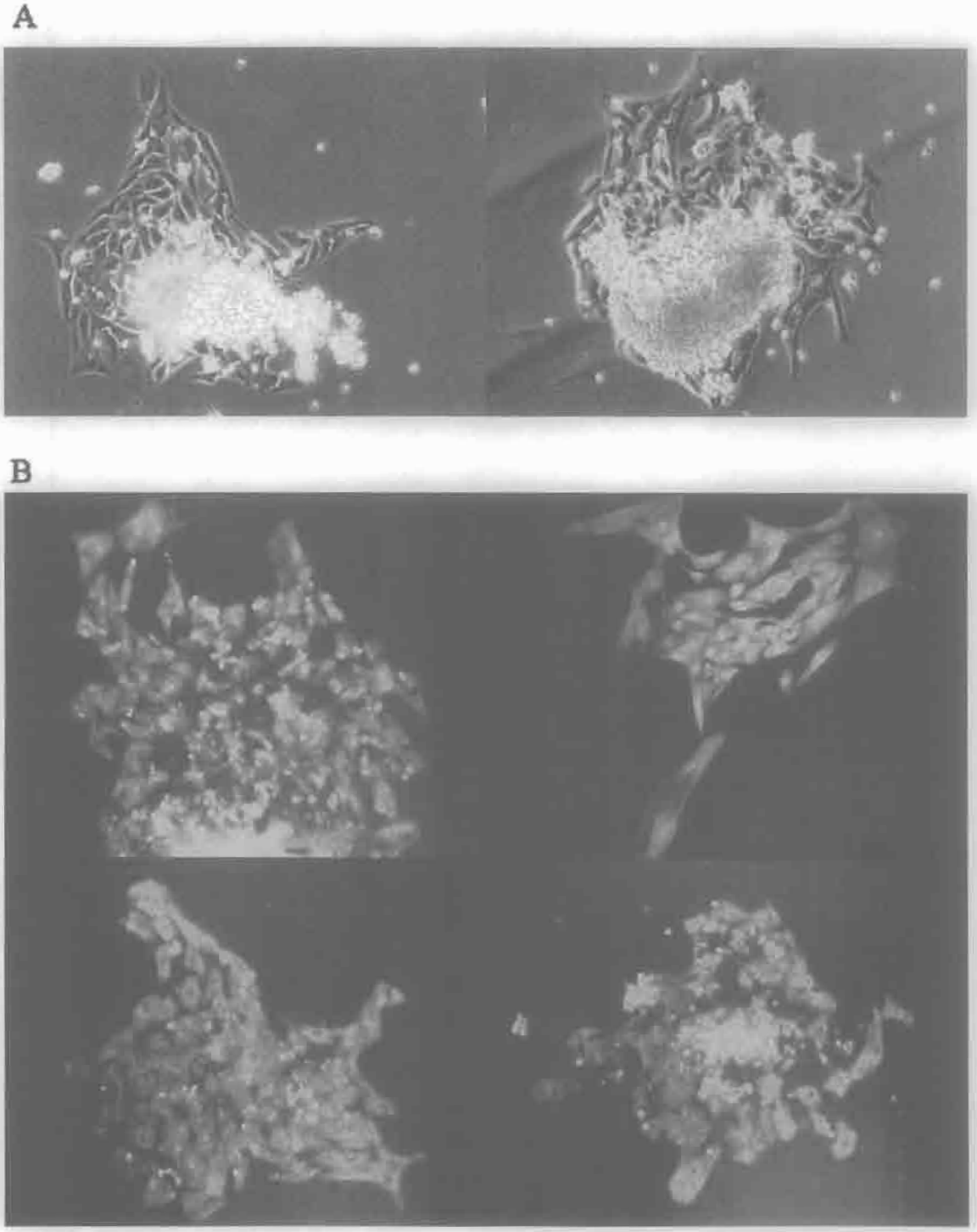


Fig. 16

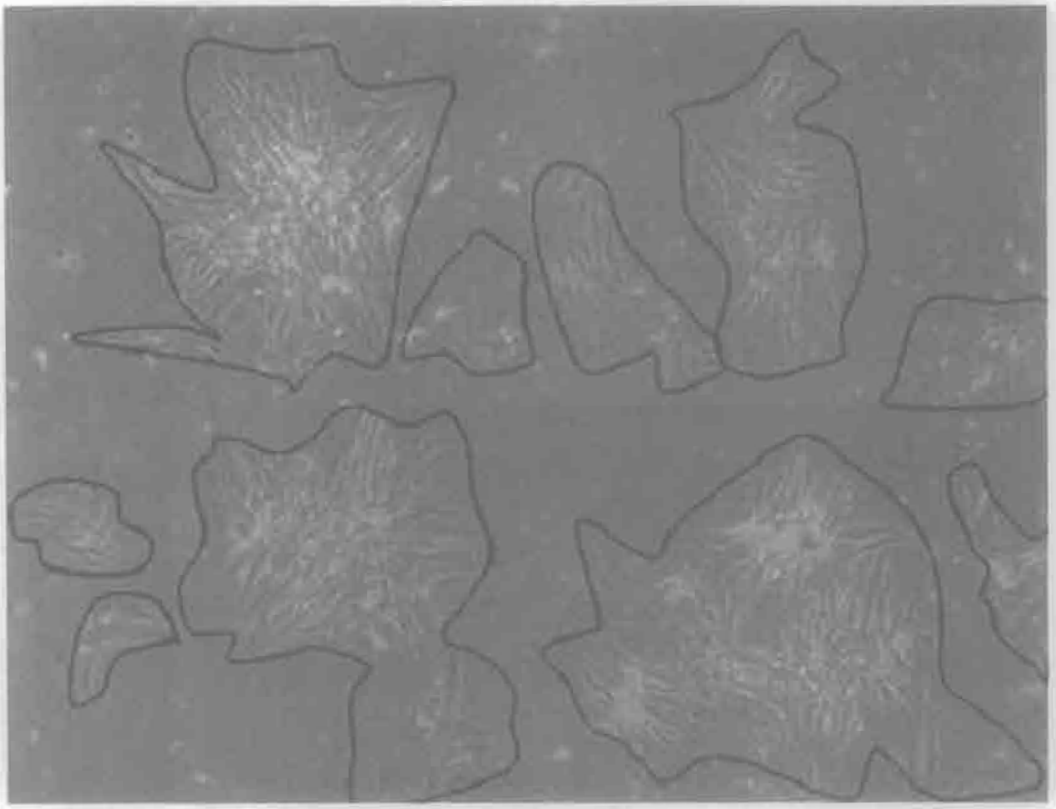


Fig. 17

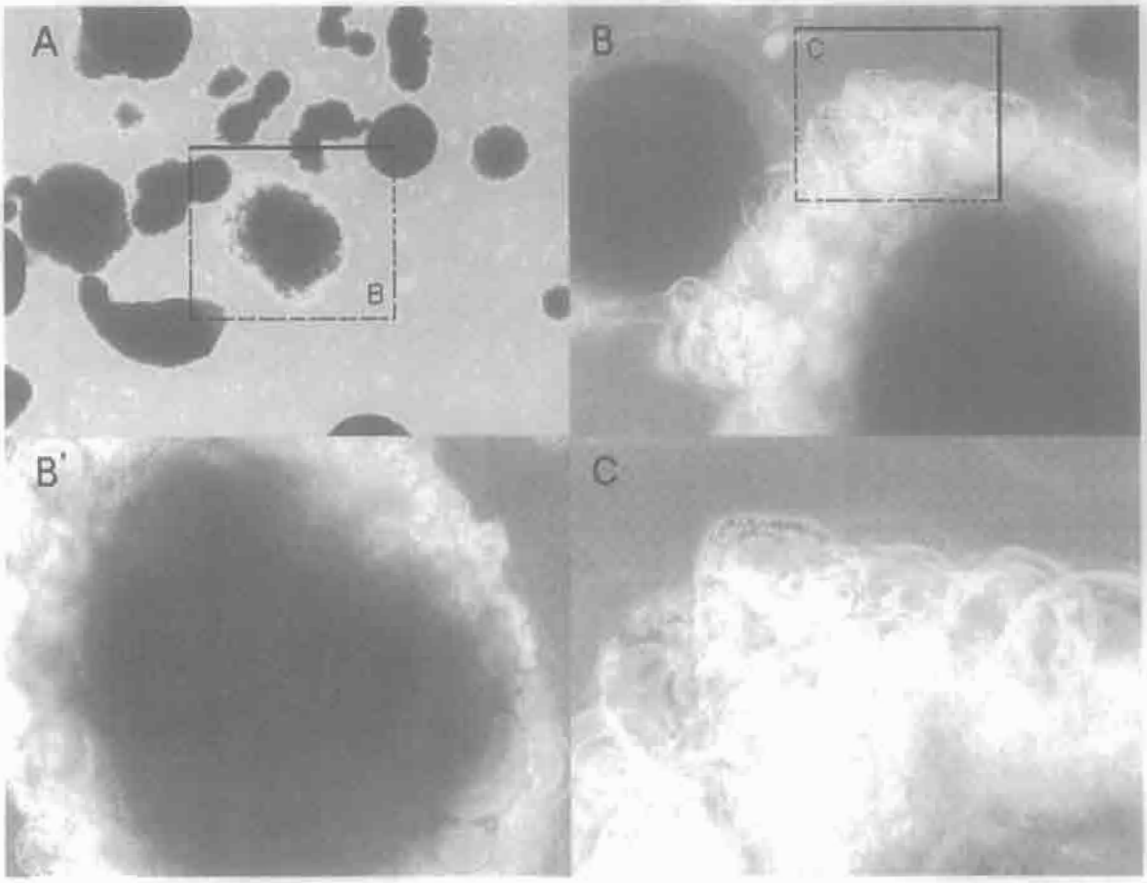


Fig. 18

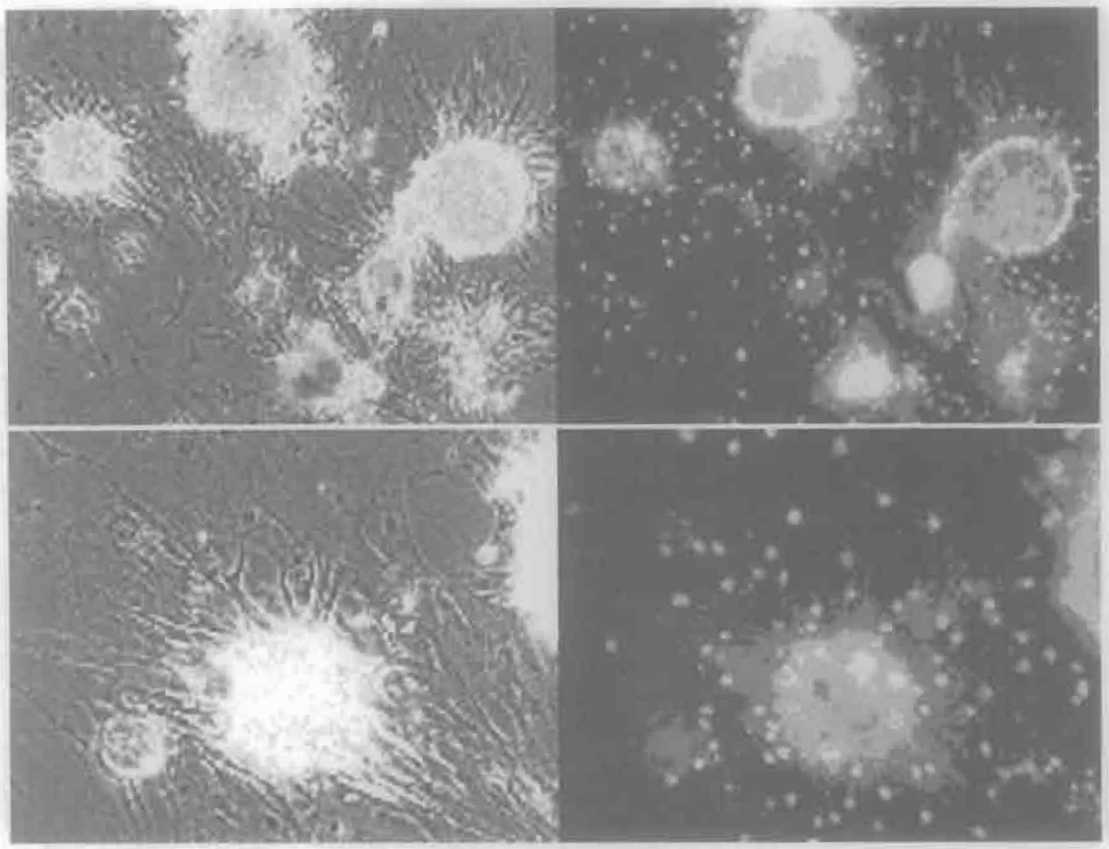


Fig. 19

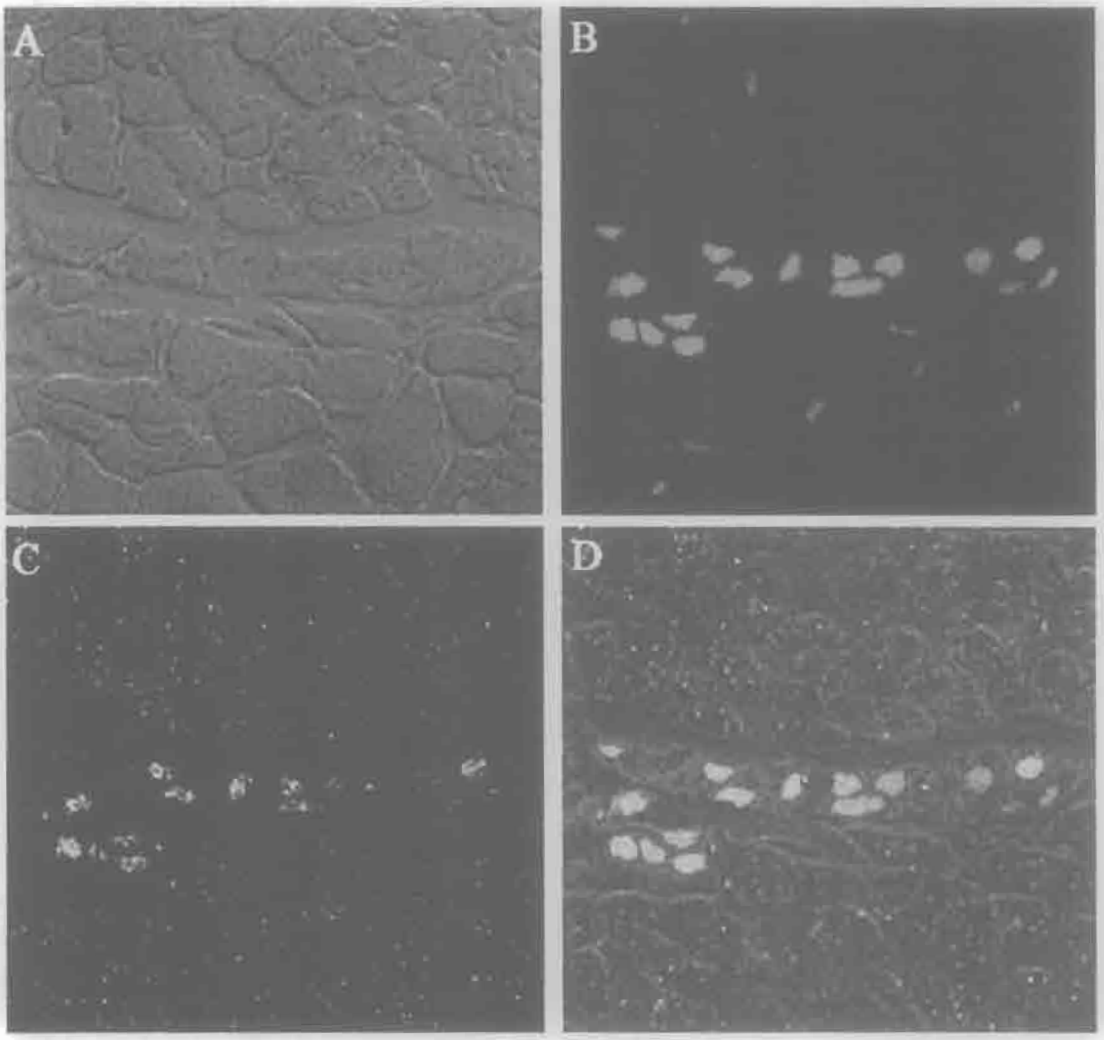


Fig. 20

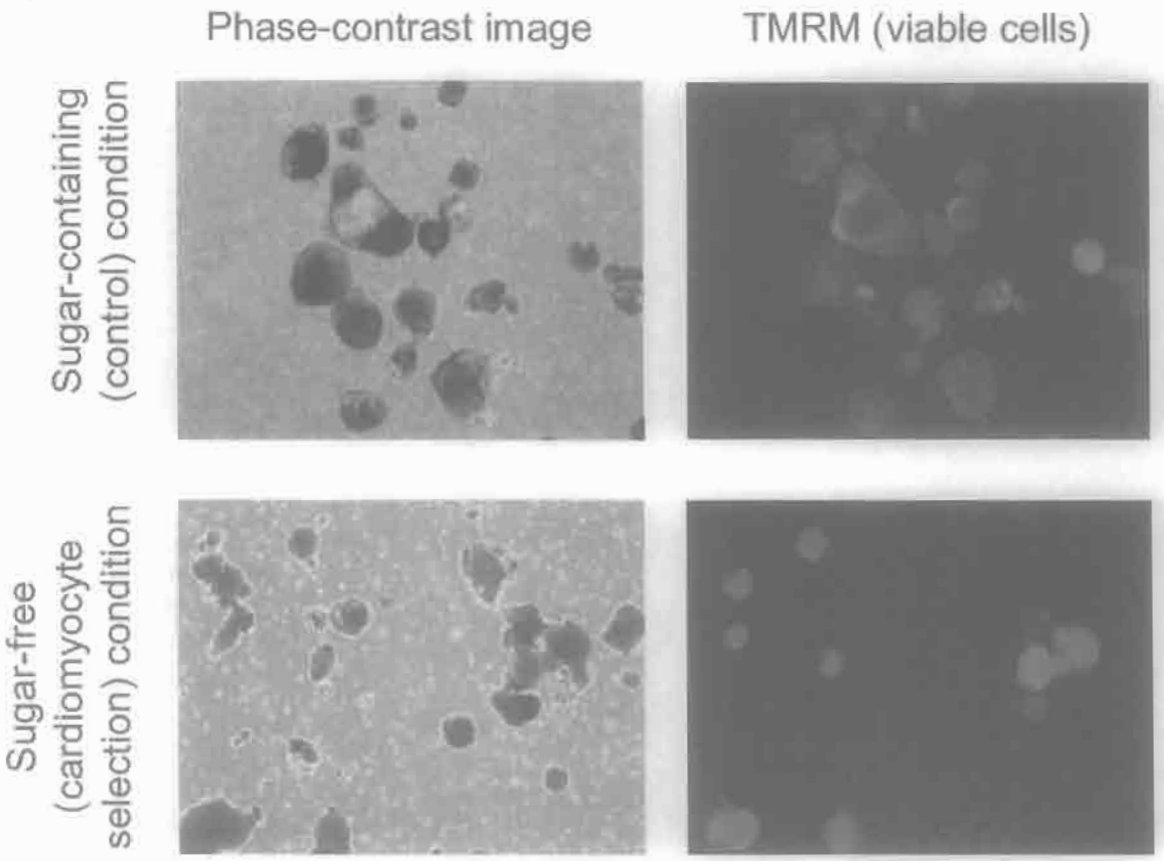
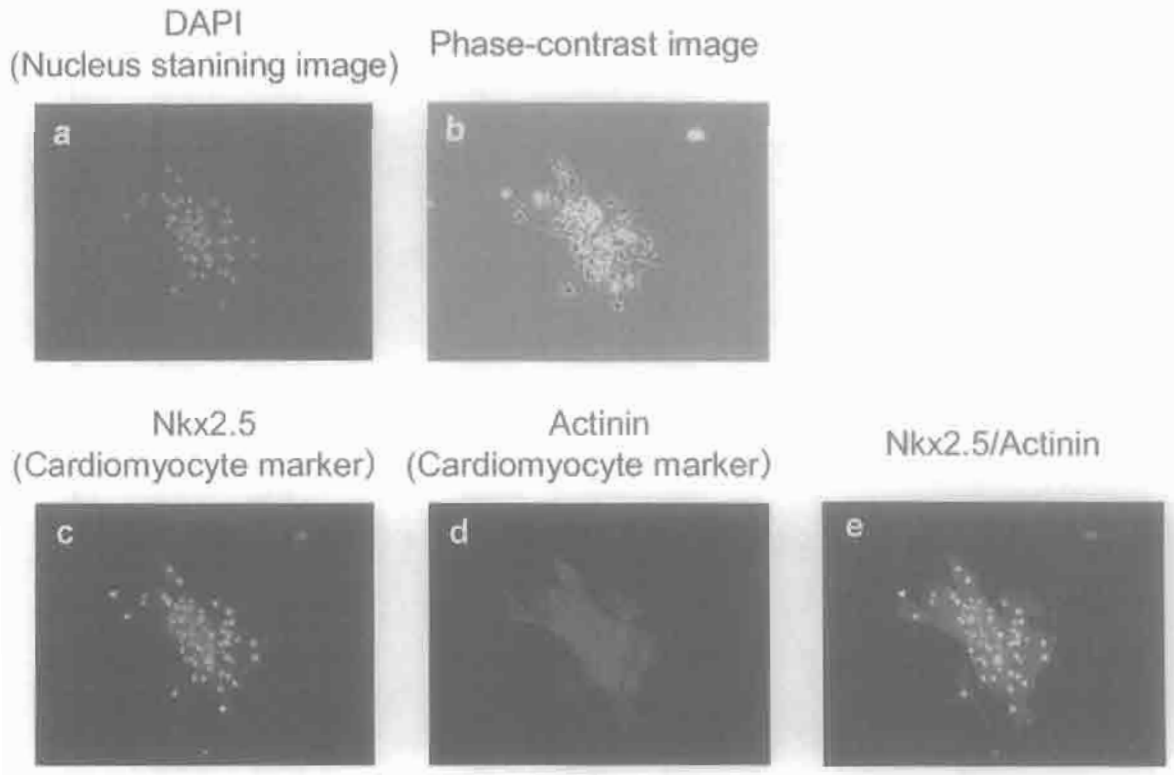

Phase-contrast image
TMRM (viable cells)
Sugar-containing (control) condition
Sugar-free (cardiomyocyte selection) condition

Fig. 21


DAPI
(Nucleus stanining image)
Phase-contrast image
a
b
Nkx2.5
(Cardiomyocyte marker)
Actinin
(Cardiomyocyte marker)
Nkx2.5/Actinin
c
d
e