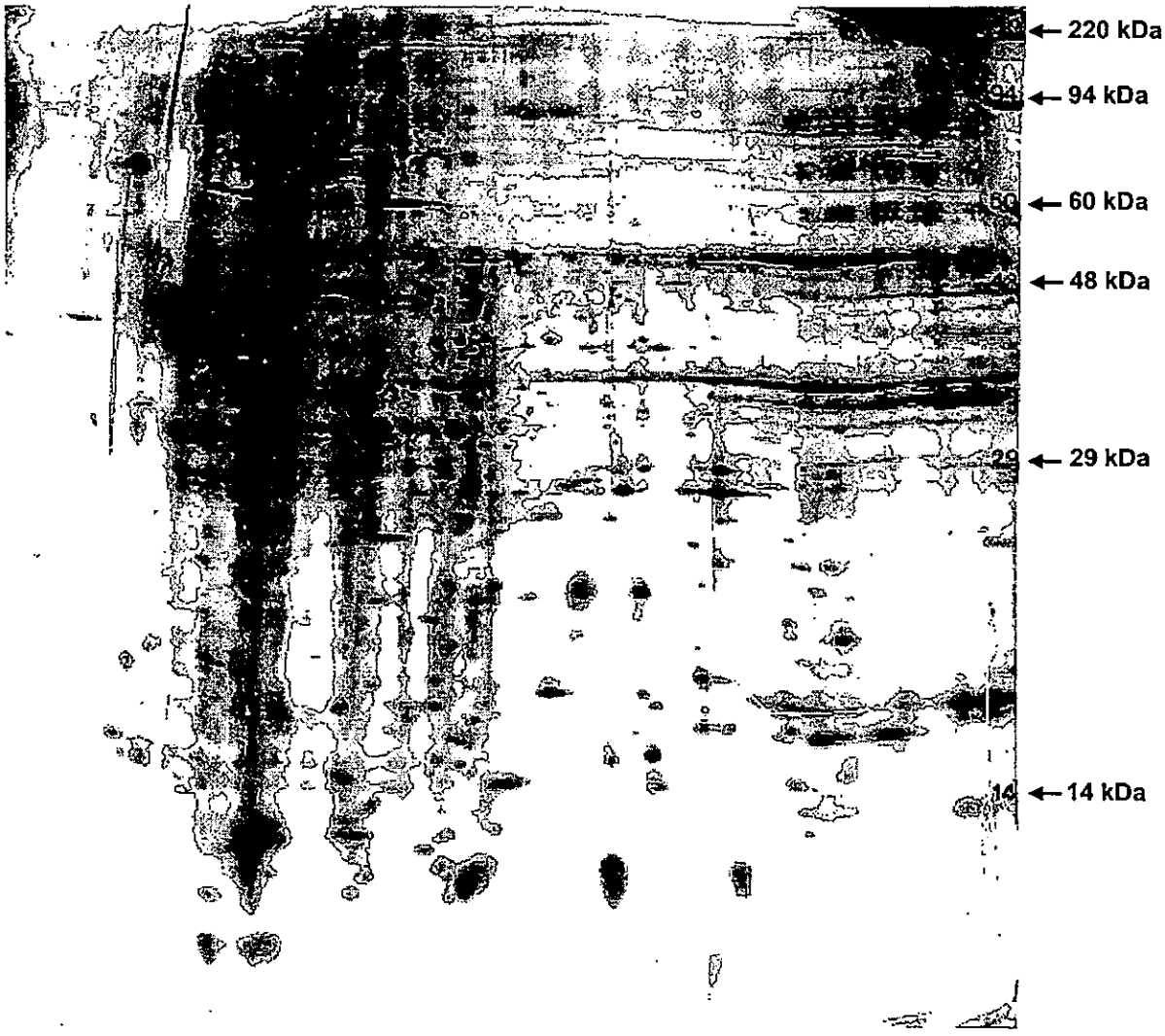


Fig. 1

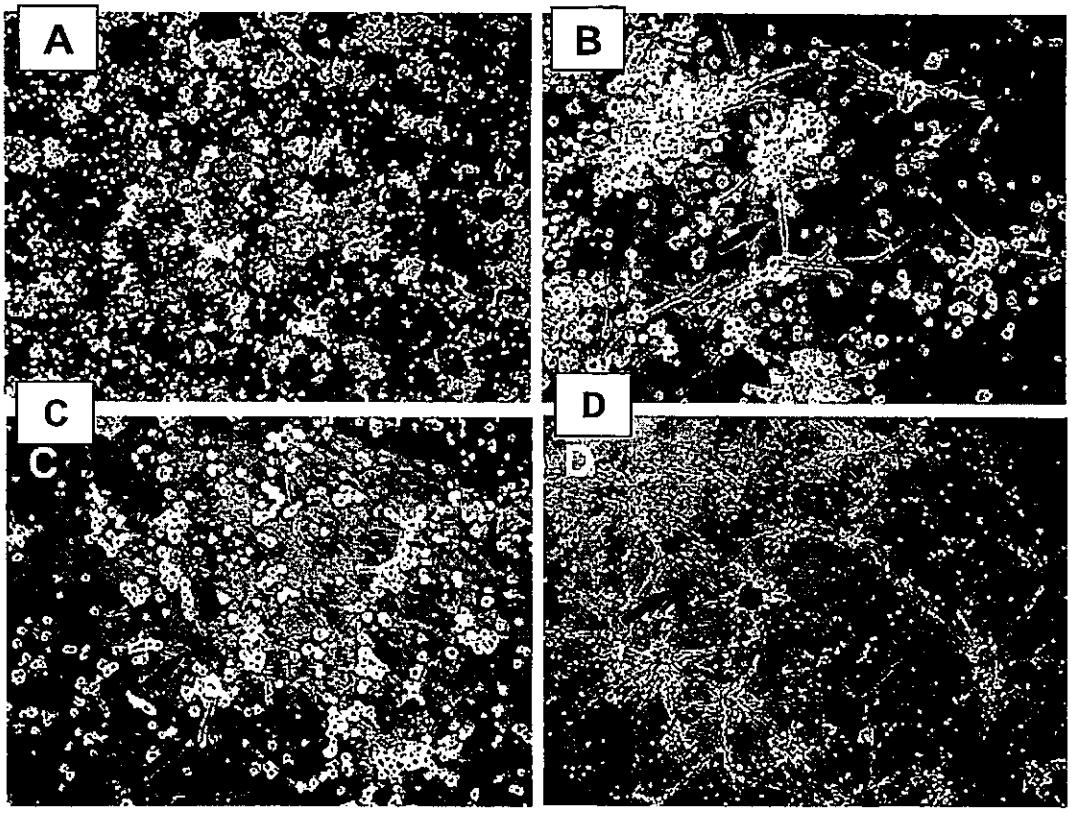


Fig. 2

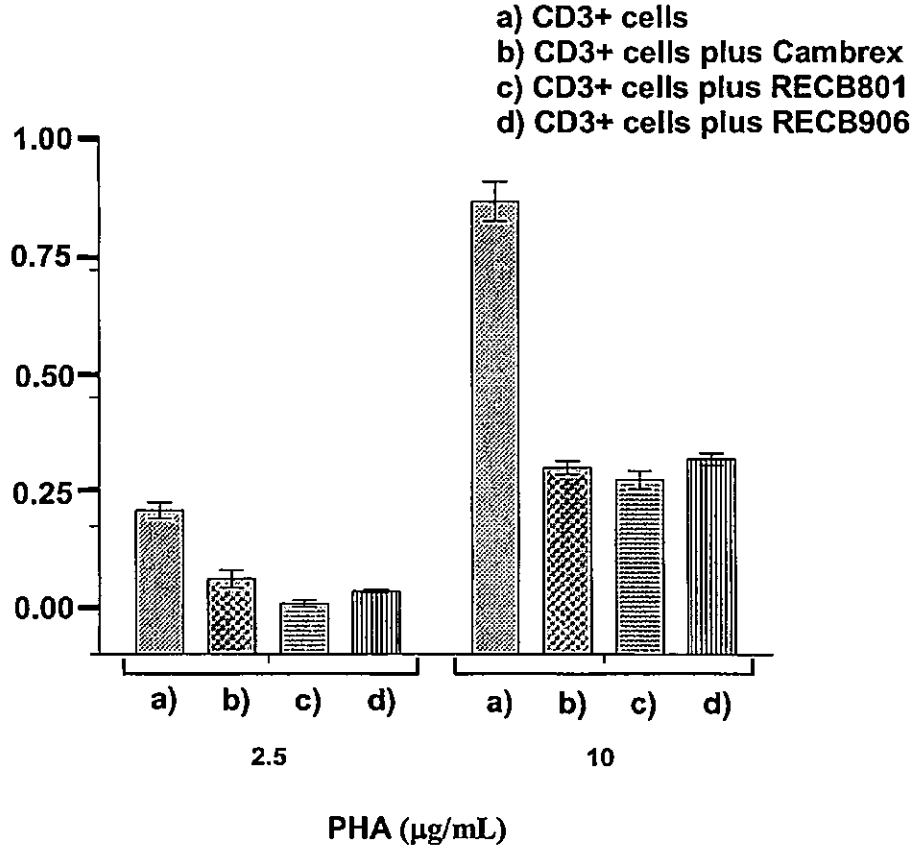

a) CD3+ cells
b) CD3+ cells plus Cambrex
c) CD3+ cells plus RECB801
d) CD3+ cells plus RECB906
1.00
0.75
0.50
0.25
0.00
a) b) c) d)
a) b) c) d)
2.5
10
PHA (µg/mL)

Fig. 3

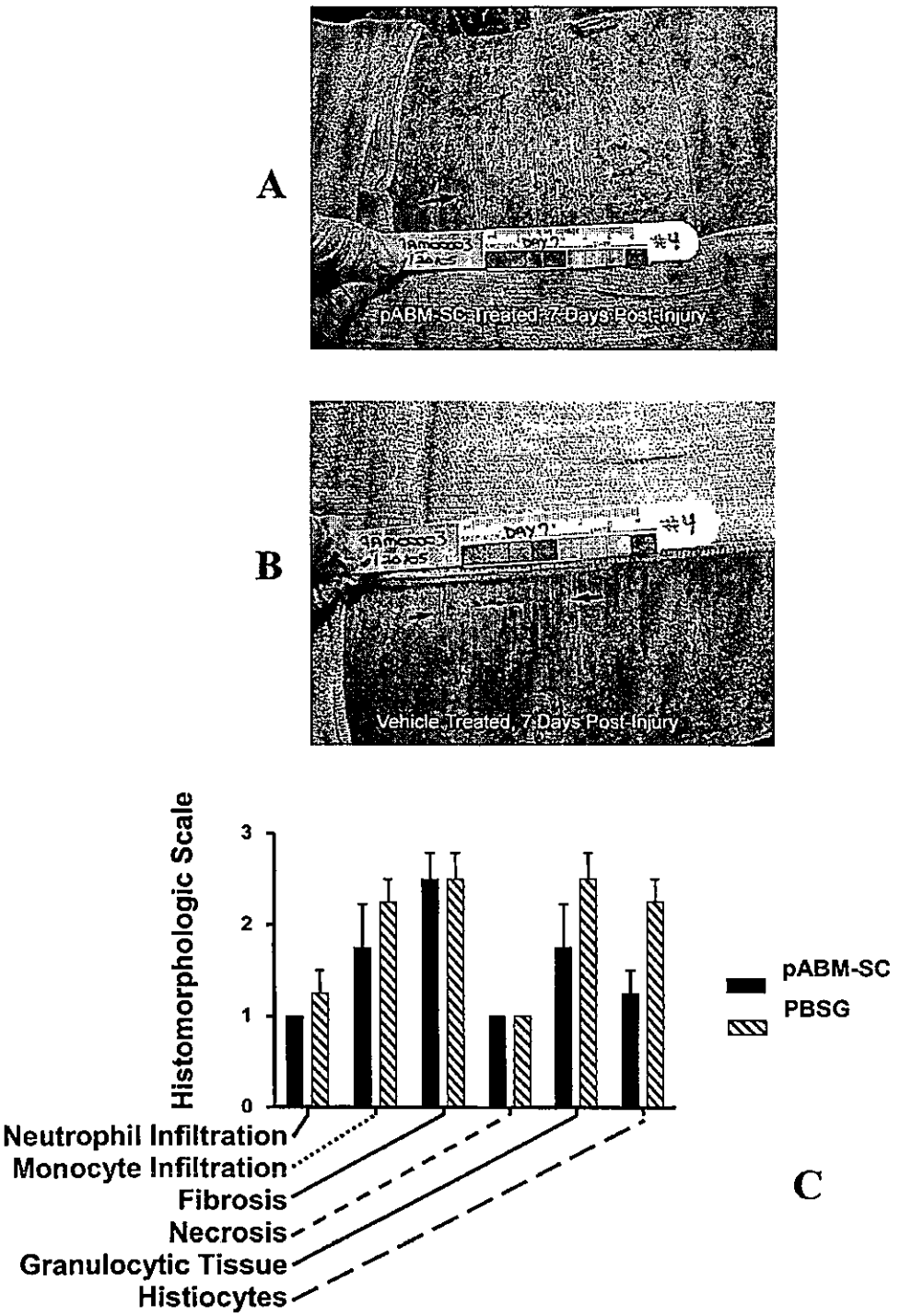
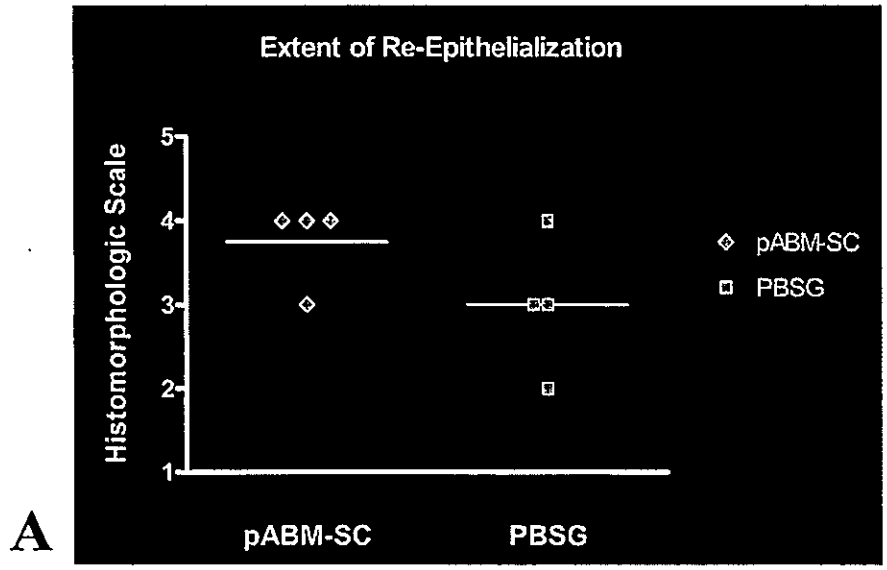
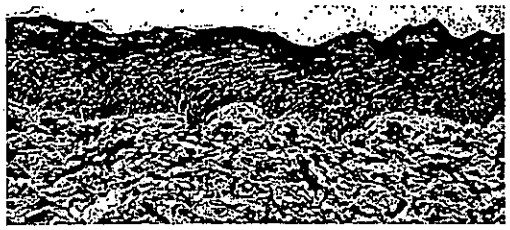

A
pABM-SC Treated, 7 Days Post Injury
B
Vehicle Treated, 7 Days Post Injury
Histomorphologic Scale
0
1
2
3
pABM-SC
PBSG
Neutrophil Infiltration
Monocyte Infiltration
Fibrosis
Necrosis
Granulocytic Tissue
Histiocytes
C

Fig. 4


Extent of Re-Epithelialization
Histomorphologic Scale
5
4
3
2
1
pABM-SC
PBSG
pABM-SC
PBSG

A



B



C

Fig. 5

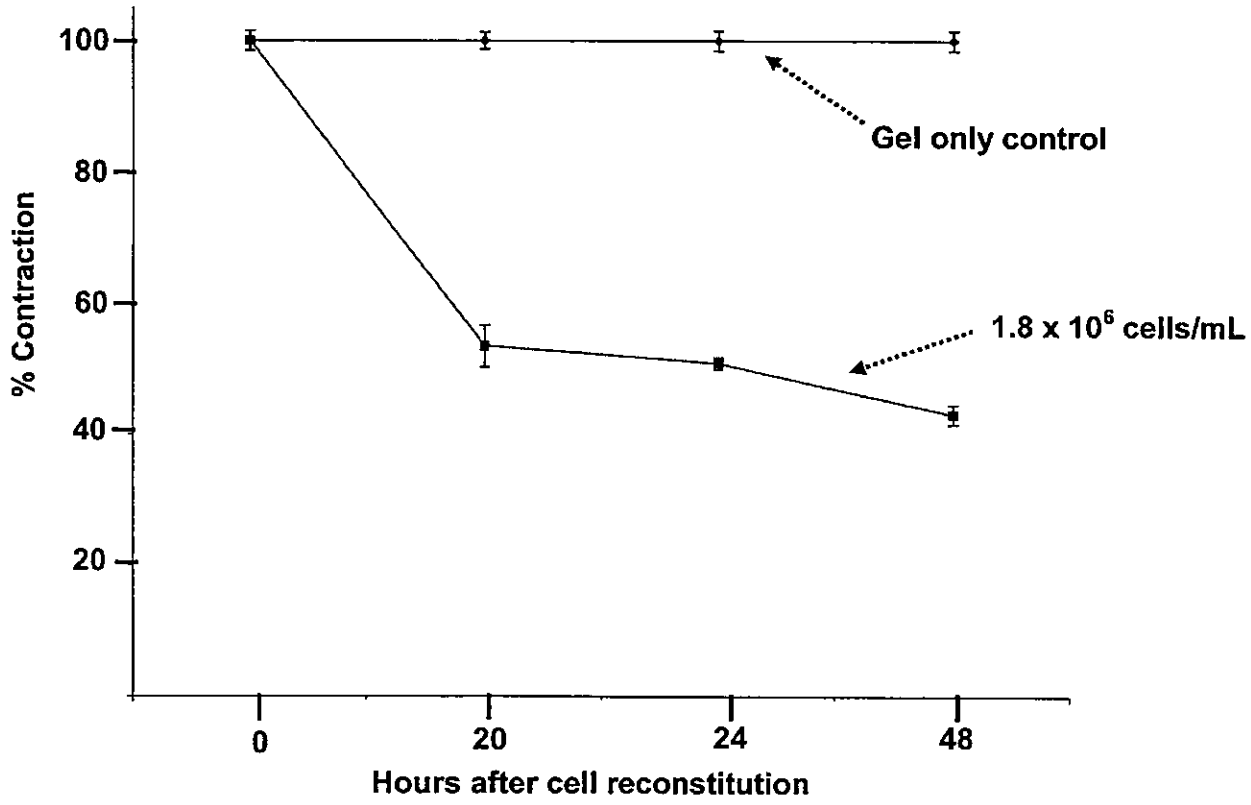

100
80
60
40
20
% Contraction
Gel only control
1.8 x 10^6 cells/mL
0
20
24
48
Hours after cell reconstitution

Fig. 6

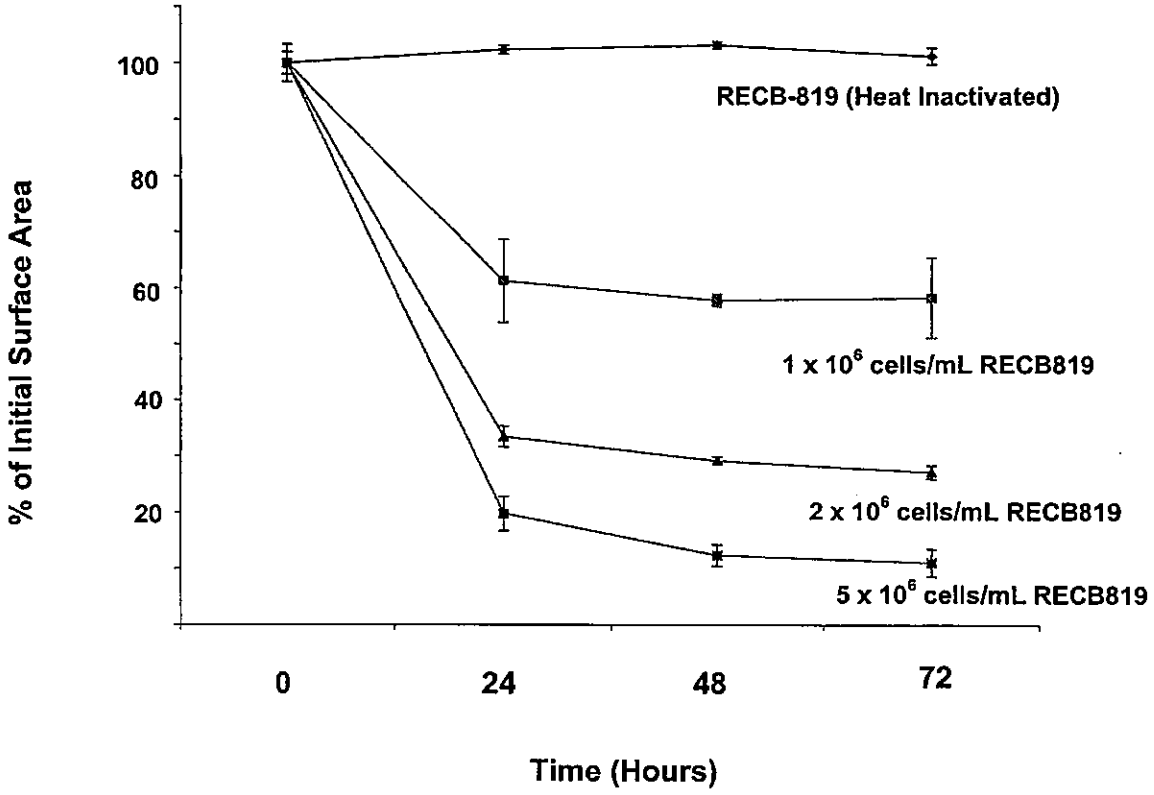

100
80
60
40
20
% of Initial Surface Area
RECB-819 (Heat Inactivated)
1 x 10^6 cells/mL RECB819
2 x 10^6 cells/mL RECB819
5 x 10^6 cells/mL RECB819
0
24
48
72
Time (Hours)

Fig. 7

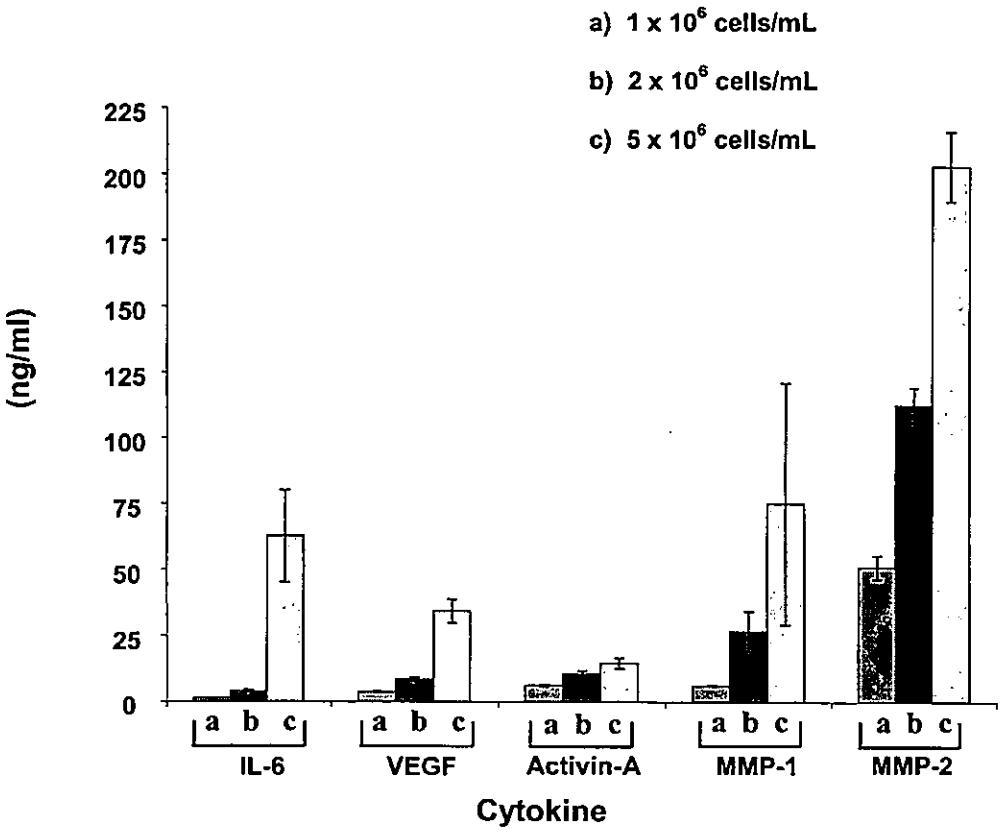

a) 1 x 10^6 cells/mL
b) 2 x 10^6 cells/mL
c) 5 x 10^6 cells/mL
225
200
175
150
125
100
75
50
25
0
(ng/ml)
a b c
IL-6
VEGF
Activin-A
MMP-1
MMP-2
Cytokine

Fig. 8

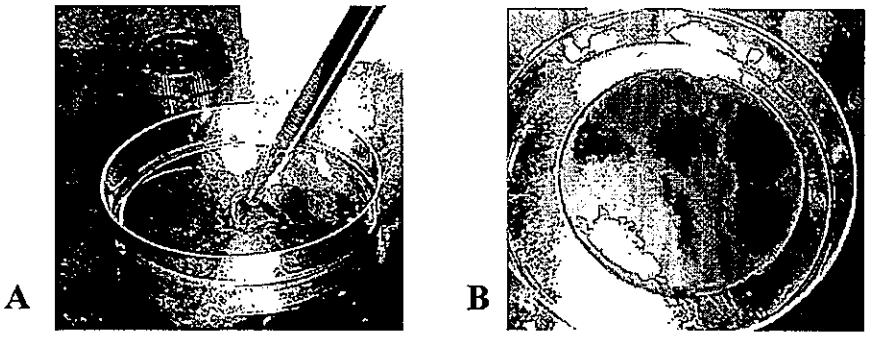


Fig. 9

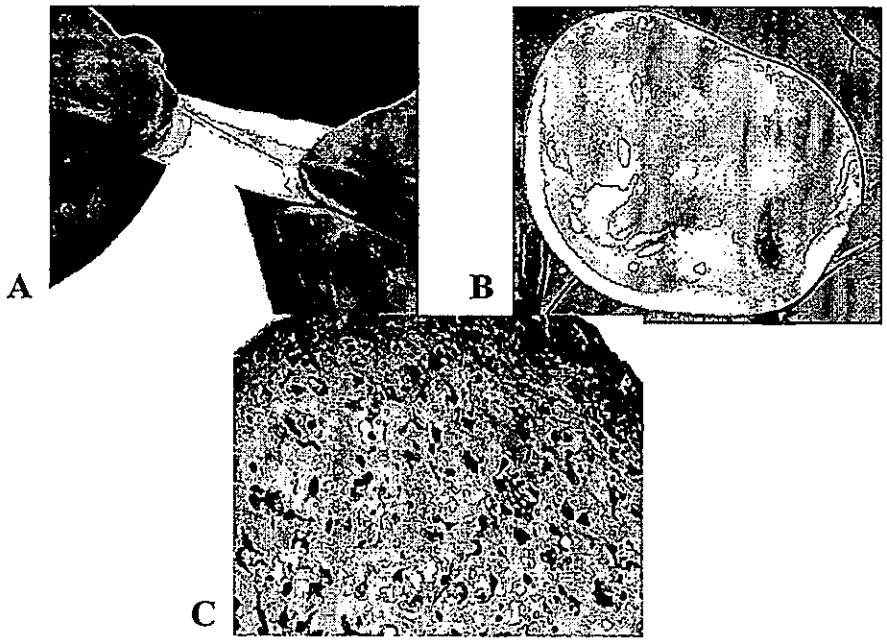


Fig. 10

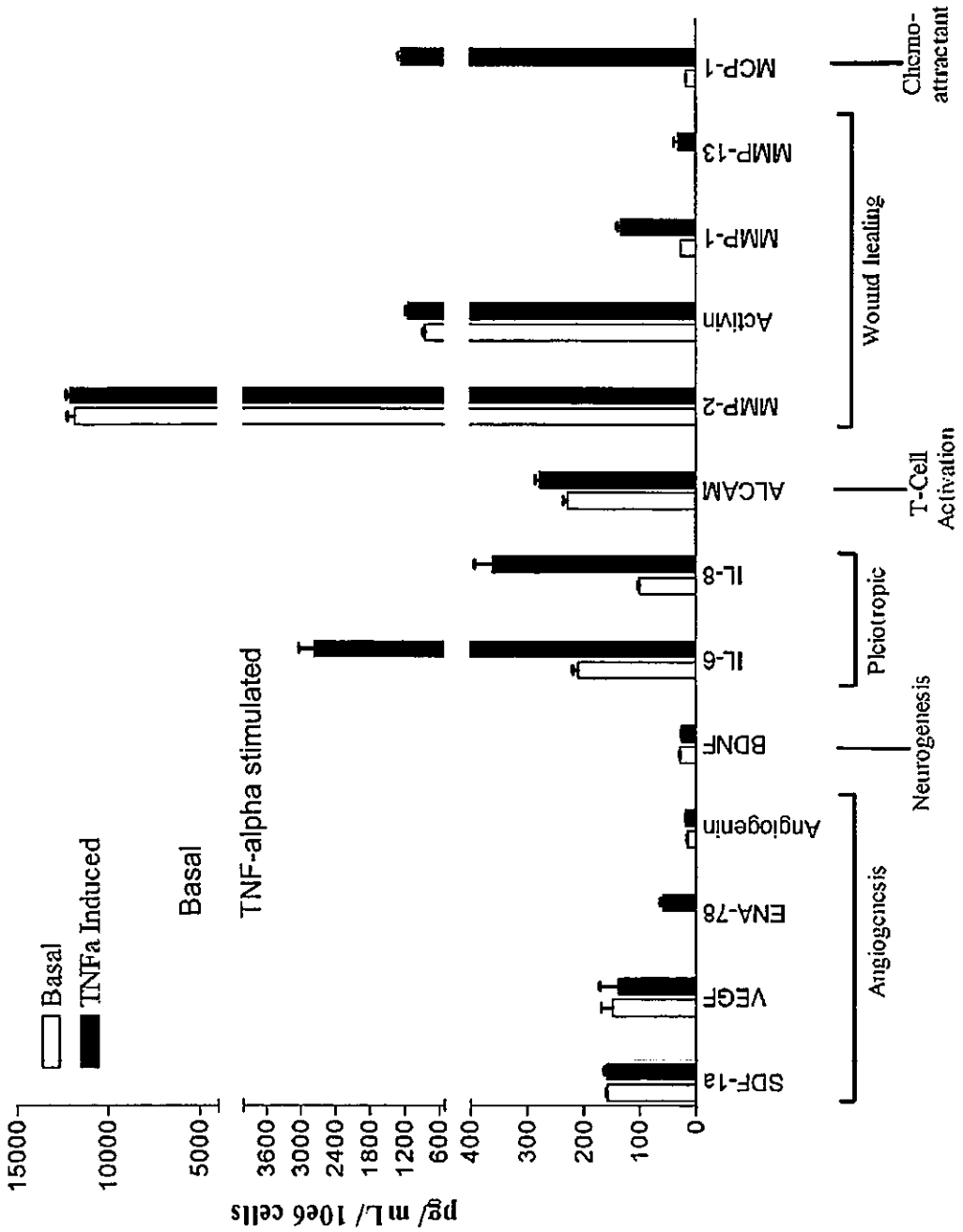

Basal
TNFa Induced
Basal
TNF-alpha stimulated
pg/ mL/ 10e6 cells
15000
10000
5000
3600
3000
2400
1800
1200
600
400
300
200
100
0
SDF-1a
VEGF
ENA-78
Angiogenin
BDNF
IL-6
IL-8
ALCAM
MMP-2
Activin
MMP-1
MMP-13
MCP-1
Angiogenesis
Neurogenesis
Pleiotropic
T-Cell Activation
Wound healing
Chemo-attractant

Fig. 11

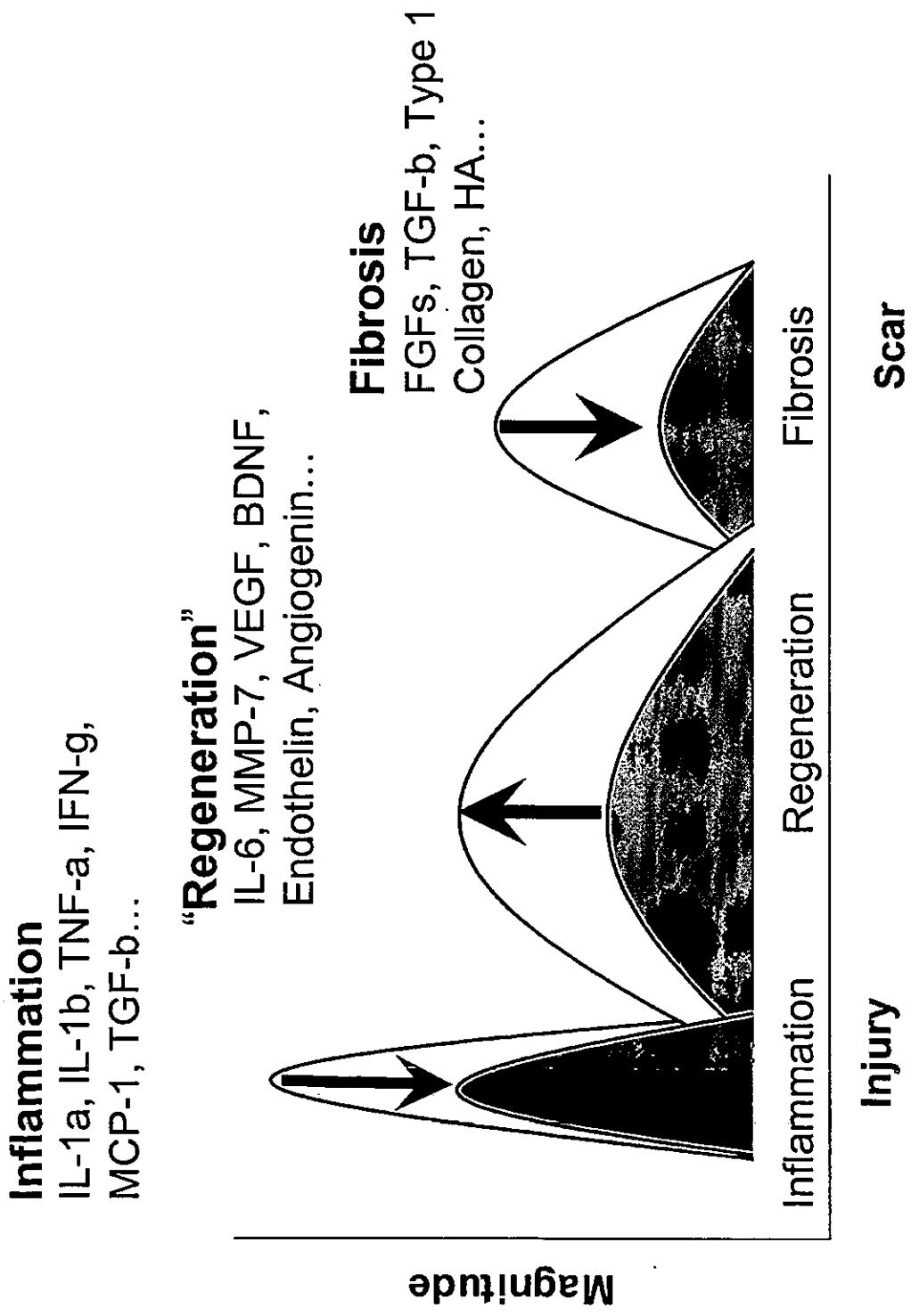

Inflammation
IL-1a, IL-1b, TNF-a, IFN-g,
MCP-1, TGF-b...
"Regeneration"
IL-6, MMP-7, VEGF, BDNF,
Endothelin, Angiogenin...
Fibrosis
FGFs, TGF-b, Type 1
Collagen, HA...
Magnitude
Inflammation
Regeneration
Fibrosis
Injury
Scar

Fig. 12

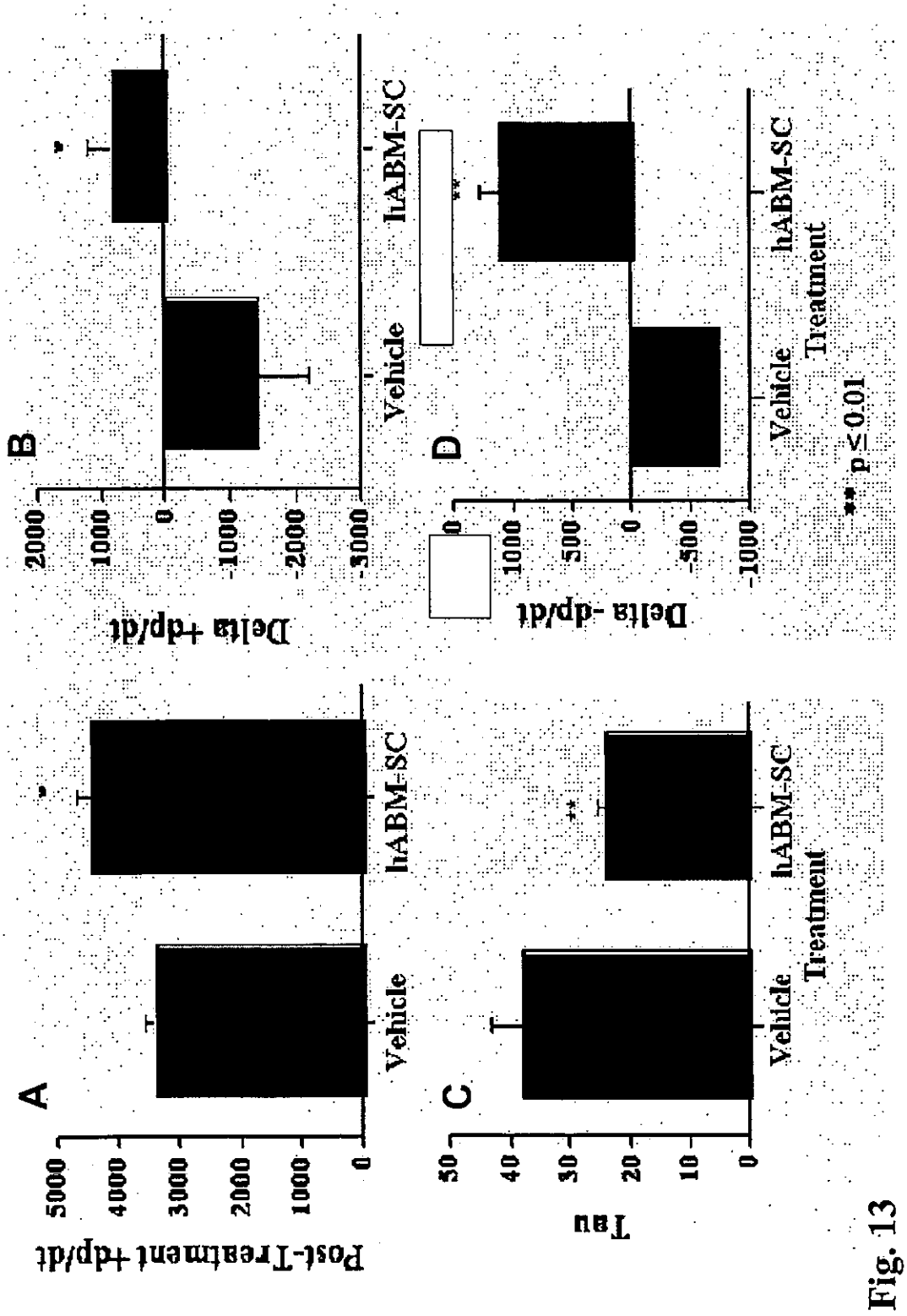

A
Post-Treatment +dp/dt
5000
4000
3000
2000
1000
0
Vehicle
hABM-SC
Treatment
B
Delta +dp/dt
2000
1000
0
-1000
-2000
-3000
Vehicle
hABM-SC
C
Tau
50
40
30
20
10
0
Vehicle
hABM-SC
Treatment
D
Delta -dp/dt
1000
500
0
-500
-1000
Vehicle
hABM-SC
Treatment
** p ≤ 0.01
Systolic Pressure
Diastolic Pressure

Fig. 13



Fig. 14

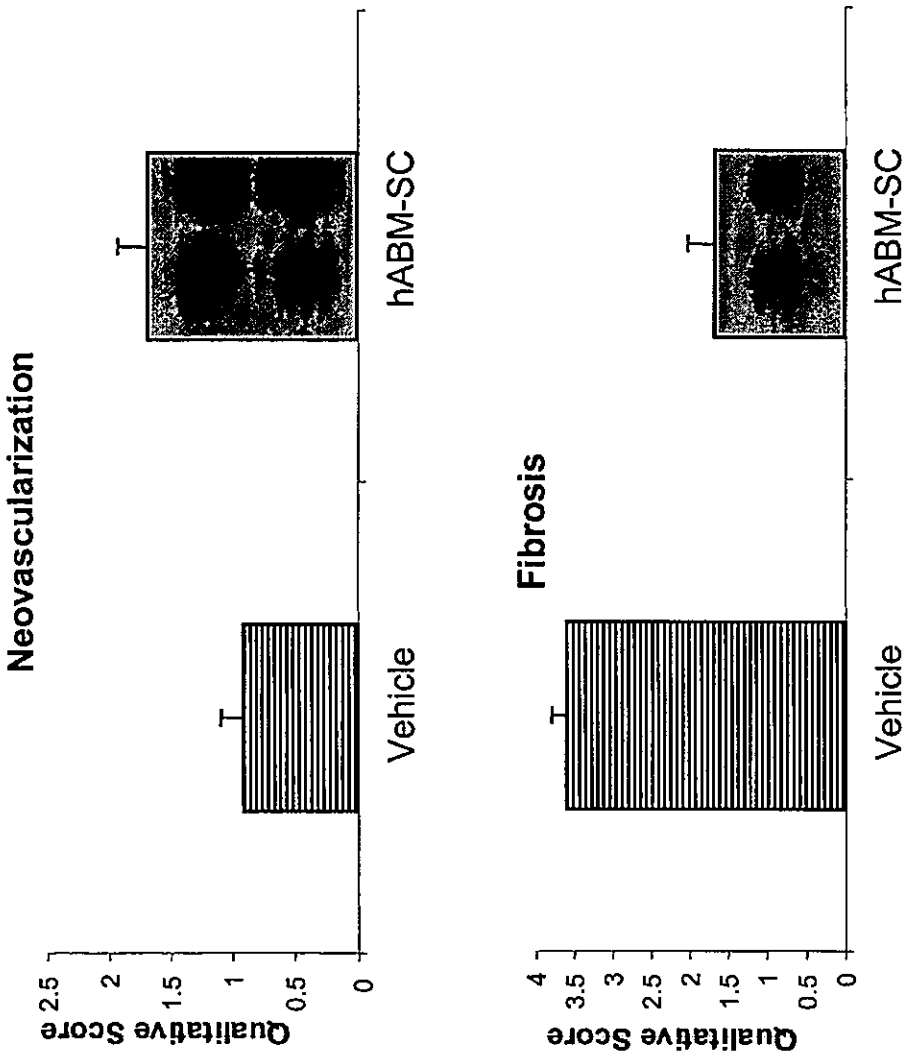

Neovascularization
Qualitative Score
2.5
2
1.5
1
0.5
0
Vehicle
hABM-SC
Fibrosis
Qualitative Score
4
3.5
3
2.5
2
1.5
1
0.5
0
Vehicle
hABM-SC

Fig. 15

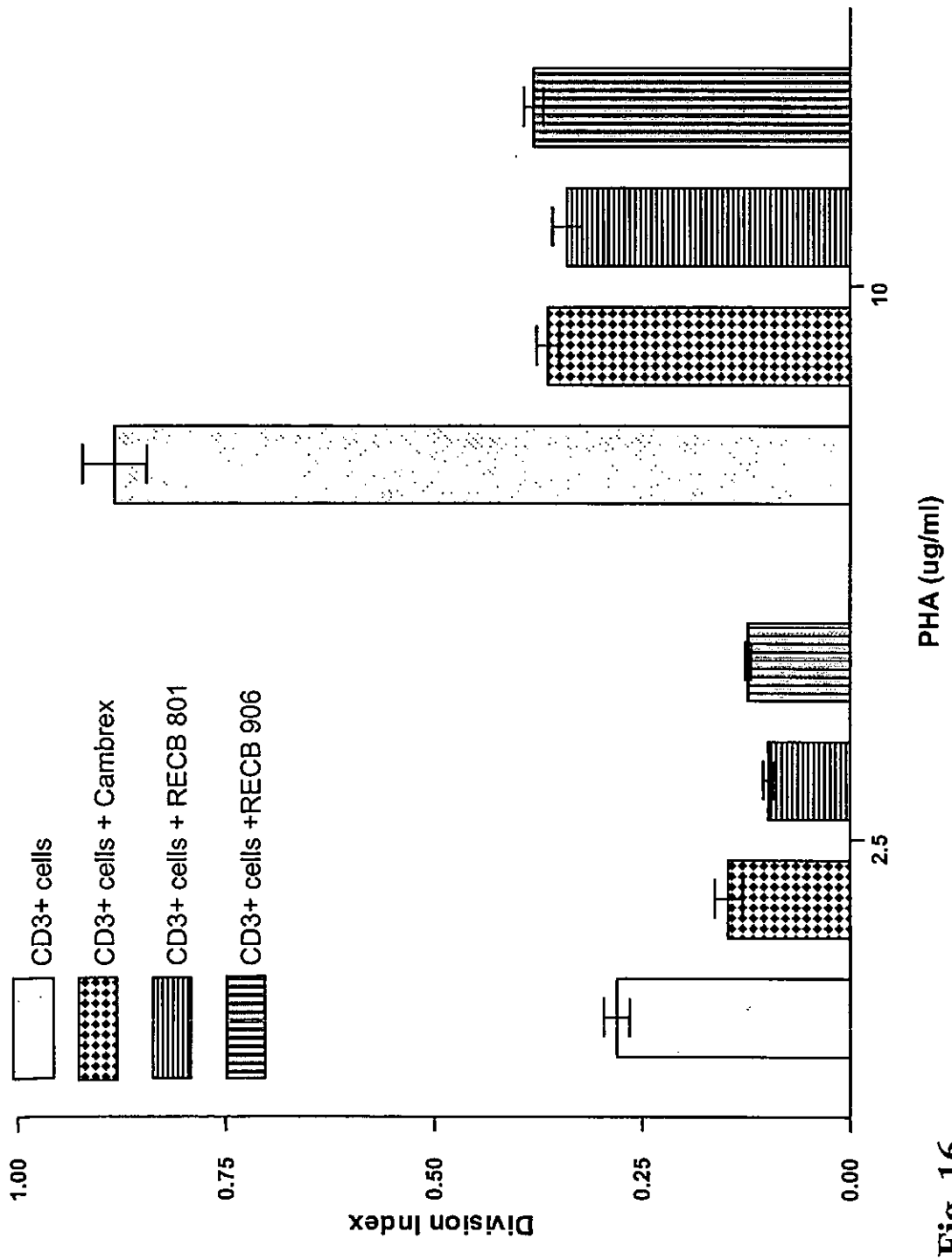

CD3+ cells
CD3+ cells + Cambrex
CD3+ cells + RECB 801
CD3+ cells +RECB 906
Division Index
1.00
0.75
0.50
0.25
0.00
2.5
10
PHA (ug/ml)

Fig. 16

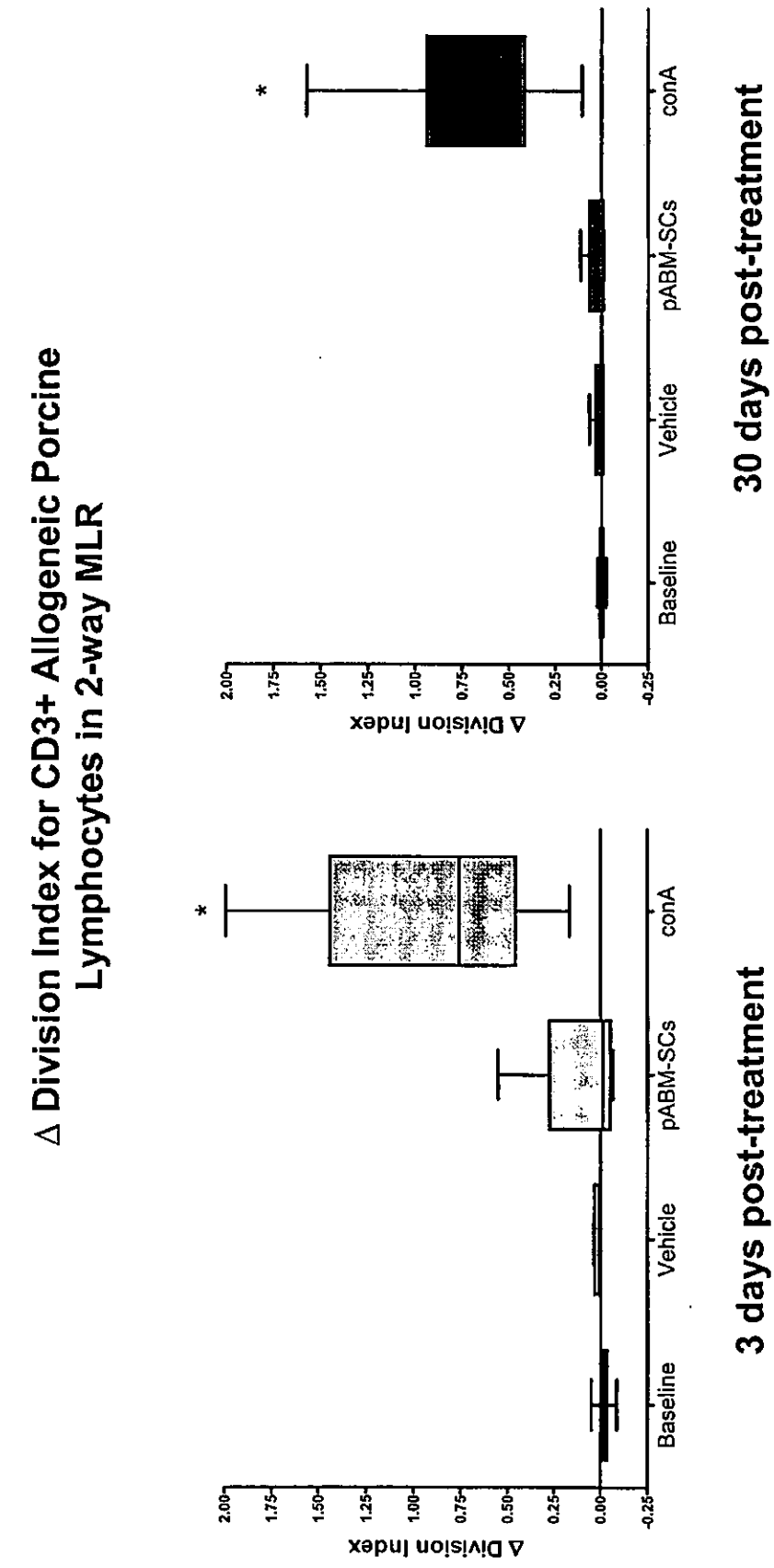

Δ Division Index for CD3+ Allogeneic Porcine Lymphocytes in 2-way MLR
Δ Division Index
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
-0.25
*
Baseline
Vehicle
pABM-SCs
conA
3 days post-treatment
30 days post-treatment

Fig. 17

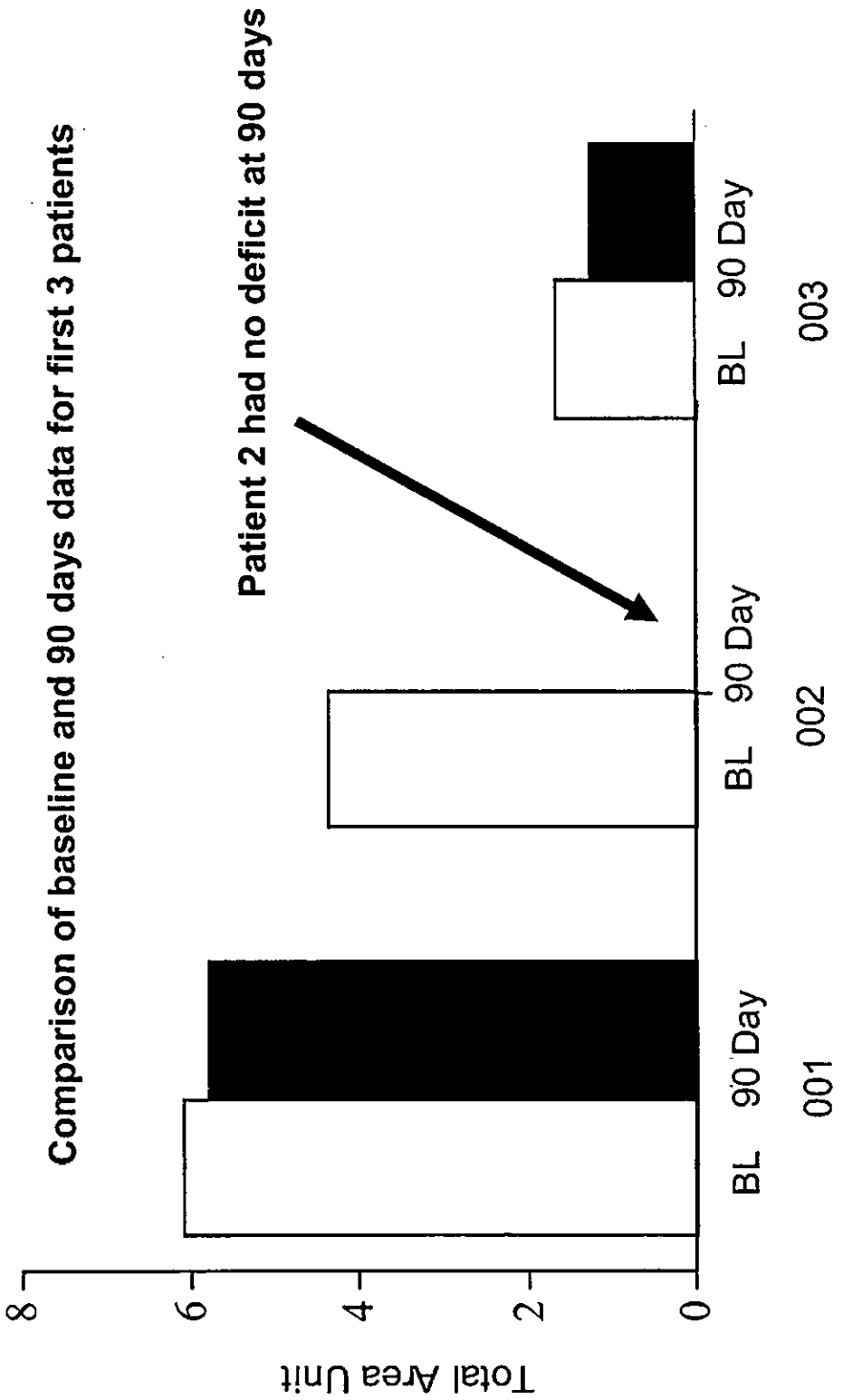

Comparison of baseline and 90 days data for first 3 patients
Patient 2 had no deficit at 90 days
Total Area Unit
0
2
4
6
8
BL
90 Day
001
002
003

Fig. 18

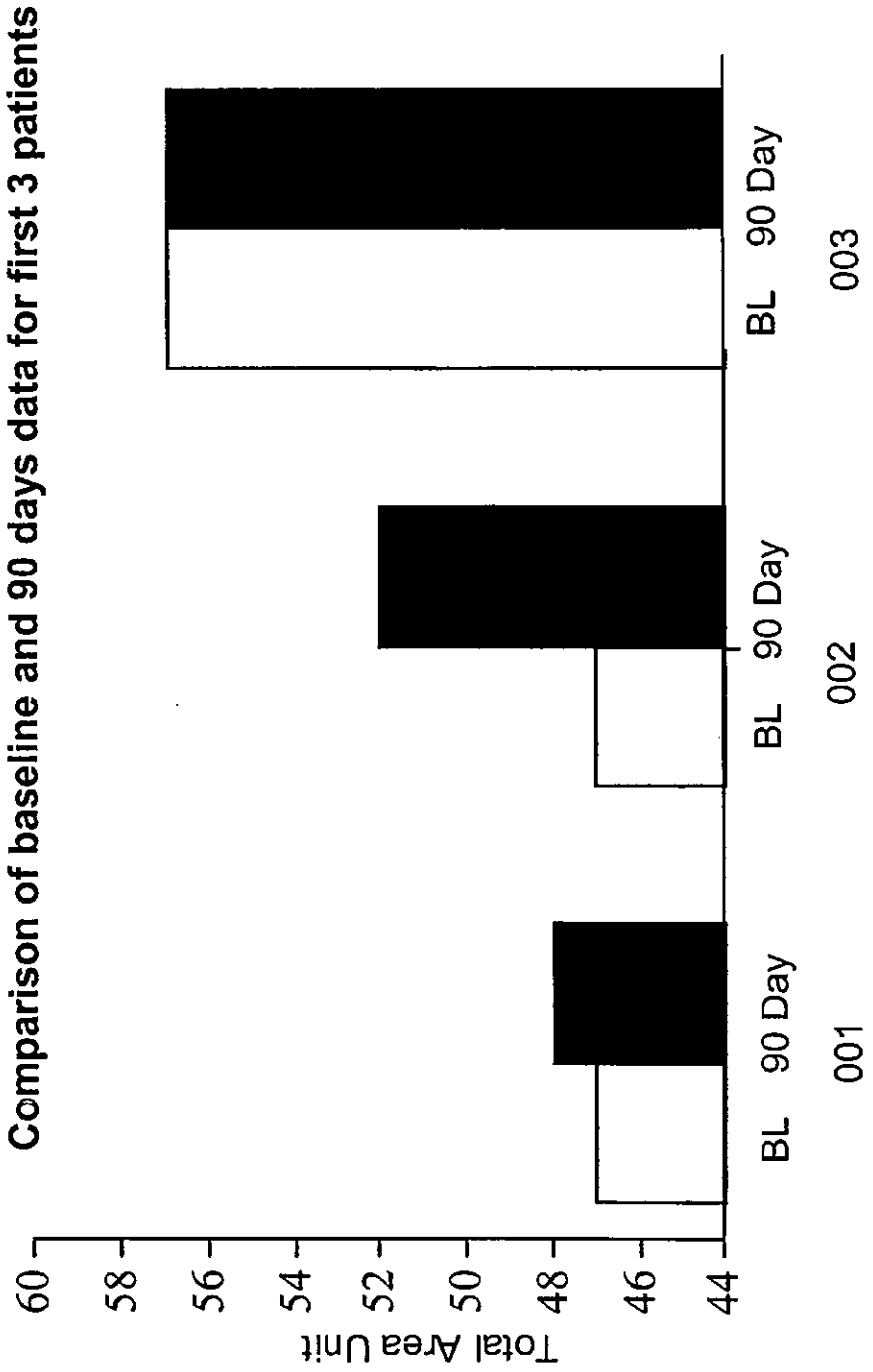

Comparison of baseline and 90 days data for first 3 patients
Total Area Unit
60
58
56
54
52
50
48
46
44
BL
90 Day
001
BL
90 Day
002
BL
90 Day
003

Fig. 19

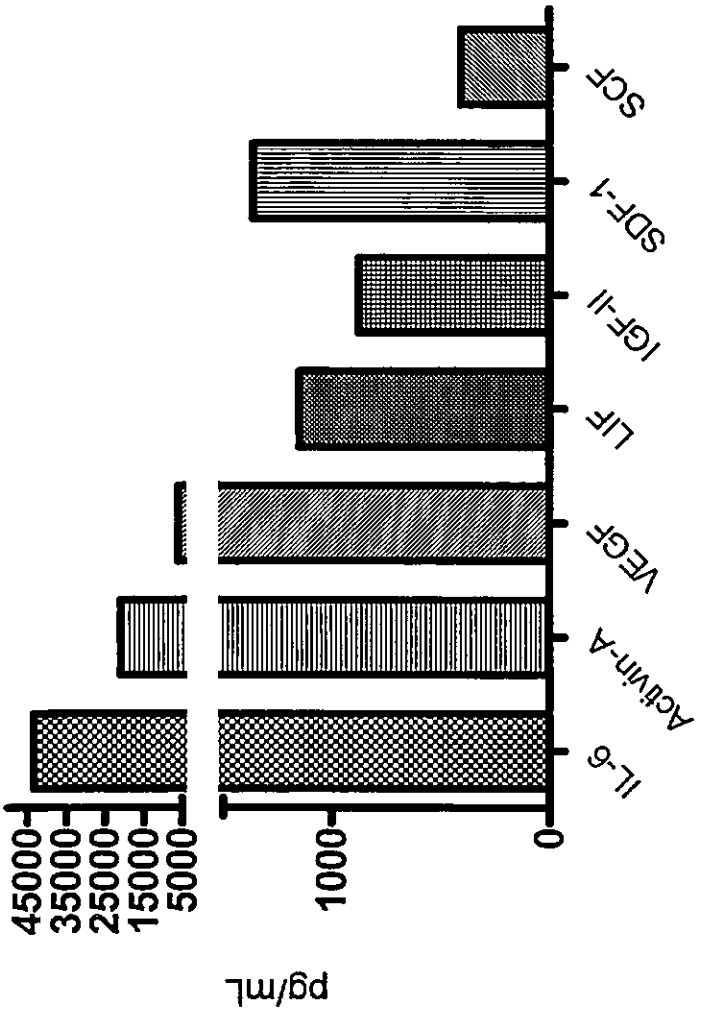

hABM-SC Secreted Cytokines
pg/mL
45000
35000
25000
15000
5000
1000
0
IL-6
Activin-A
VEGF
LIF
IGF-II
SDF-1
SCF

Fig. 20

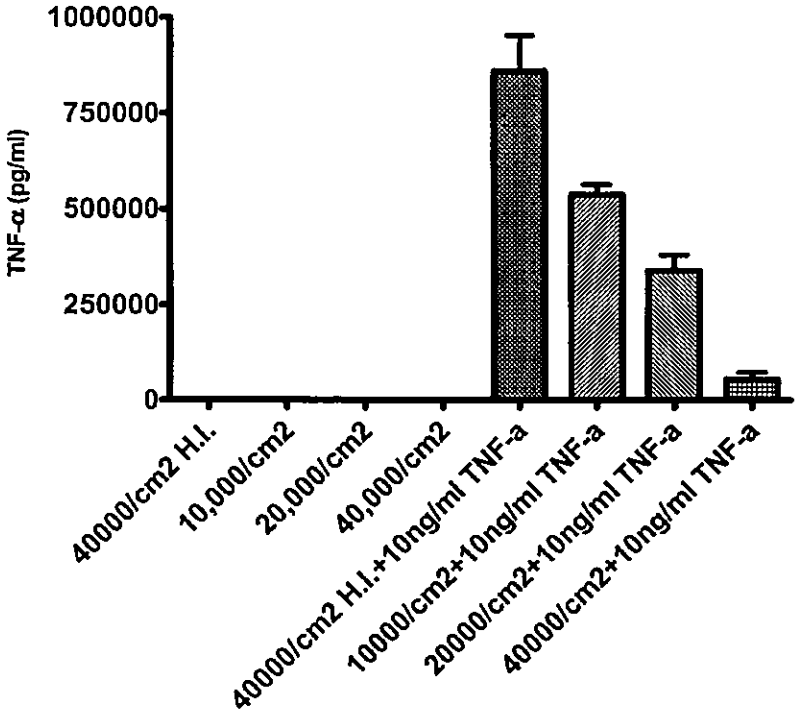
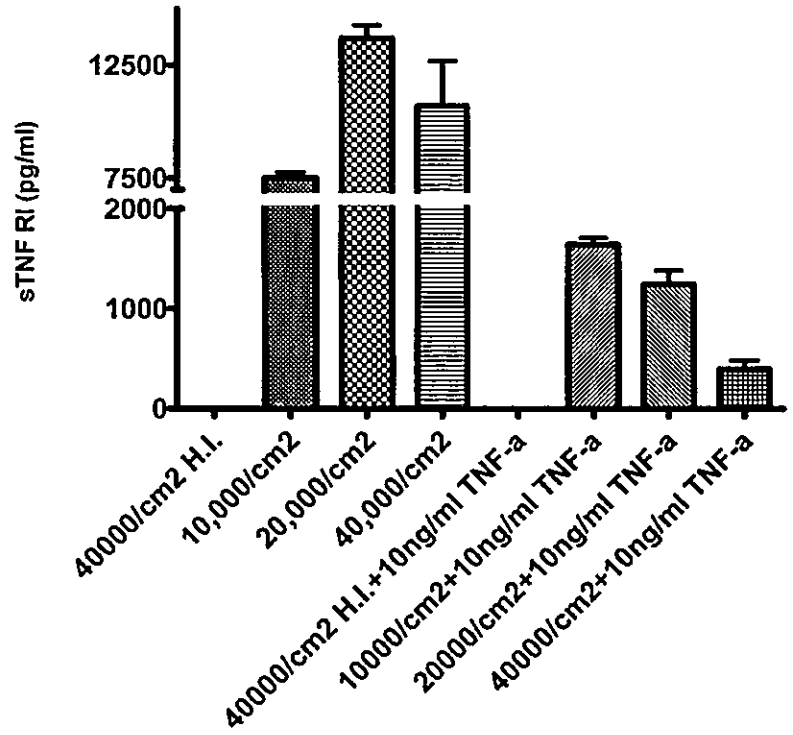
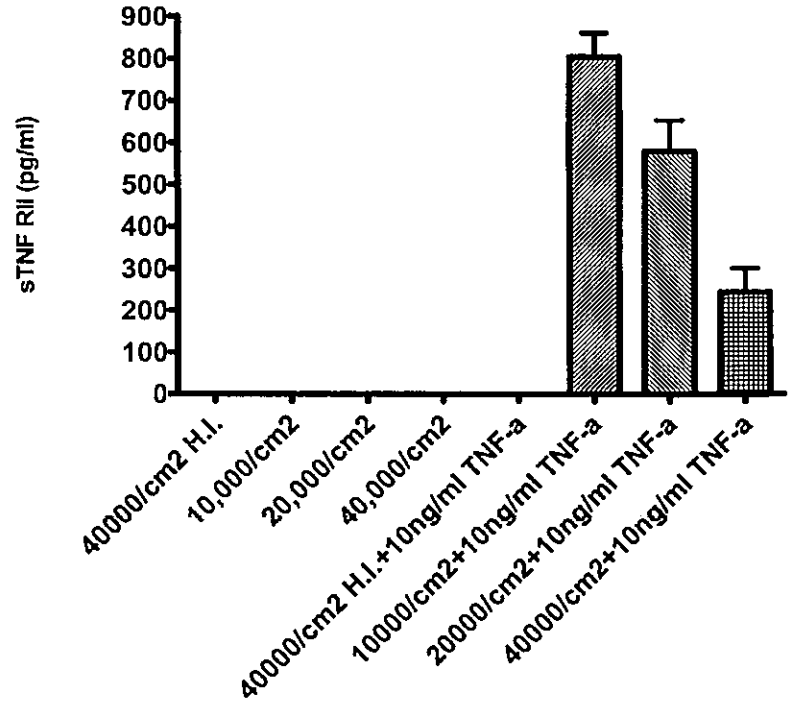

1000000
750000
500000
250000
0
TNF-α (pg/ml)
40000/cm2 H.I.
10,000/cm2
20,000/cm2
40,000/cm2
40000/cm2 H.I.+10ng/ml TNF-a
10000/cm2+10ng/ml TNF-a
20000/cm2+10ng/ml TNF-a
40000/cm2+10ng/ml TNF-a

Fig. 21


sTNF RI (pg/ml)
12500
7500
2000
1000
0
40000/cm2 H.I.
10,000/cm2
20,000/cm2
40,000/cm2
40000/cm2 H.I.+10ng/ml TNF-a
10000/cm2+10ng/ml TNF-a
20000/cm2+10ng/ml TNF-a
40000/cm2+10ng/ml TNF-a

A


sTNF RII (pg/ml)
900
800
700
600
500
400
300
200
100
0
40000/cm2 H.I.
10,000/cm2
20,000/cm2
40,000/cm2
40000/cm2 H.I.+10ng/ml TNF-a
10000/cm2+10ng/ml TNF-a
20000/cm2+10ng/ml TNF-a
40000/cm2+10ng/ml TNF-a

B

Fig. 22

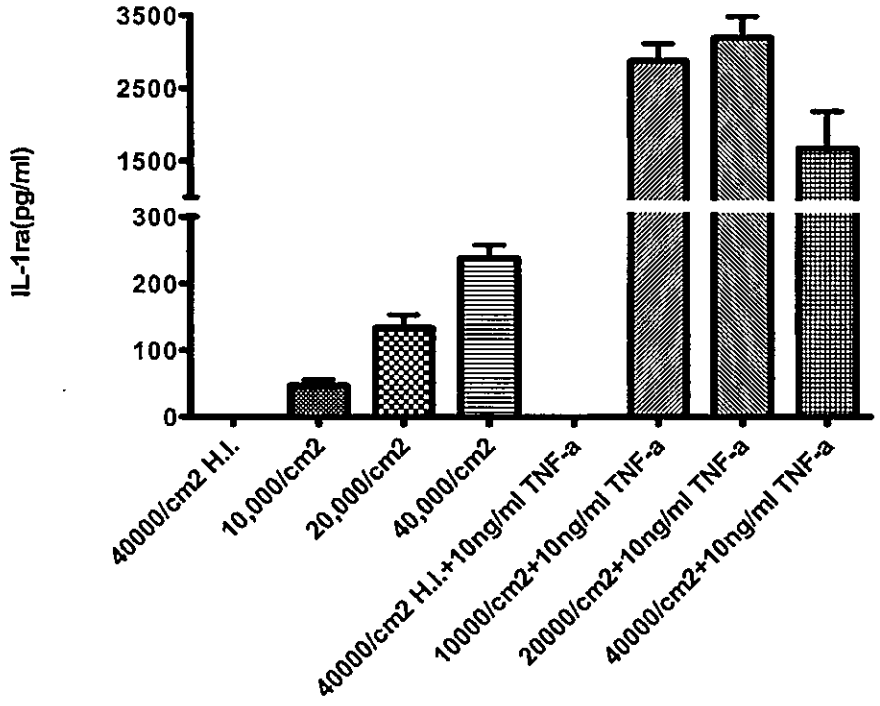

IL-1ra(pg/ml)
3500
2500
1500
300
200
100
0
40000/cm2 H.I.
10,000/cm2
20,000/cm2
40,000/cm2
40000/cm2 H.I.+10ng/ml TNF-a
10000/cm2+10ng/ml TNF-a
20000/cm2+10ng/ml TNF-a
40000/cm2+10ng/ml TNF-a

Fig. 23

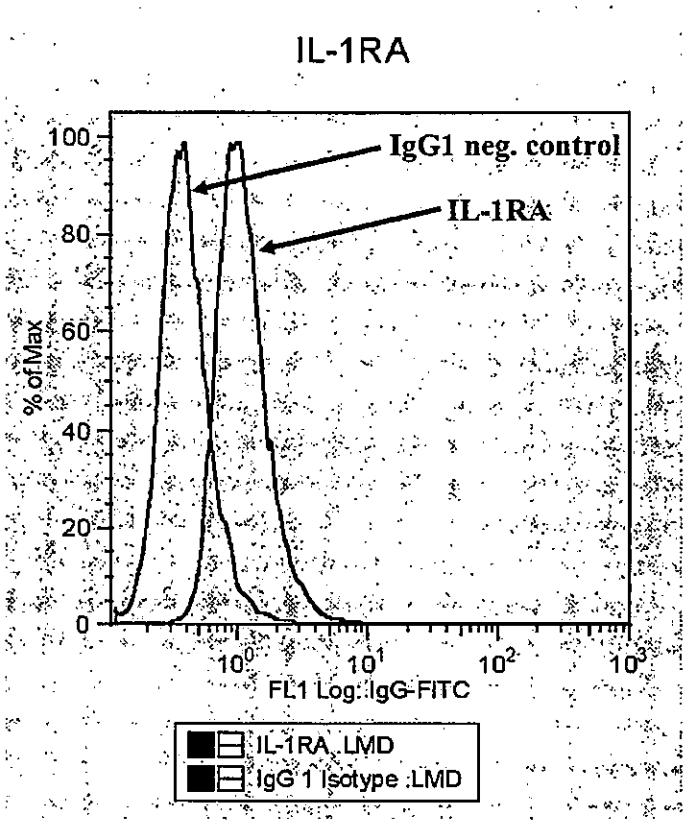


Fig. 24A.

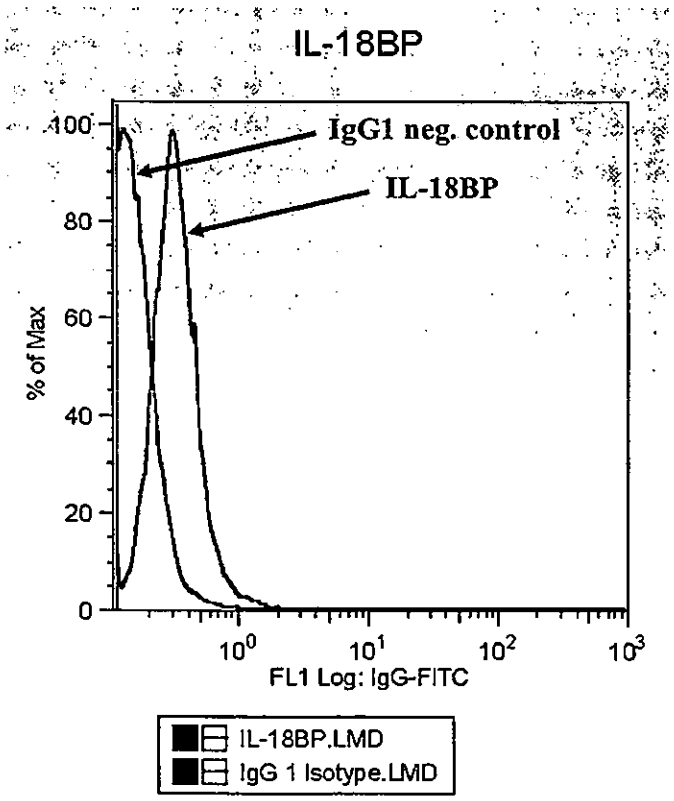


Fig. 24 B.

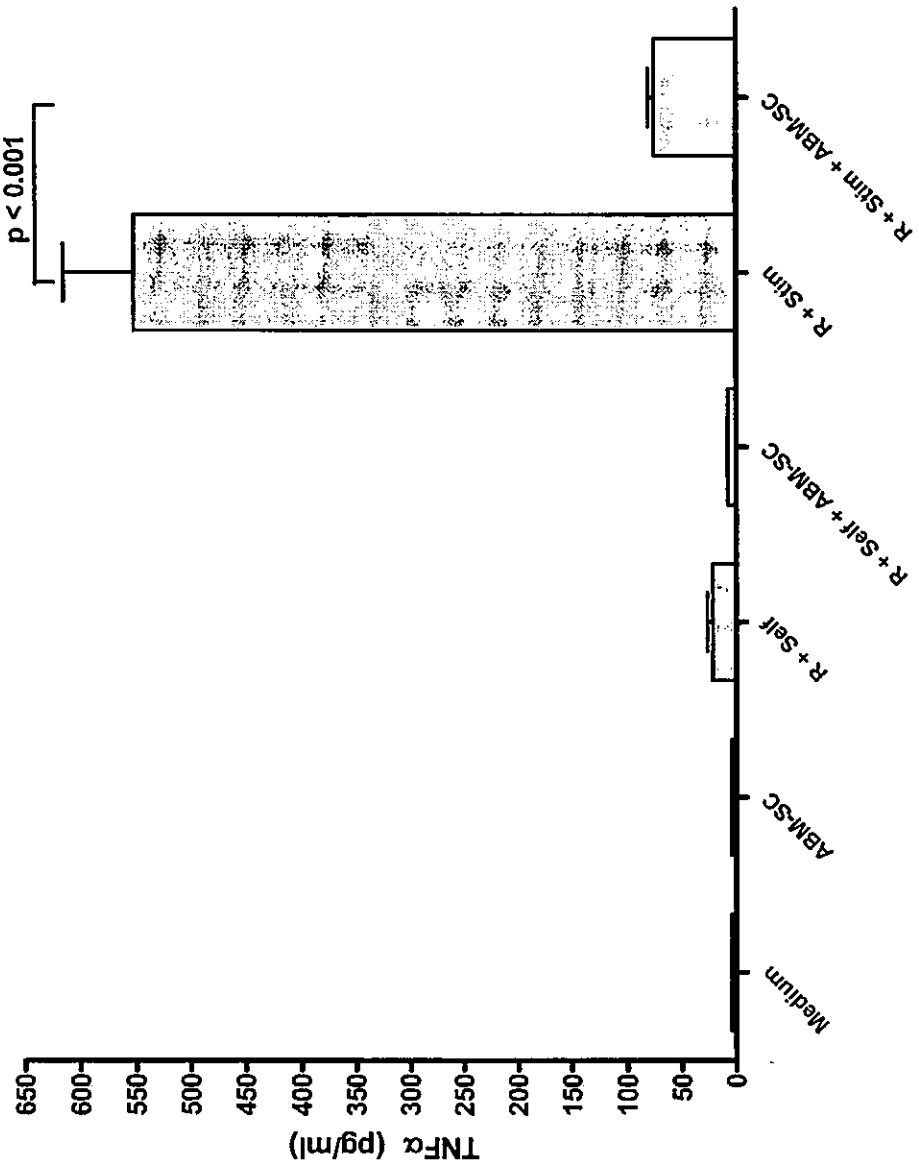

p < 0.001
TNFα (pg/ml)
650
600
550
500
450
400
350
300
250
200
150
100
50
0
Medium
ABM-SC
R + Self
R + Self + ABM-SC
R + Stim
R + Stim + ABM-SC

Fig. 25A

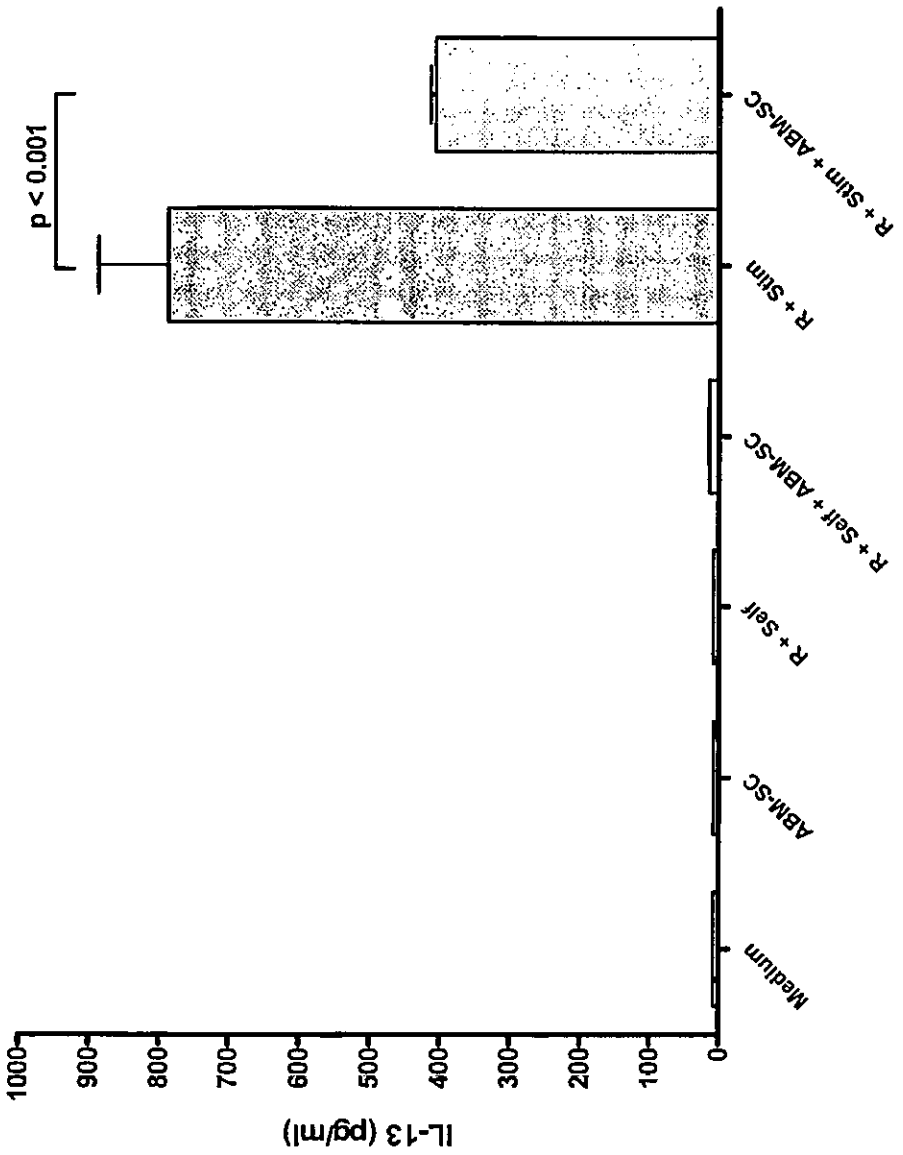

IL-13 (pg/ml)
1000
900
800
700
600
500
400
300
200
100
0
p < 0.001
Medium
ABM-SC
R + Self
R + Self + ABM-SC
R + Stim
R + Stim + ABM-SC

Fig. 25B

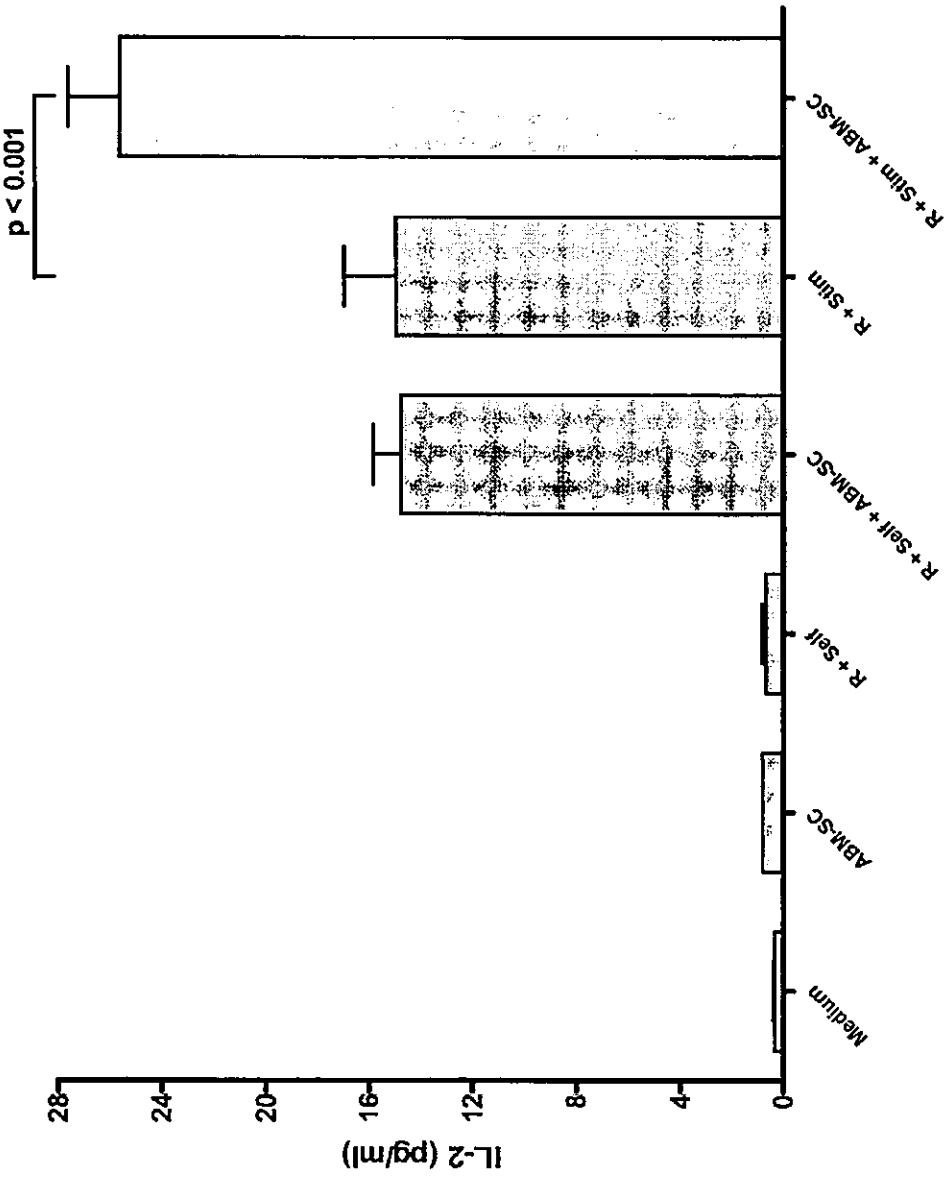

IL-2 (pg/ml)
0
4
8
12
16
20
24
28
Medium
ABM-SC
R+Salt
R+Salt+ABM-SC
R+Stim
R+Stim+ABM-SC
p < 0.001

Fig. 25C

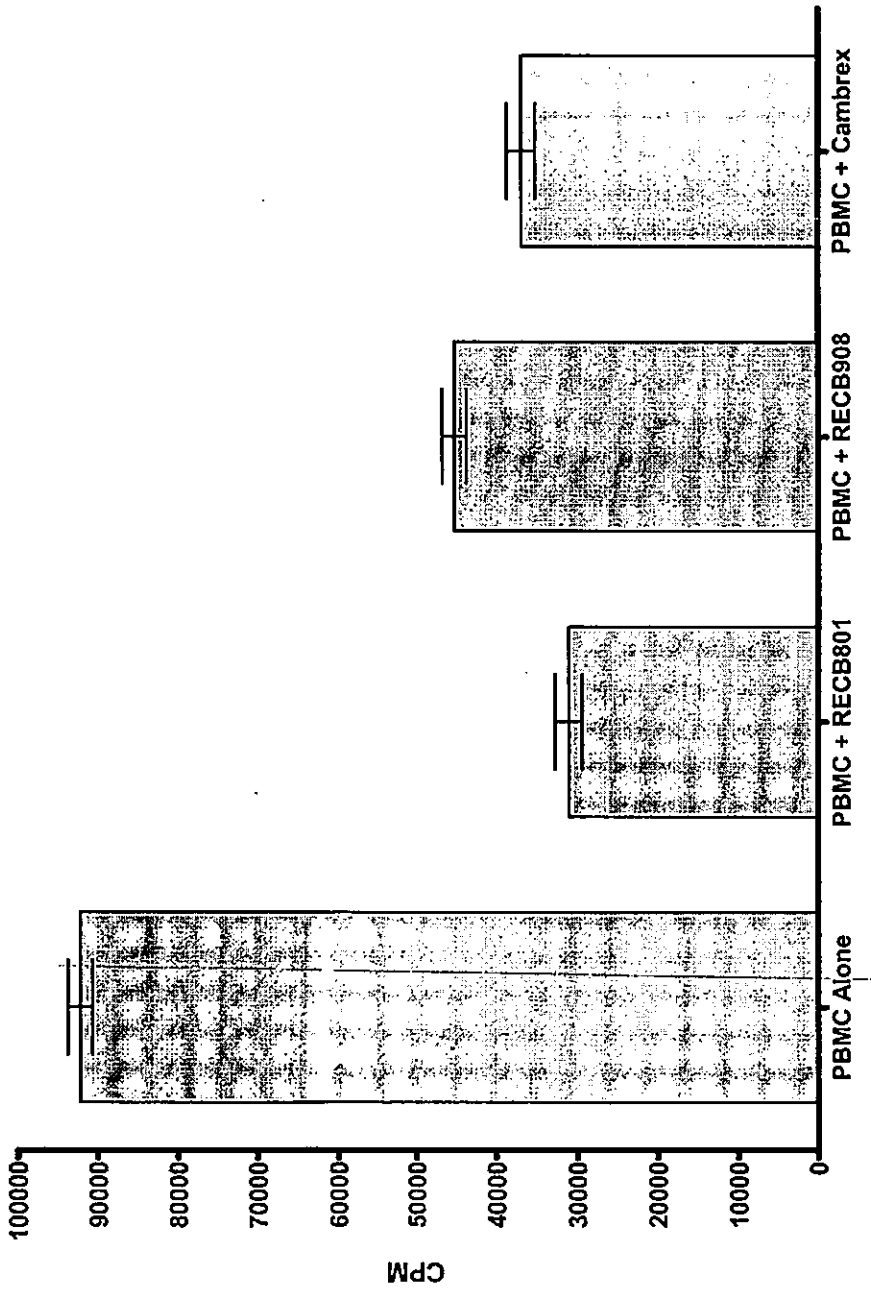

CPM
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
PBMC Alone
PBMC + RECB801
PBMC + RECB908
PBMC + Cambrex

Fig. 26