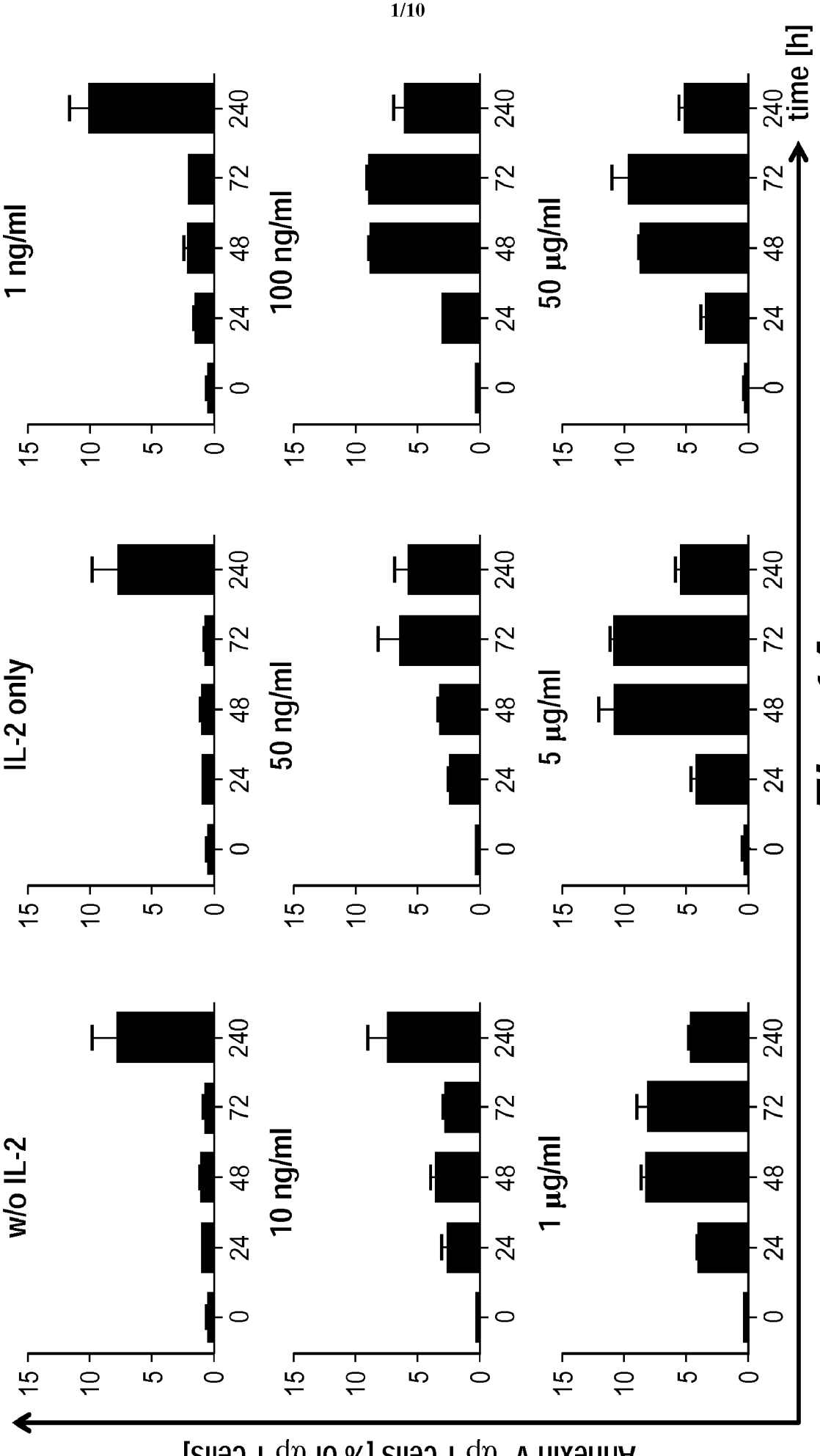

w/o IL-2
IL-2 only
1 ng/ml
10 ng/ml
50 ng/ml
100 ng/ml
1 µg/ml
5 µg/ml
50 µg/ml
Annexin V+ αβ T cells [% of αβ T cells]
time [h]
0
5
10
15
0
24
48
72
240

Fig. 1A

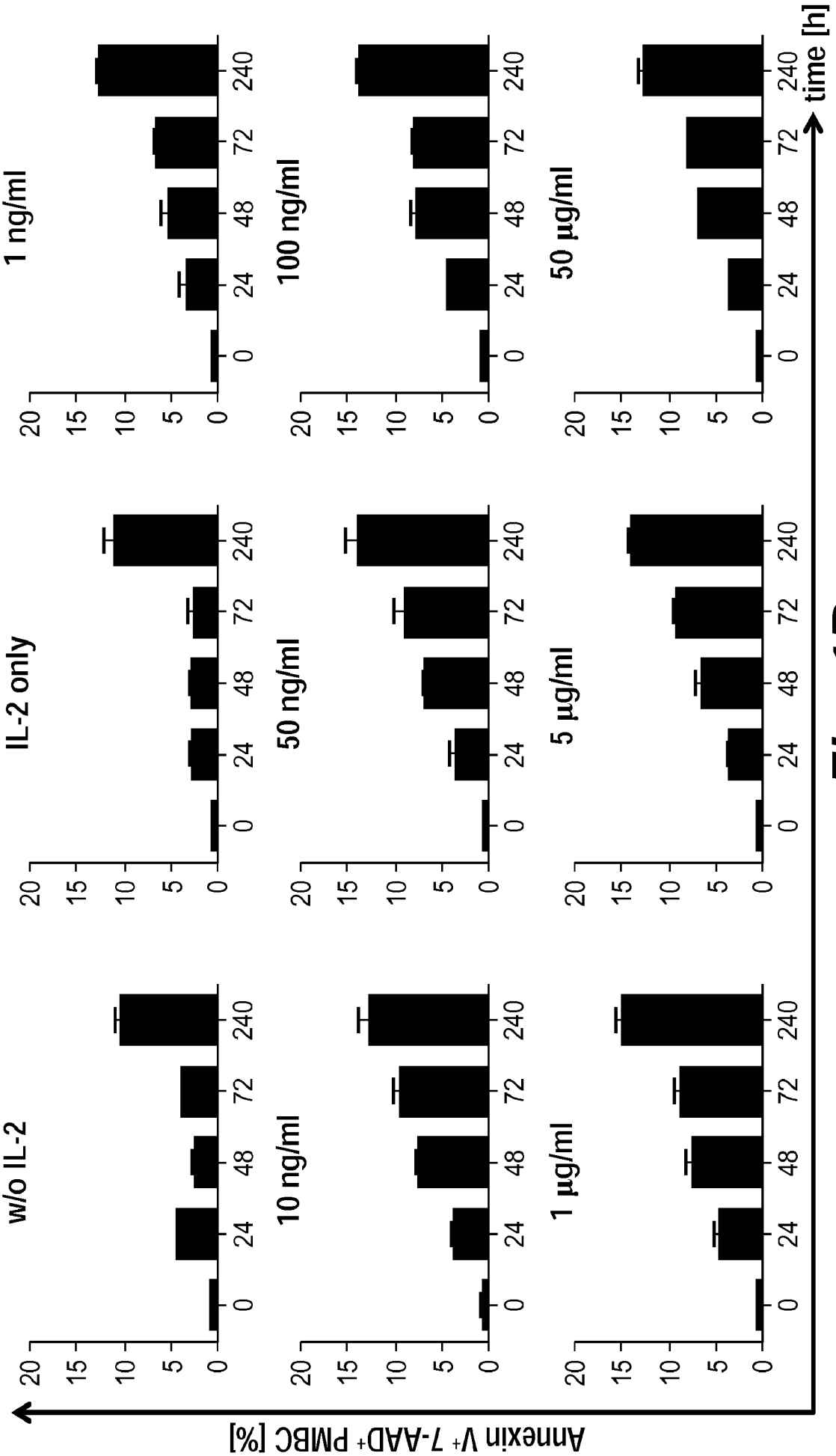

w/o IL-2
IL-2 only
1 ng/ml
10 ng/ml
50 ng/ml
100 ng/ml
1 µg/ml
5 µg/ml
50 µg/ml
0
5
10
15
20
0
24
48
72
240
time [h]
Annexin V+ 7-AAD+ PMBC [%]

*Fig. 1B*

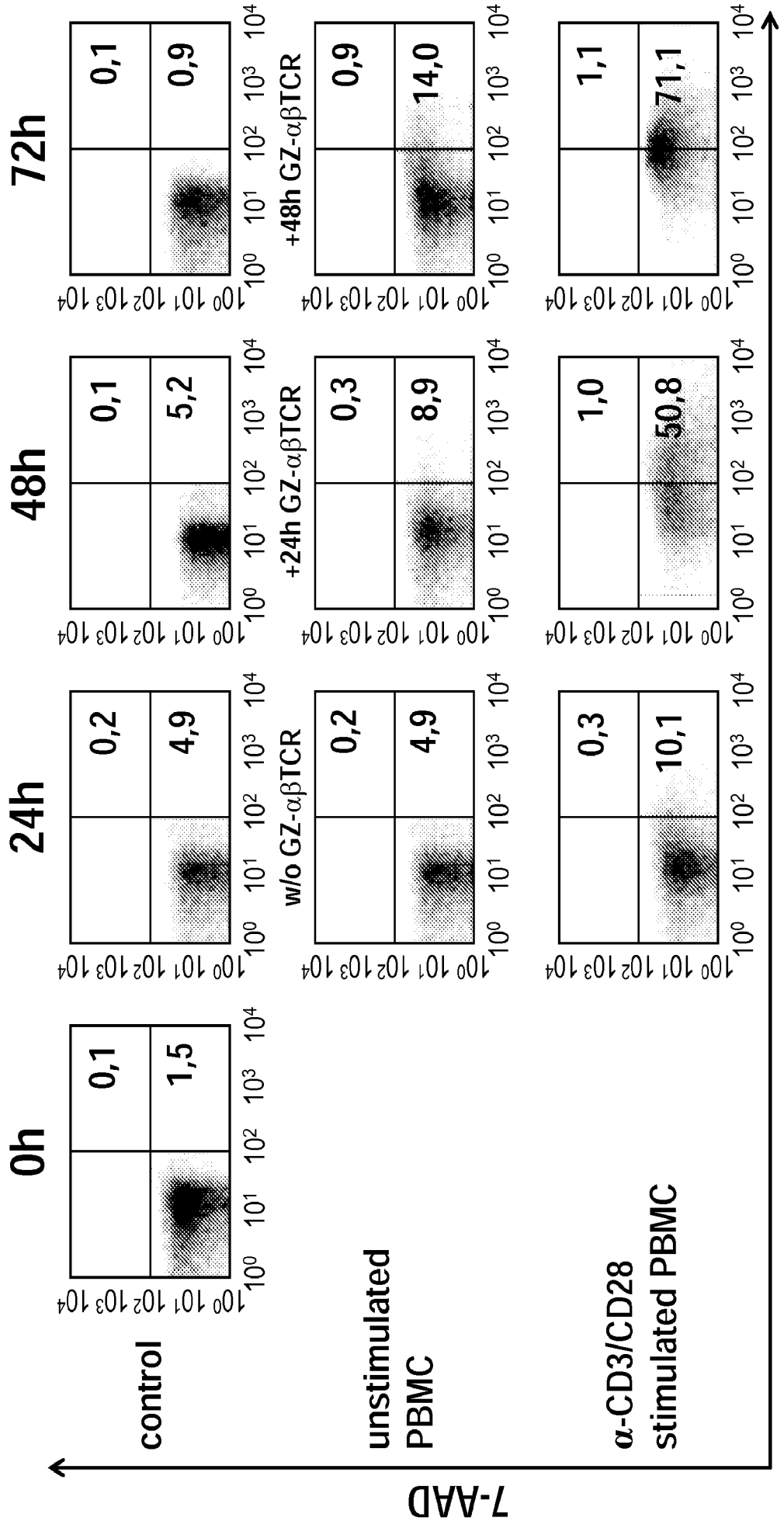

0h
24h
48h
72h
control
unstimulated PBMC
α-CD3/CD28 stimulated PBMC
w/o GZ-αβTCR
+24h GZ-αβTCR
+48h GZ-αβTCR
0,1
1,5
0,2
4,9
0,1
5,2
0,1
0,9
0,2
4,9
0,3
8,9
0,9
14,0
0,3
10,1
1,0
50,8
1,1
71,1
7-AAD
Annexin V

*Fig. 2A*

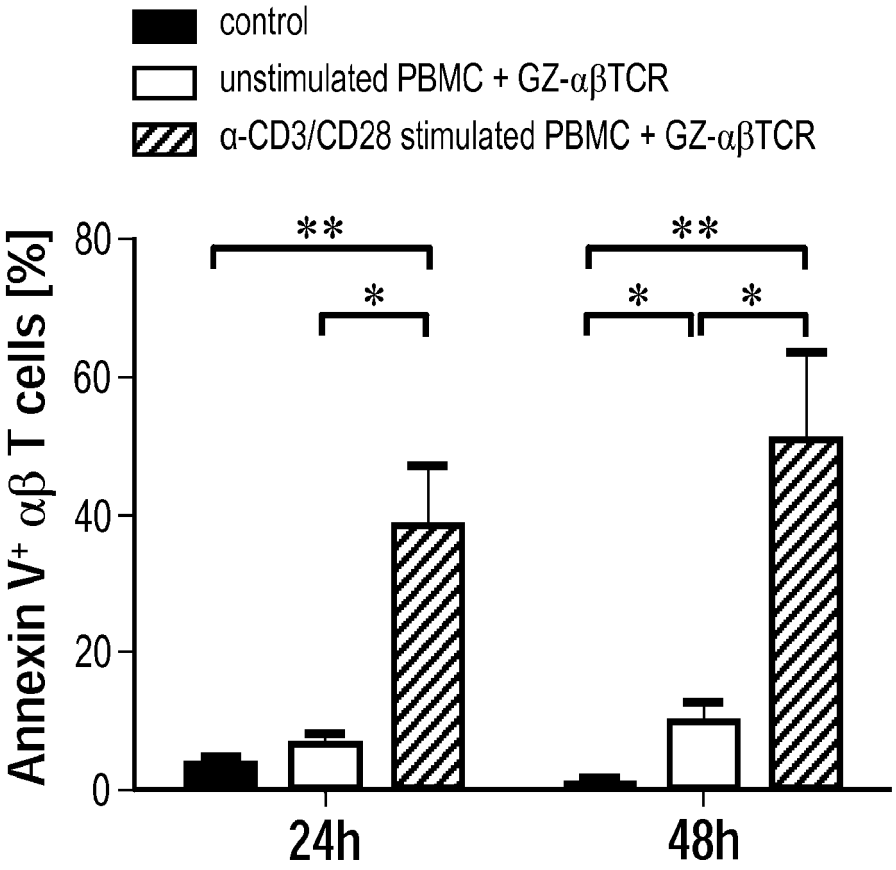

control
unstimulated PBMC + GZ-αβTCR
α-CD3/CD28 stimulated PBMC + GZ-αβTCR
Annexin V+ αβ T cells [%]
80
60
40
20
0
**
*
**
*
*
24h
48h

Fig. 2B

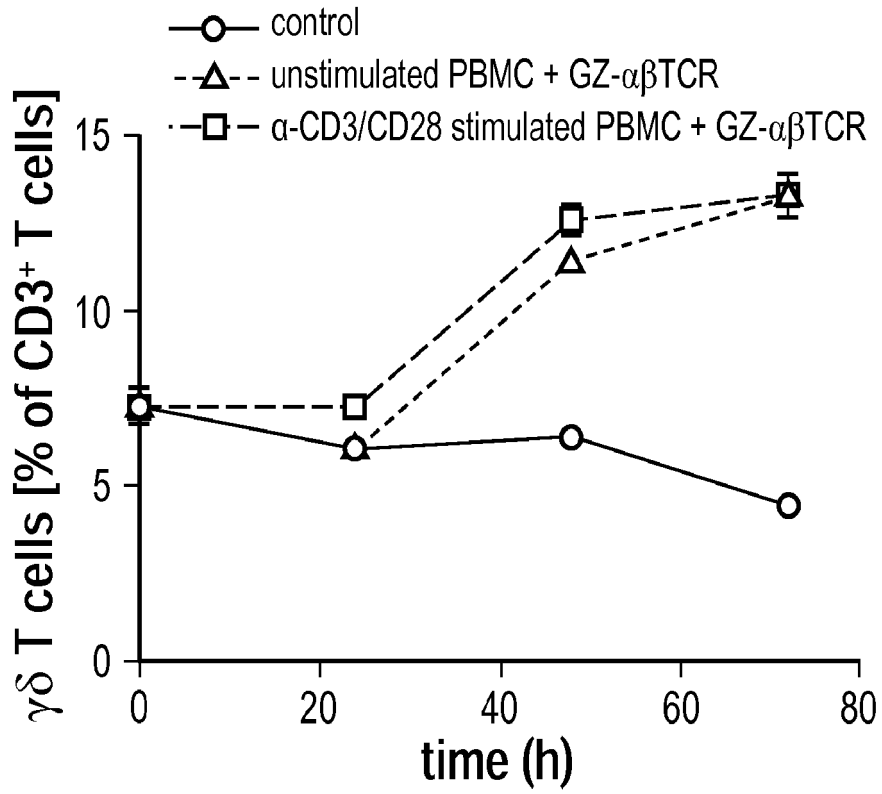

control
unstimulated PBMC + GZ-αβTCR
α-CD3/CD28 stimulated PBMC + GZ-αβTCR
γδ T cells [% of CD3+ T cells]
15
10
5
0
0
20
40
60
80
time (h)

Fig. 2C

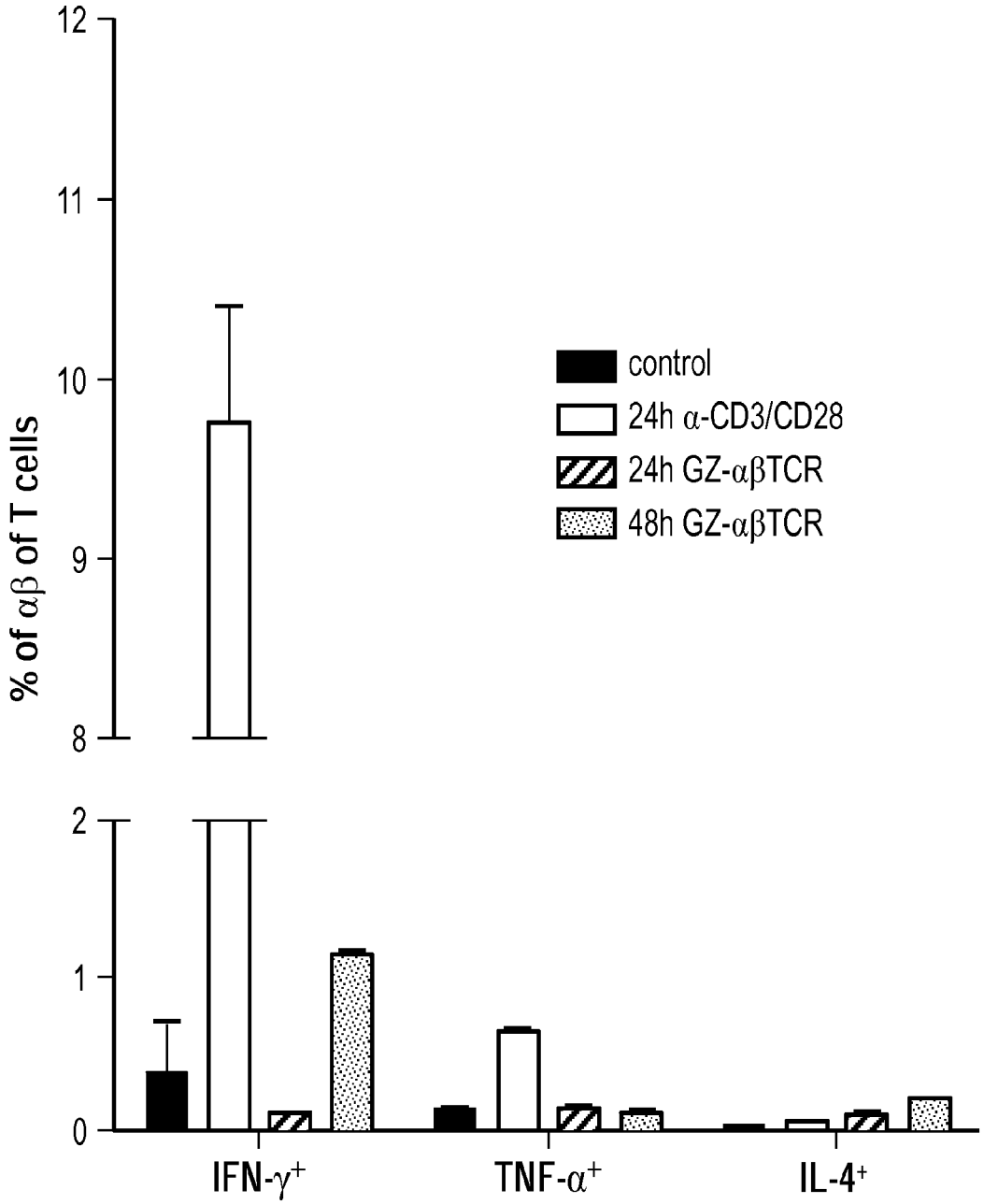

12
11
10
9
8
2
1
0
% of αβ of T cells
control
24h α-CD3/CD28
24h GZ-αβTCR
48h GZ-αβTCR
IFN-γ+
TNF-α+
IL-4+

*Fig. 2D*

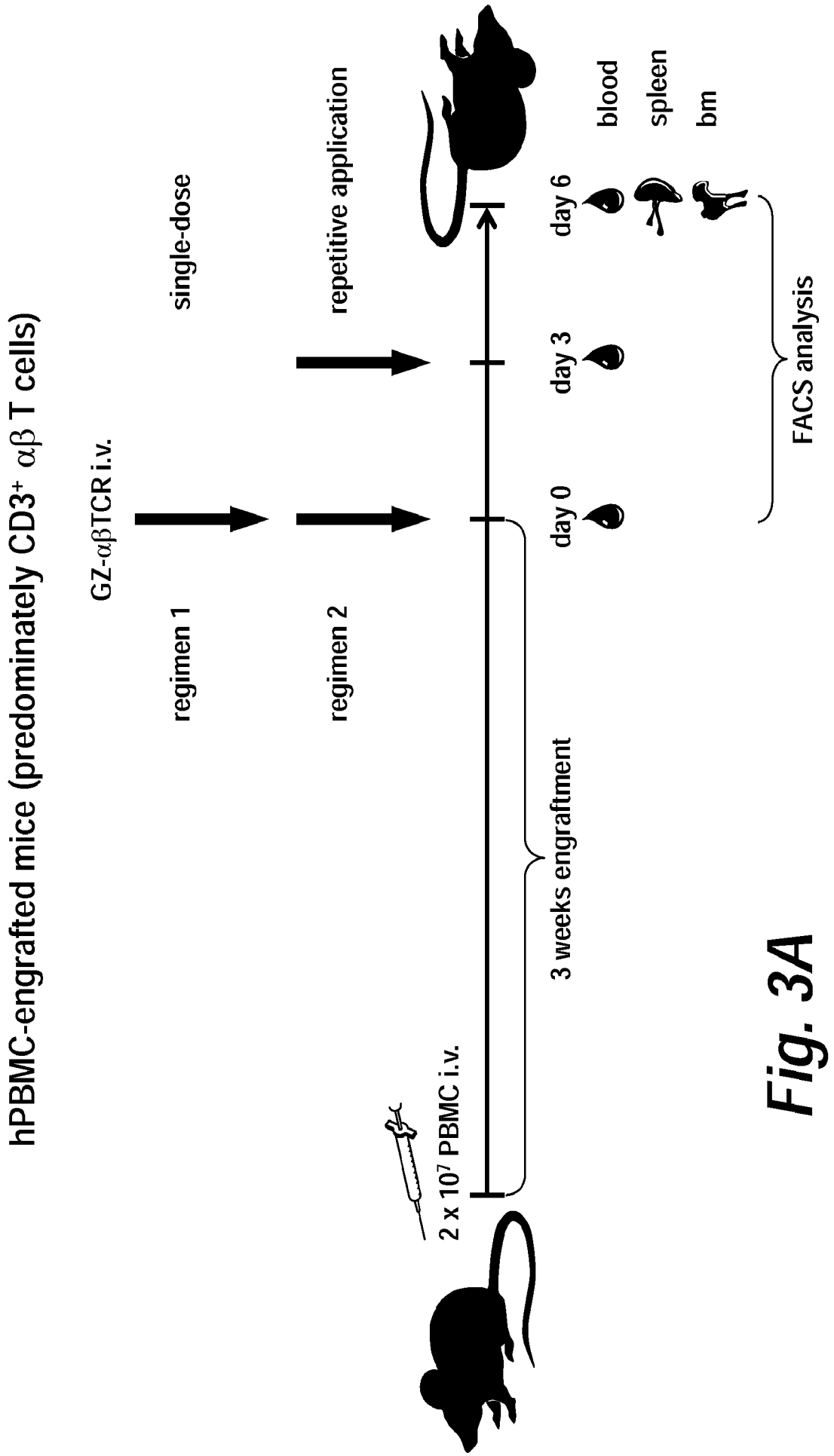

hPBMC-engrafted mice (predominately CD3+ αβ T cells)
GZ-αβTCR i.v.
single-dose
repetitive application
regimen 1
regimen 2
day 0
day 3
day 6
blood
spleen
bm
FACS analysis
3 weeks engraftment
2 x 10^7 PBMC i.v.

Fig. 3A

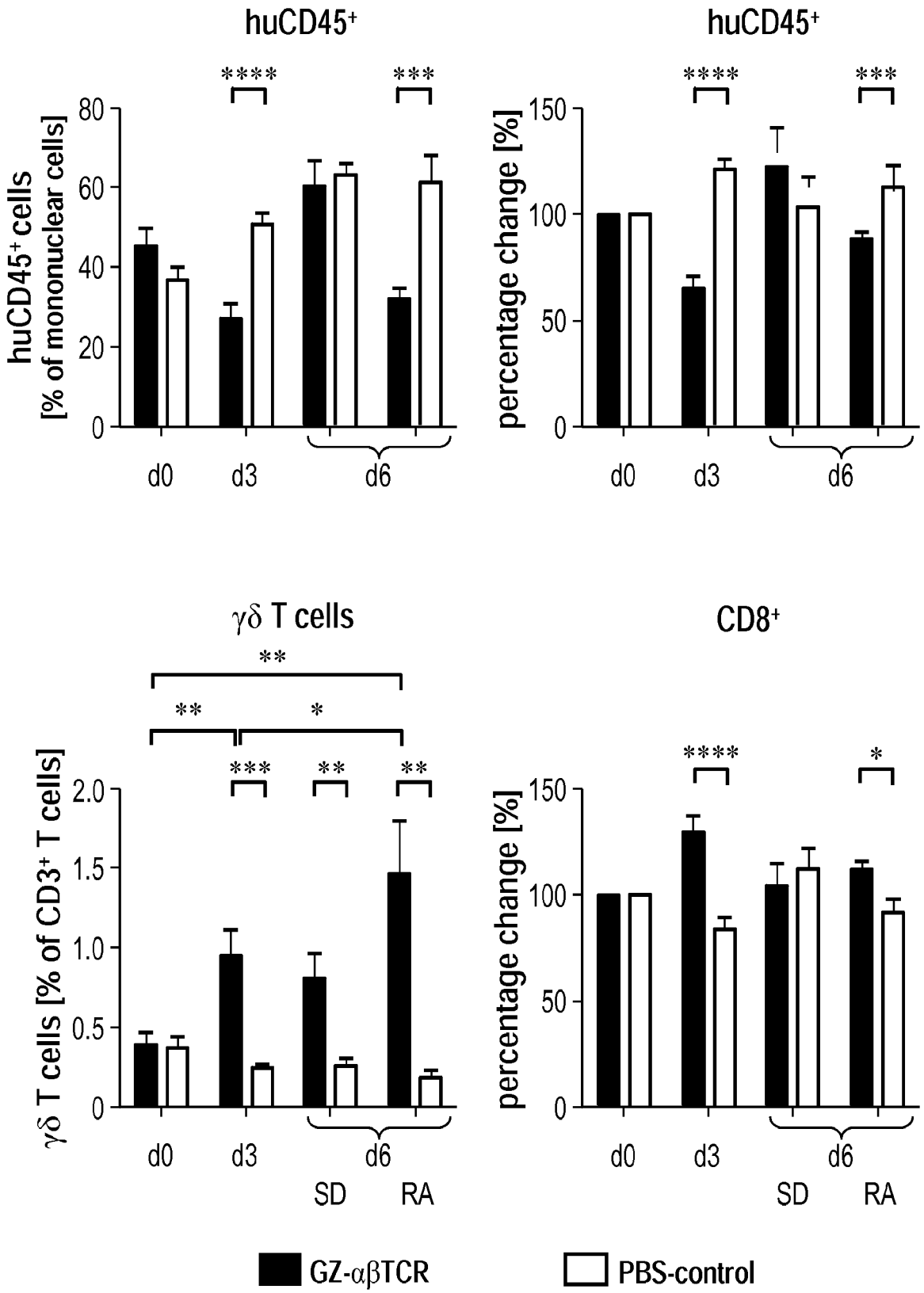

huCD45+
huCD45+ cells [% of mononuclear cells]
****
***
80
60
40
20
0
d0
d3
d6
huCD45+
percentage change [%]
****
***
150
100
50
0
d0
d3
d6
γδ T cells
γδ T cells [% of CD3+ T cells]
**
**
*
***
**
**
2.0
1.5
1.0
0.5
0
d0
d3
d6
SD
RA
CD8+
percentage change [%]
****
*
150
100
50
0
d0
d3
d6
SD
RA
GZ-αβTCR
PBS-control

*Fig. 3B*

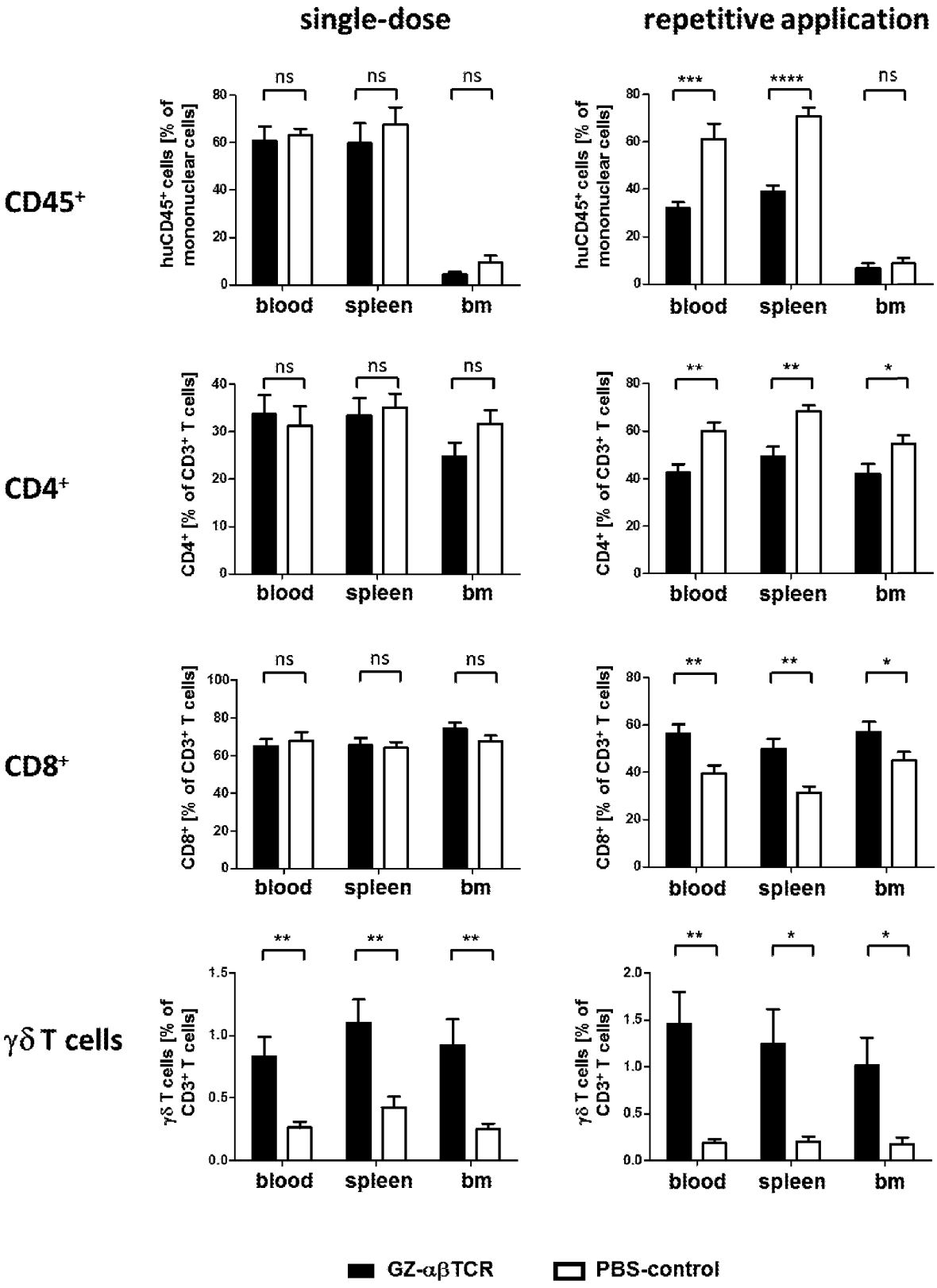

single-dose
repetitive application
CD45+
CD4+
CD8+
γδ T cells
huCD45+ cells [% of mononuclear cells]
CD4+ [% of CD3+ T cells]
CD8+ [% of CD3+ T cells]
γδ T cells [% of CD3+ T cells]
ns
***
****
**
*
blood
spleen
bm
GZ-αβTCR
PBS-control

Figure 4

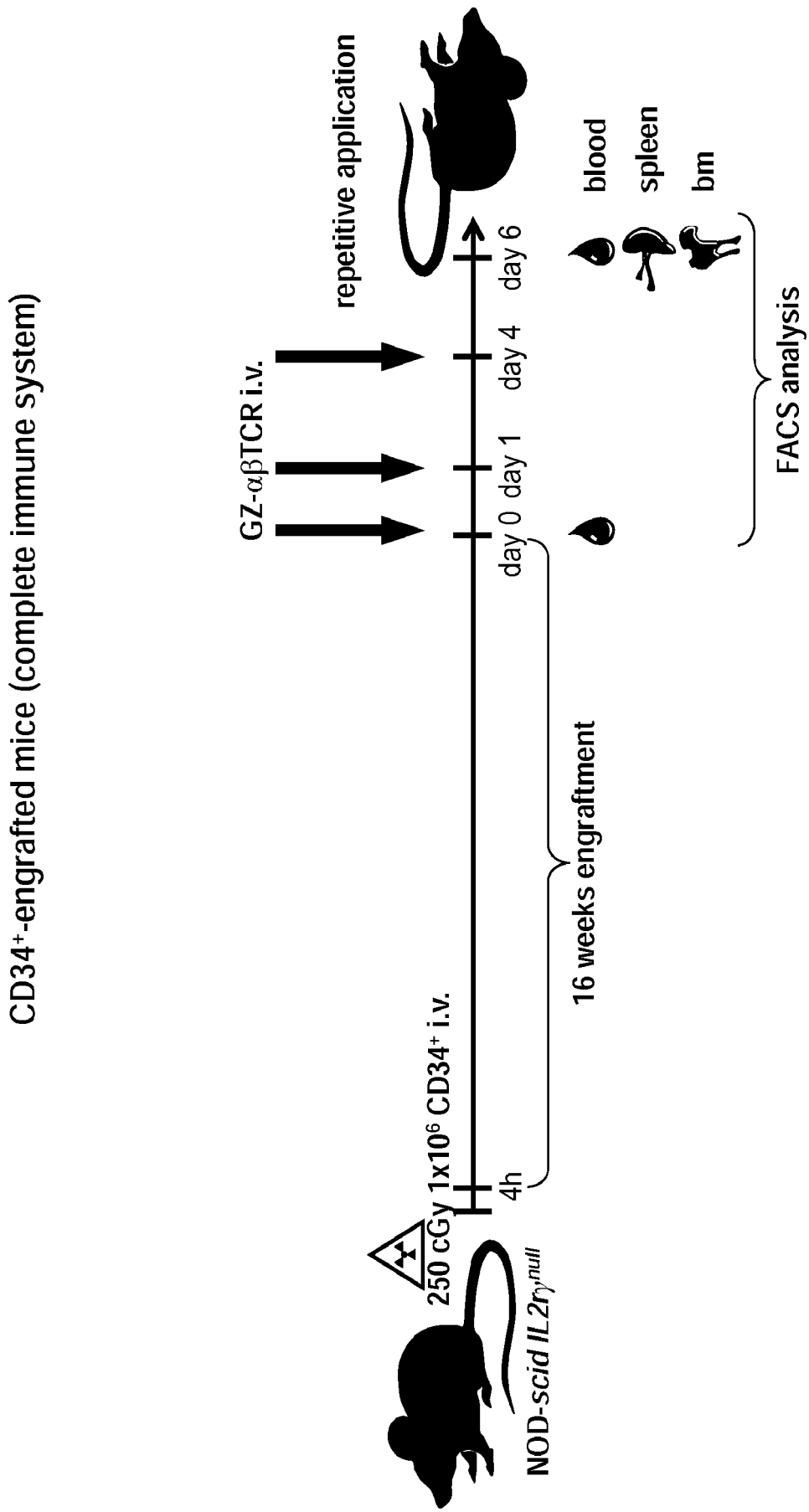

CD34+-engrafted mice (complete immune system)
NOD-scid IL2rγnull
250 cGy
1x10^6 CD34+ i.v.
4h
16 weeks engraftment
day 0
GZ-αβTCR i.v.
day 1
day 4
repetitive application
day 6
blood
spleen
bm
FACS analysis

Fig. 5A

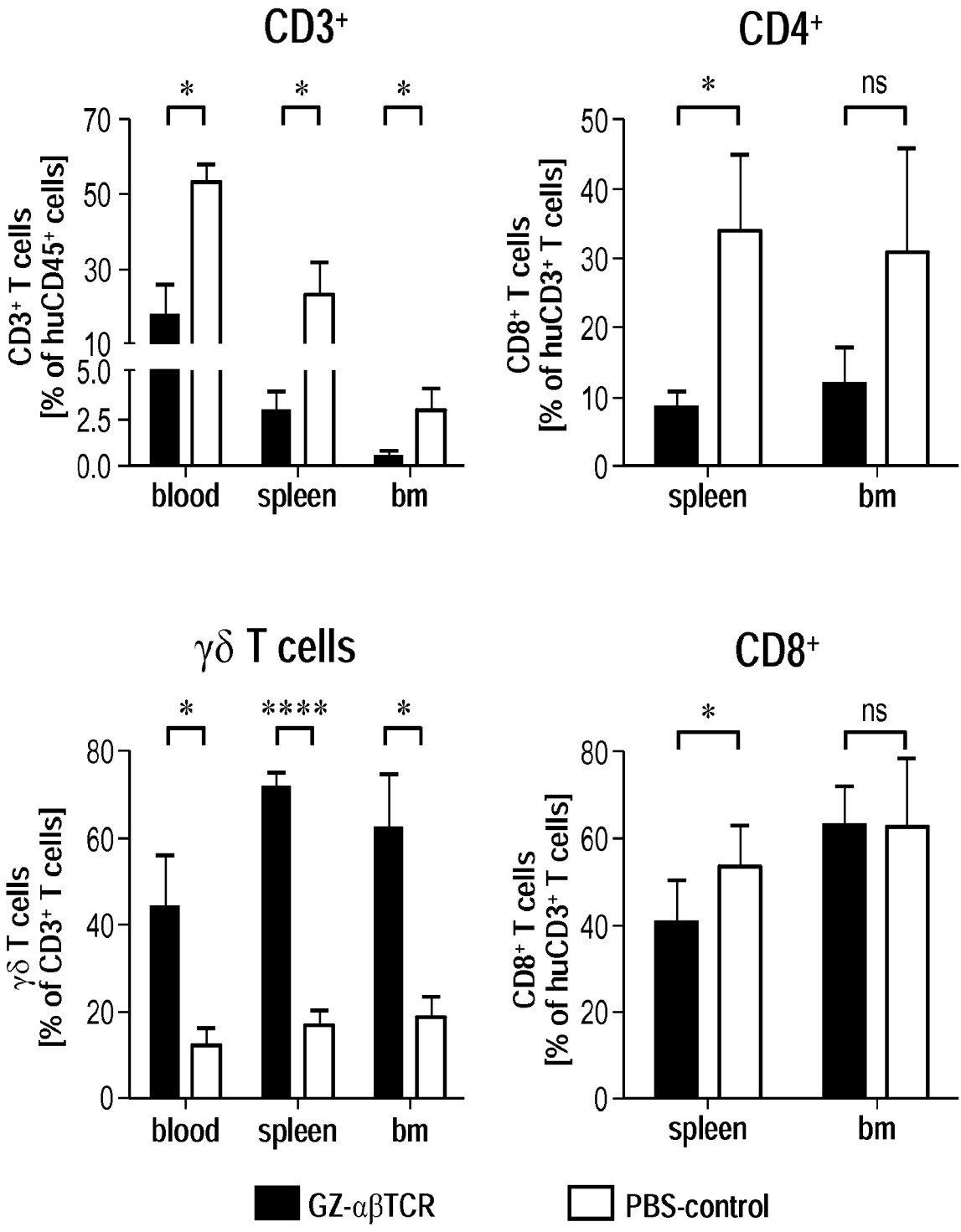

CD3+
CD3+ T cells [% of huCD45+ cells]
70
50
30
10
5.0
2.5
0.0
*
*
*
blood
spleen
bm
CD4+
CD8+ T cells [% of huCD3+ T cells]
50
40
30
20
10
0
*
ns
spleen
bm
γδ T cells
γδ T cells [% of CD3+ T cells]
80
60
40
20
0
*
****
*
blood
spleen
bm
CD8+
CD8+ T cells [% of huCD3+ T cells]
80
60
40
20
0
*
ns
spleen
bm
GZ-αβTCR
PBS-control

*Fig. 5B*