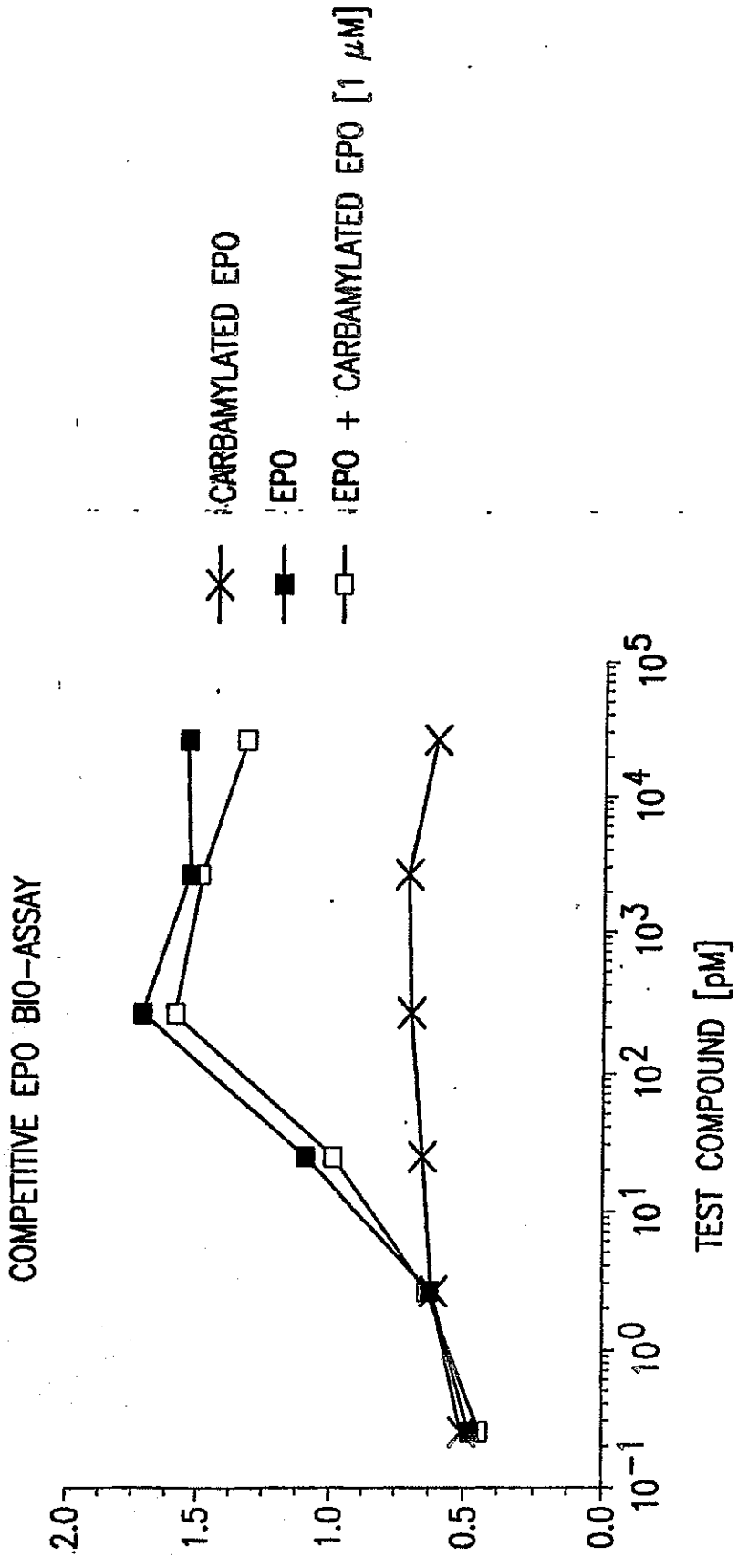
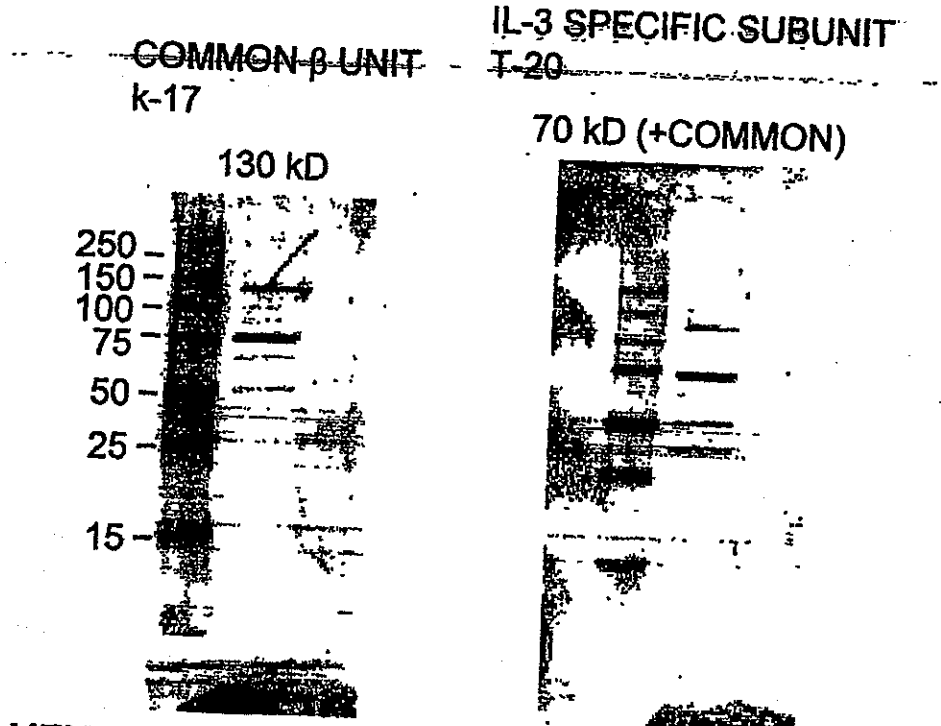

COMPETITIVE EPO BIO-ASSAY
CARBAMYLATED EPO
EPO
EPO + CARBAMYLATED EPO [1 μM]
WST1 (PROLIFERATION)
TEST COMPOUND [pM]
2.0
1.5
1.0
0.5
0.0
10^-1
10^0
10^1
10^2
10^3
10^4
10^5

FIG.1



MEMBRANES PREPARED FROM NORMAL RAT BRAIN

FIG.2

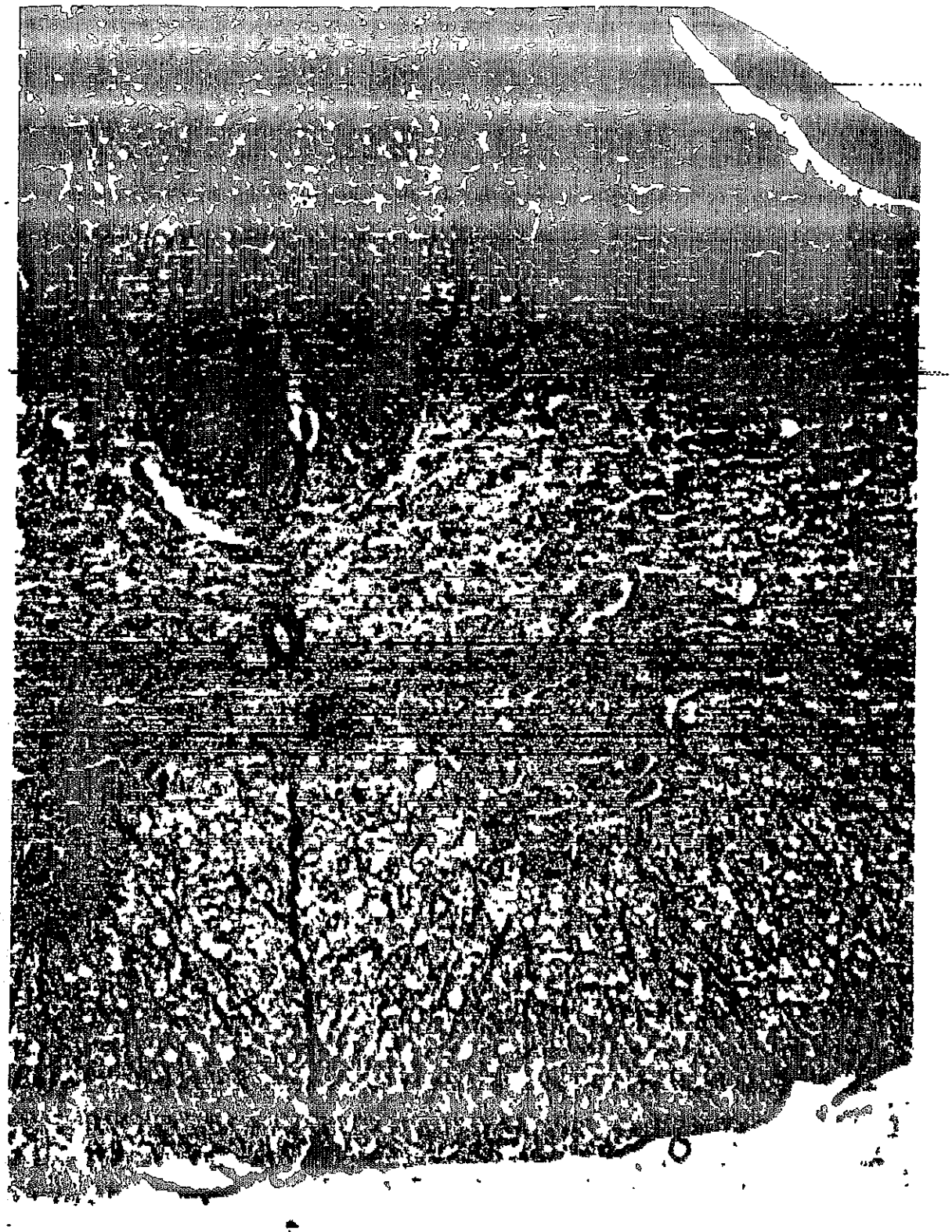


FIG.3

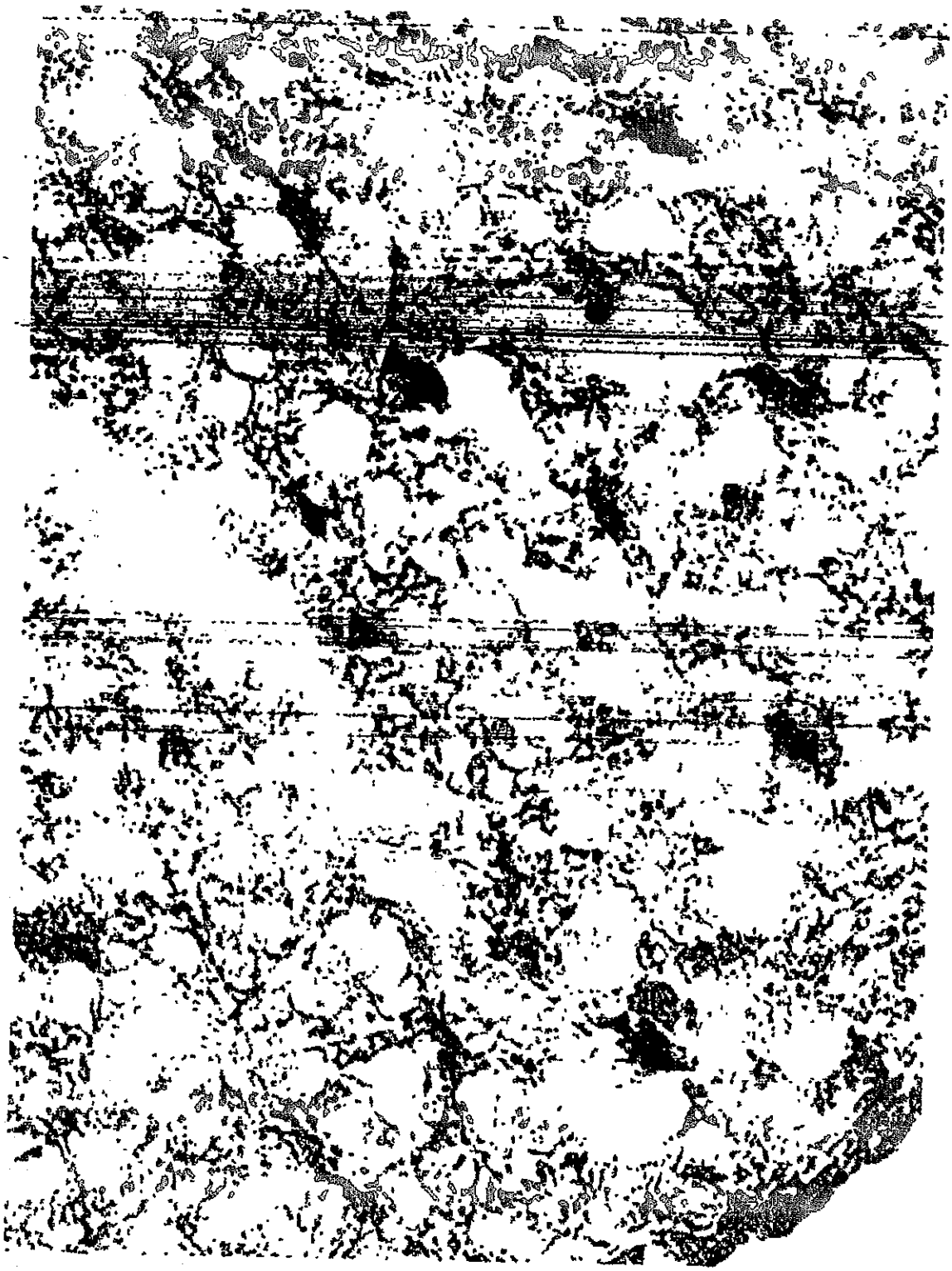


FIG 4

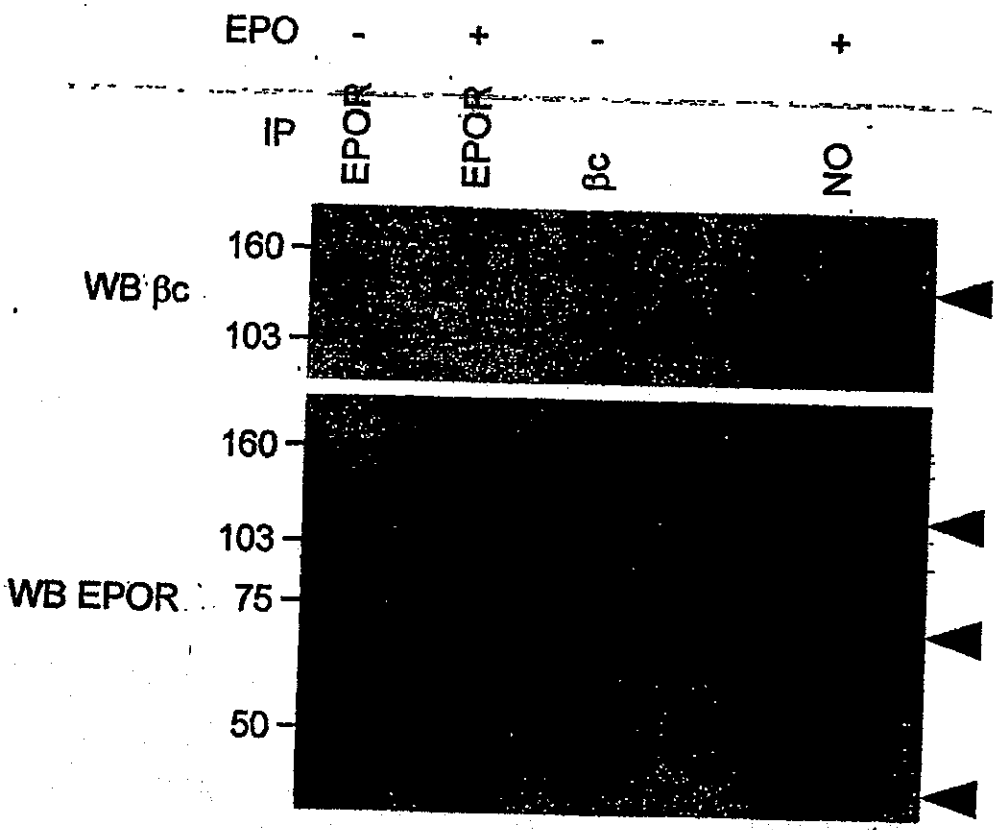


FIG.5

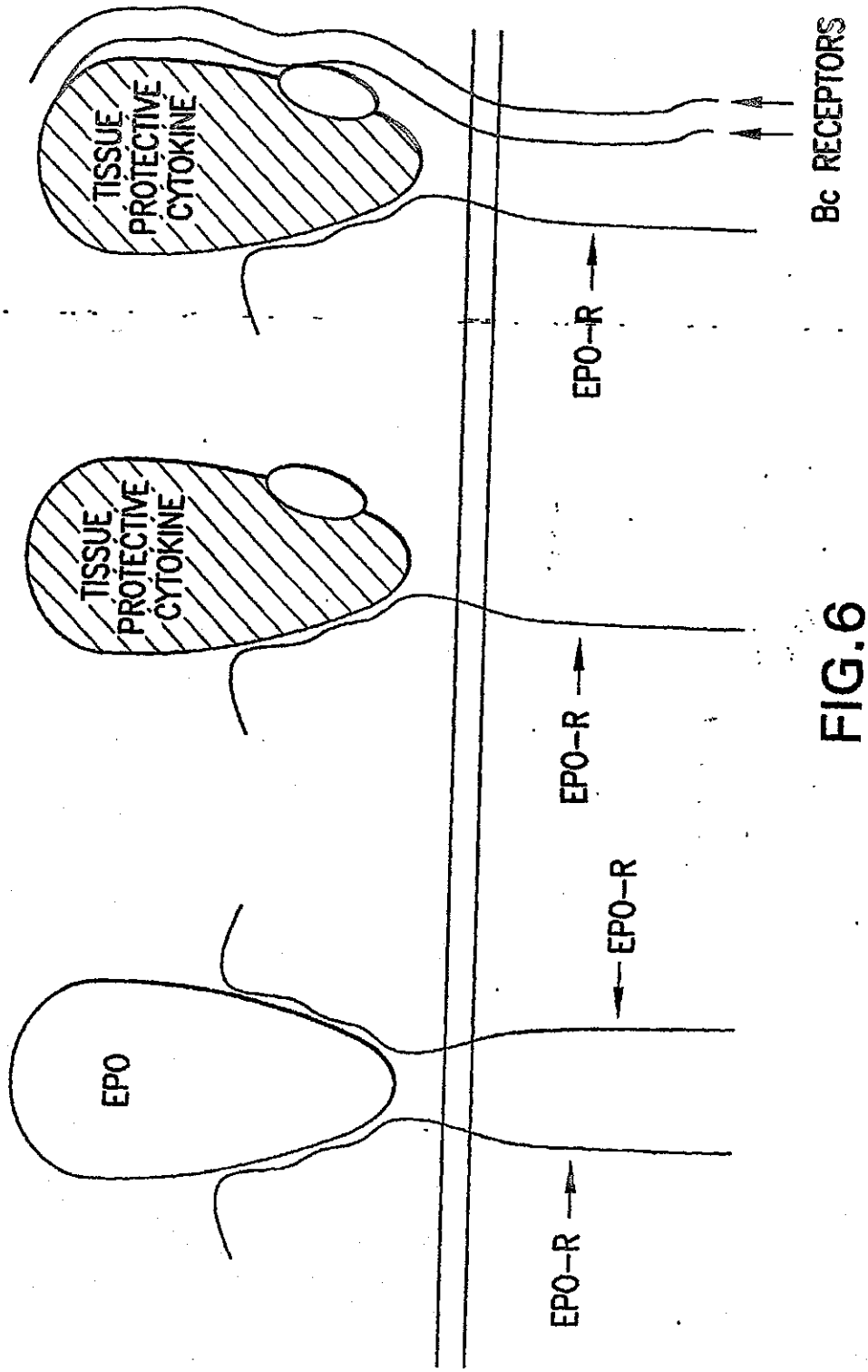

TISSUE PROTECTIVE CYTOKINE
TISSUE PROTECTIVE CYTOKINE
EPO
EPO-R
EPO-R
EPO-R
EPO-R
Bc RECEPTORS

FIG.6

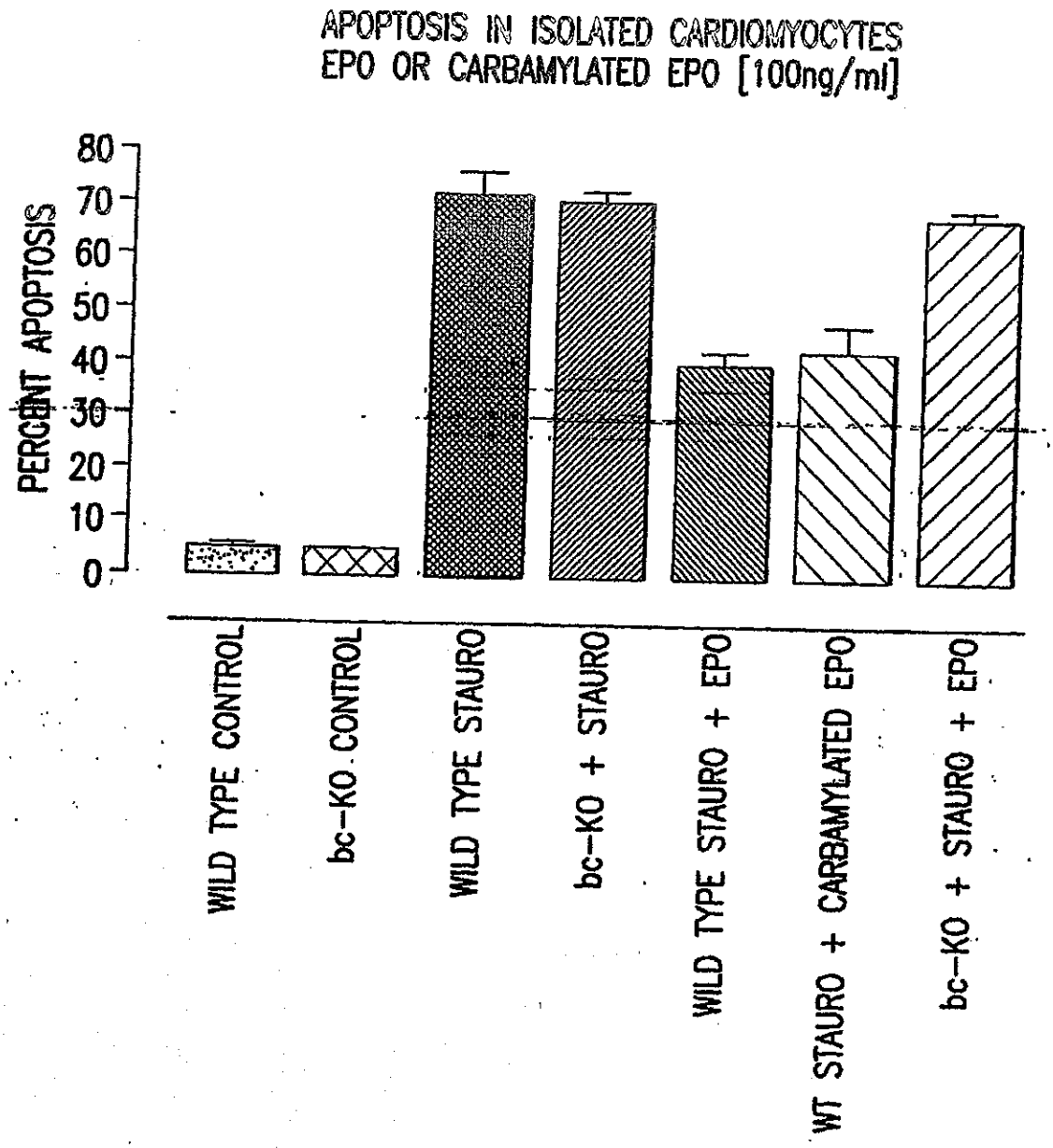

APOPTOSIS IN ISOLATED CARDIOMYOCYTES
EPO OR CARBAMYLATED EPO [100ng/ml]
PERCENT APOPTOSIS
80
70
60
50
40
30
20
10
0
WILD TYPE CONTROL
bc-KO CONTROL
WILD TYPE STAURO
bc-KO + STAURO
WILD TYPE STAURO + EPO
WT STAURO + CARBAMYLATED EPO
bc-KO + STAURO + EPO

FIG.7

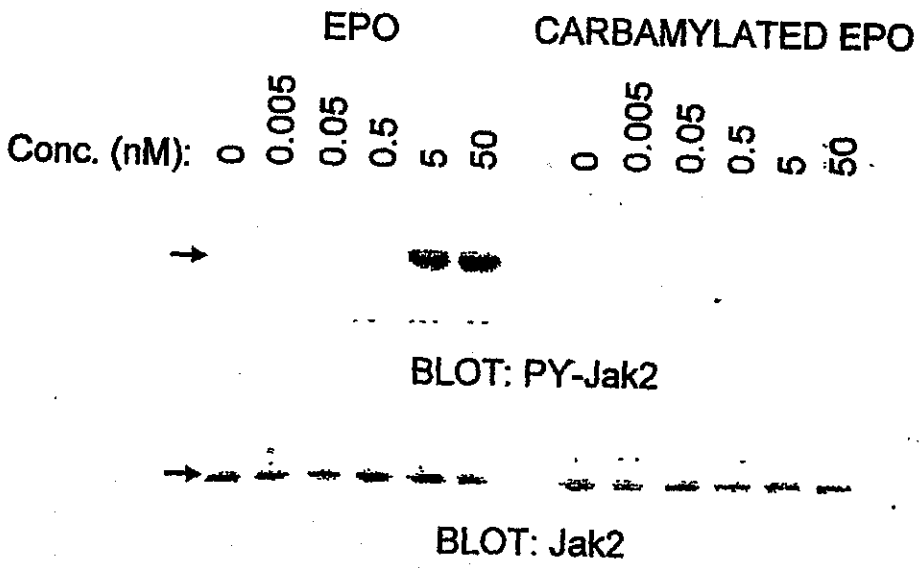

EPO
CARBAMYLATED EPO
Conc. (nM):
0
0.005
0.05
0.5
5
50
0
0.005
0.05
0.5
5
50
BLOT: PY-Jak2
BLOT: Jak2

FIG.8

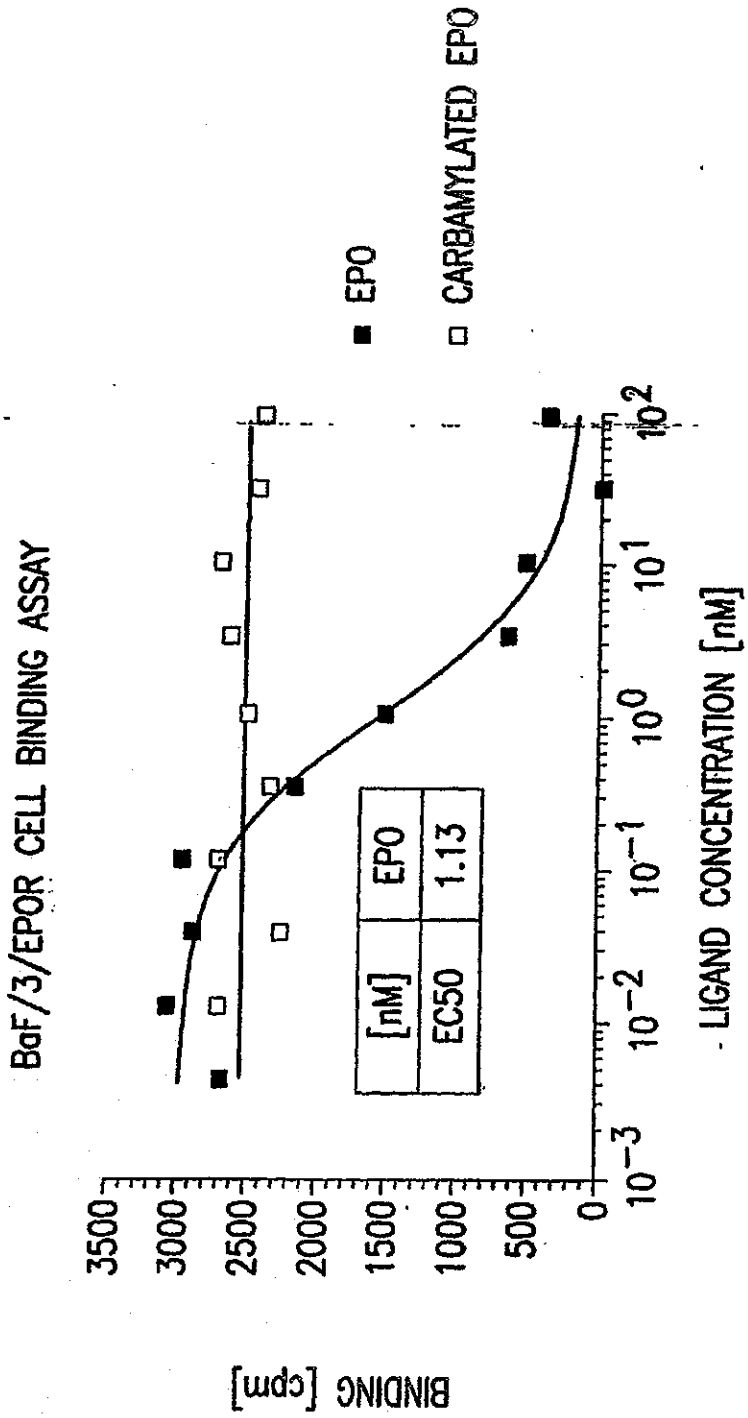

BaF/3/EPOR CELL BINDING ASSAY
EPO
CARBAMYLATED EPO
[nM] EPO
EC50 1.13
BINDING [cpm]
LIGAND CONCENTRATION [nM]
3500
3000
2500
2000
1500
1000
500
0
10^{-3}
10^{-2}
10^{-1}
10^{0}
10^{1}
10^{2}

FIG.9

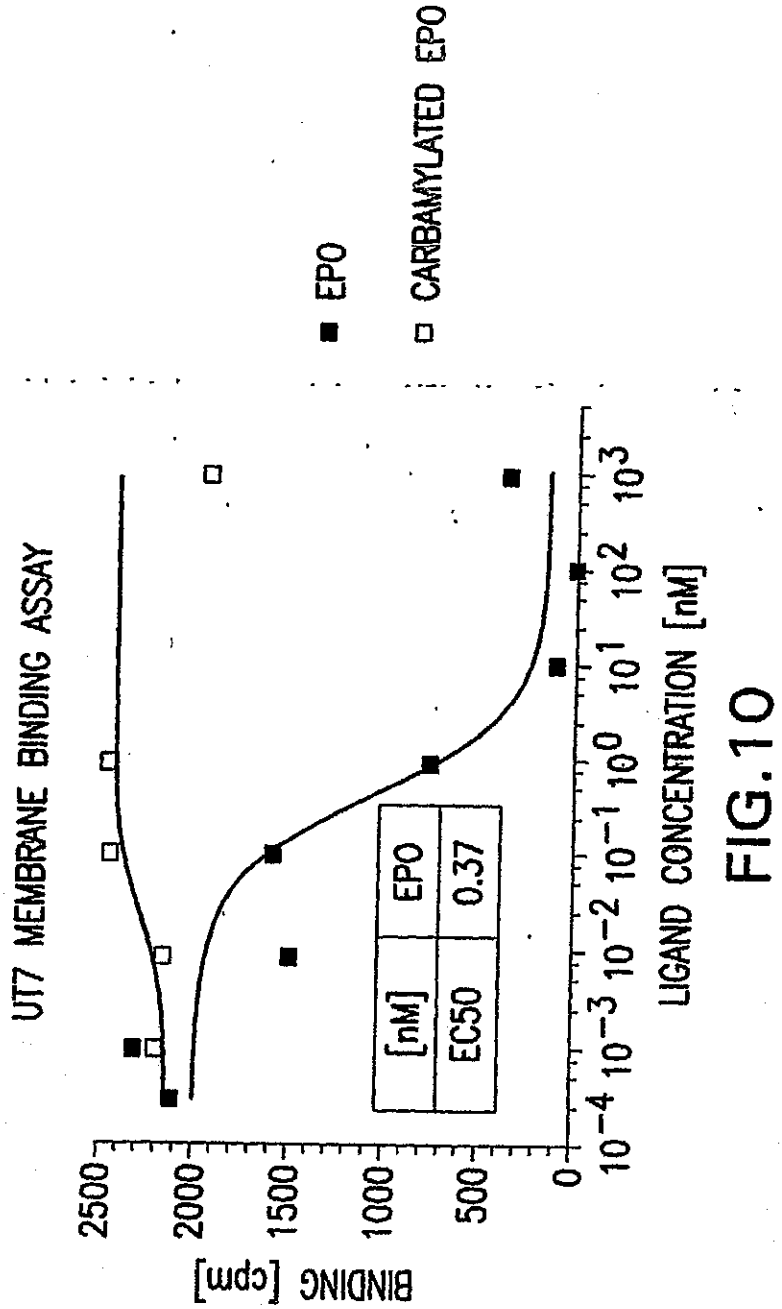
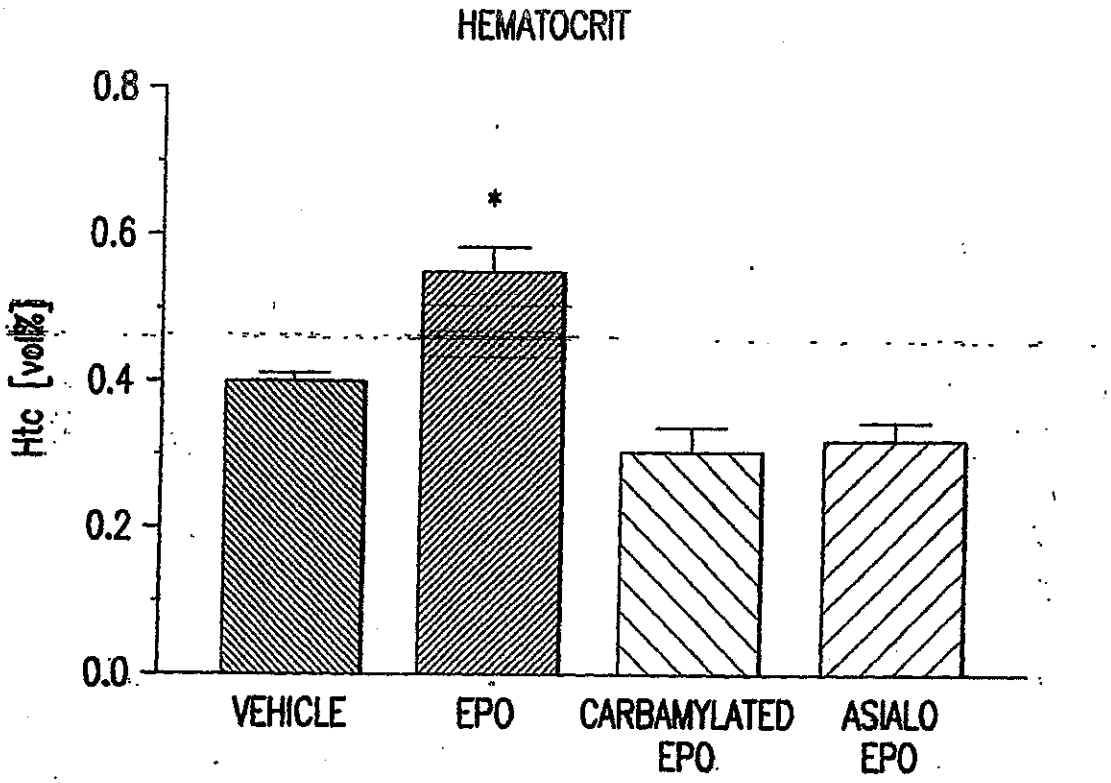
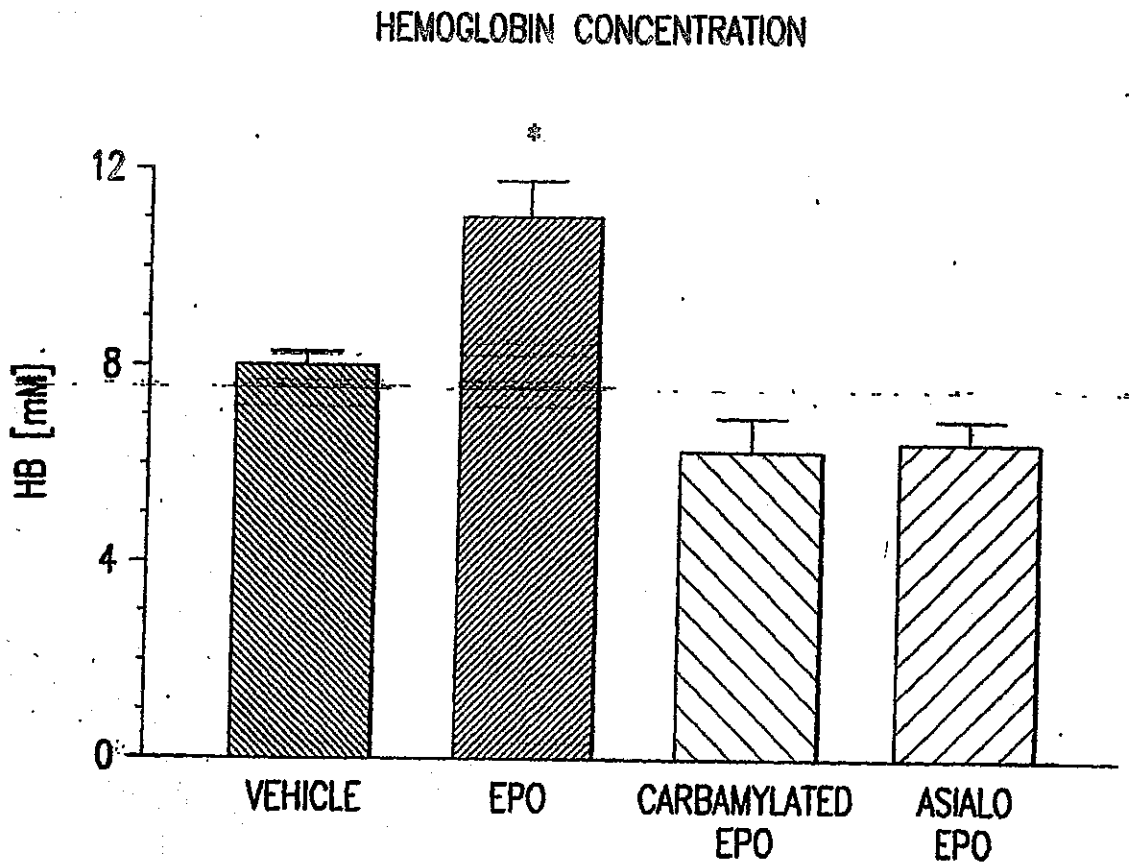

EPO
CARBAMYLATED EPO
UT7 MEMBRANE BINDING ASSAY
BINDING [cpm]
2500
2000
1500
1000
500
0
10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3}
LIGAND CONCENTRATION [nM]
[nM]
EC50
EPO
0.37

FIG.10


HEMATOCRIT
0.8
0.6
0.4
0.2
0.0
Htc [vol%]
*
VEHICLE
EPO
CARBAMYLATED EPO
ASIALO EPO

* p= 0.05

FIG.11A


HEMOGLOBIN CONCENTRATION
HB [mM]
12
8
4
0
*
VEHICLE
EPO
CARBAMYLATED EPO
ASIALO EPO

* p= 0.05

FIG.11B

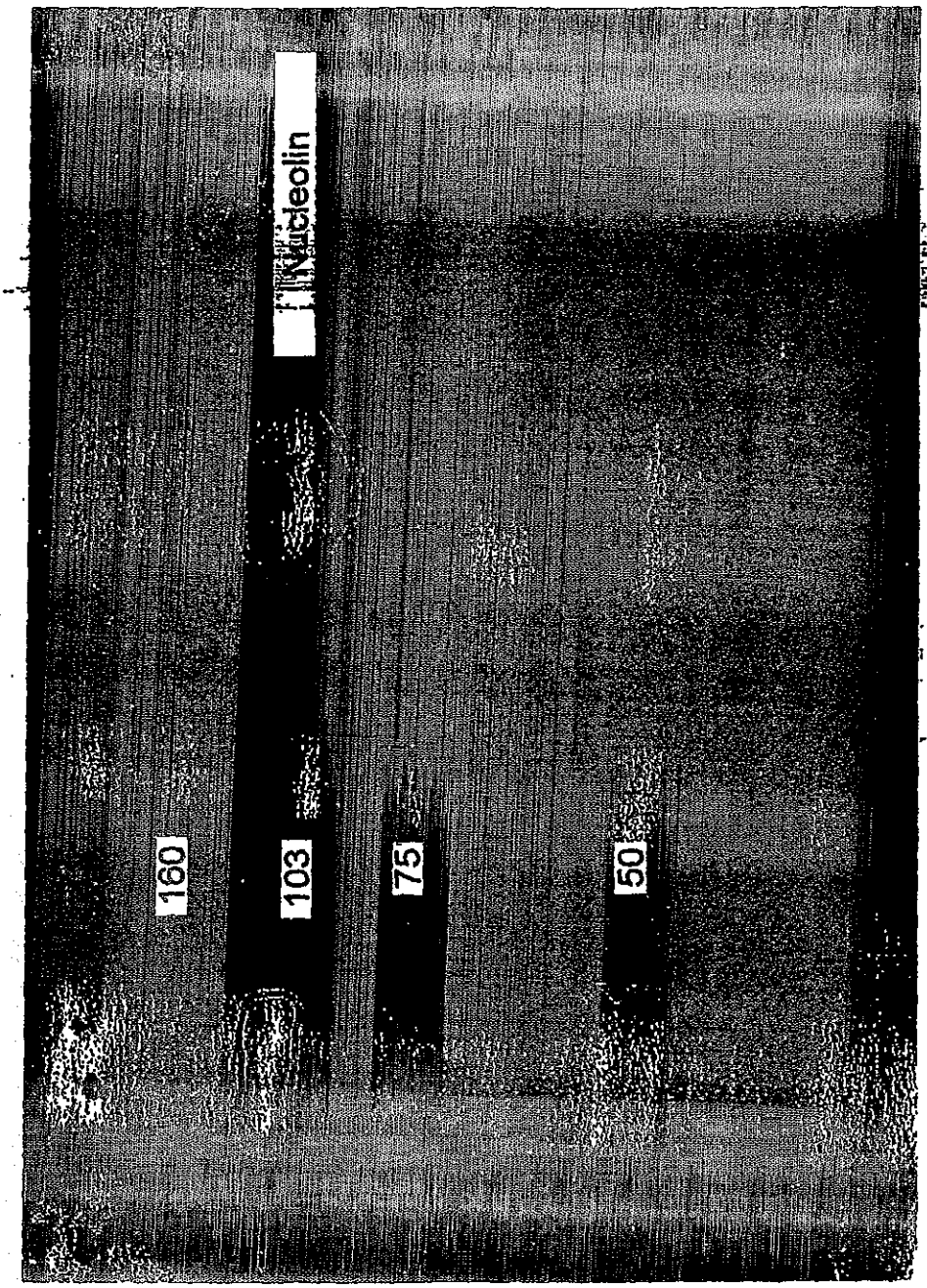


FIG.12

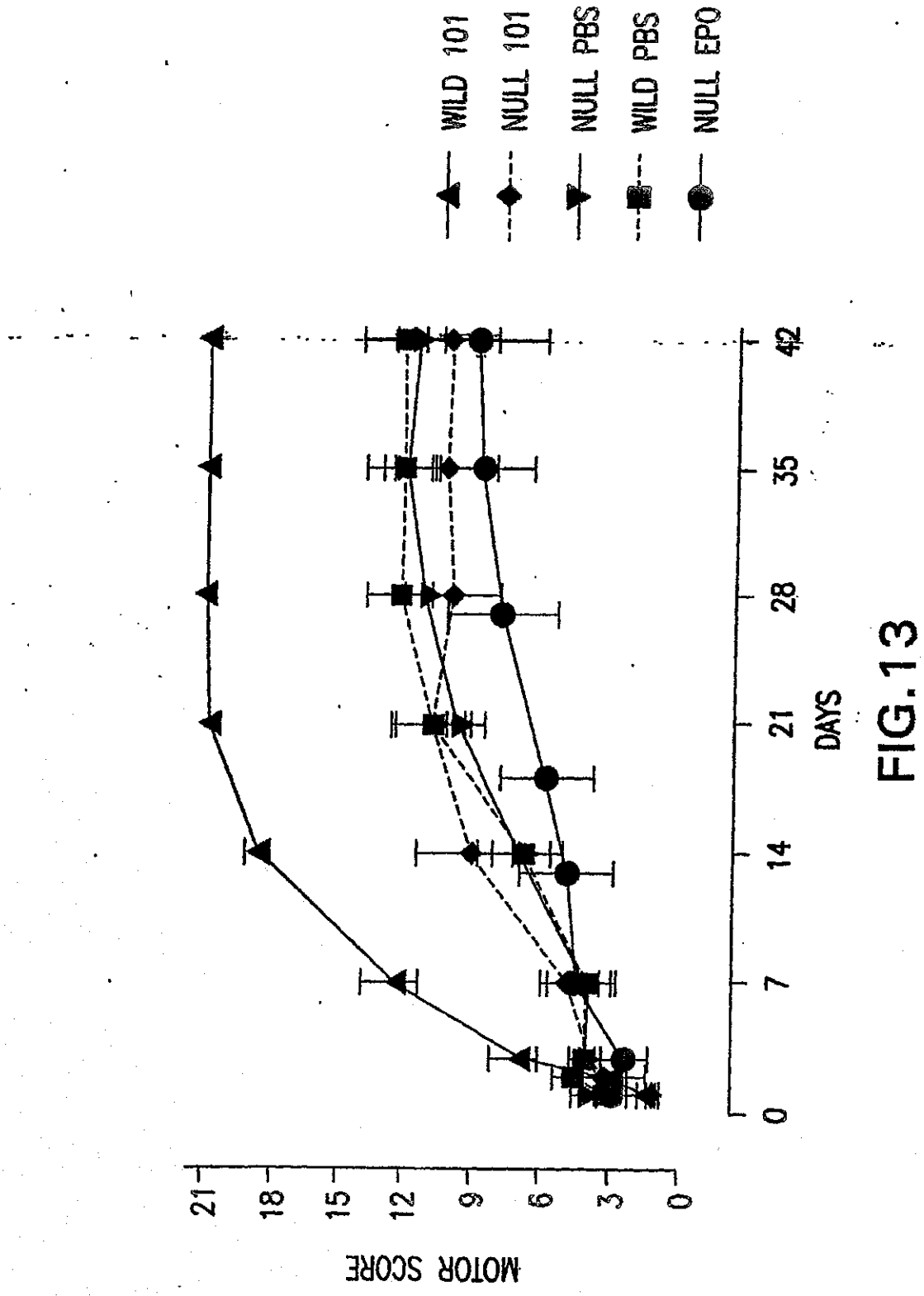

WILD 101
NULL 101
NULL PBS
WILD PBS
NULL EPO
MOTOR SCORE
0
3
6
9
12
15
18
21
DAYS
0
7
14
21
28
35
42

FIG.13

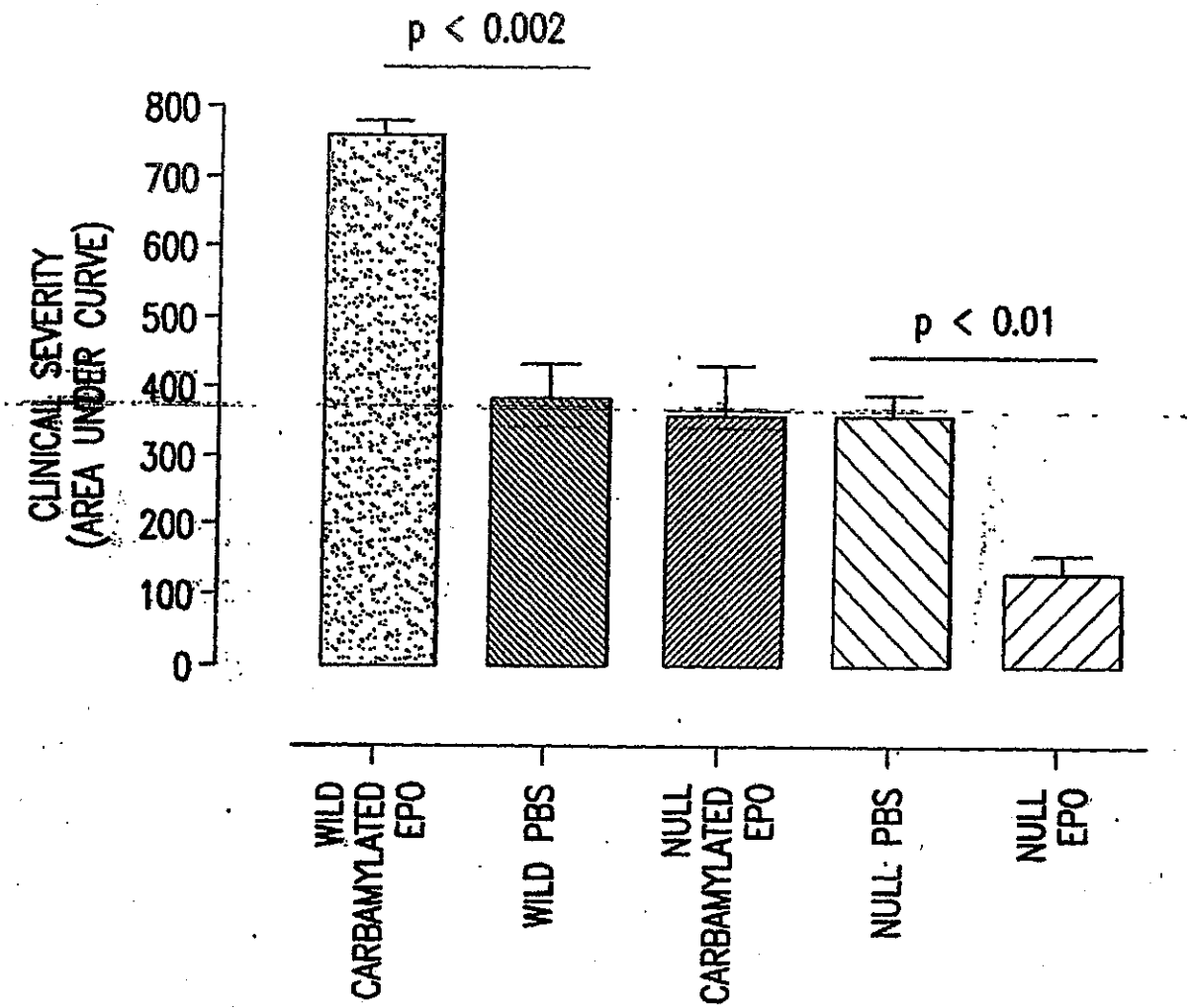

p < 0.002
p < 0.01
CLINICAL SEVERITY (AREA UNDER CURVE)
800
700
600
500
400
300
200
100
0
WILD CARBAMYLATED EPO
WILD PBS
NULL CARBAMYLATED EPO
NULL PBS
NULL EPO

FIG. 14