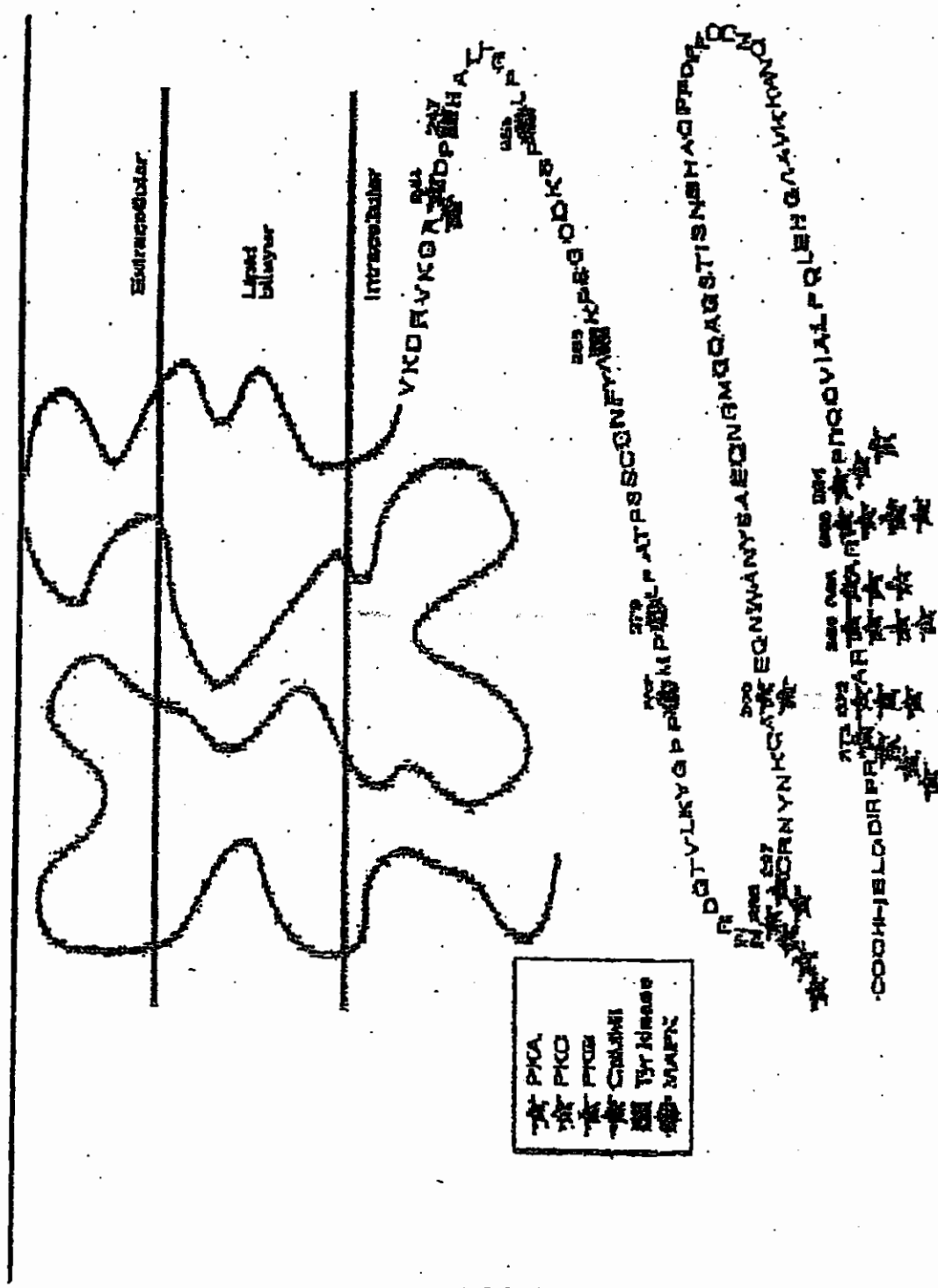

Extracellular
Lipid bilayer
Intracellular
PKA
PKC
PKG
CaMKII
Tyr kinase
MAPK

Figure 1

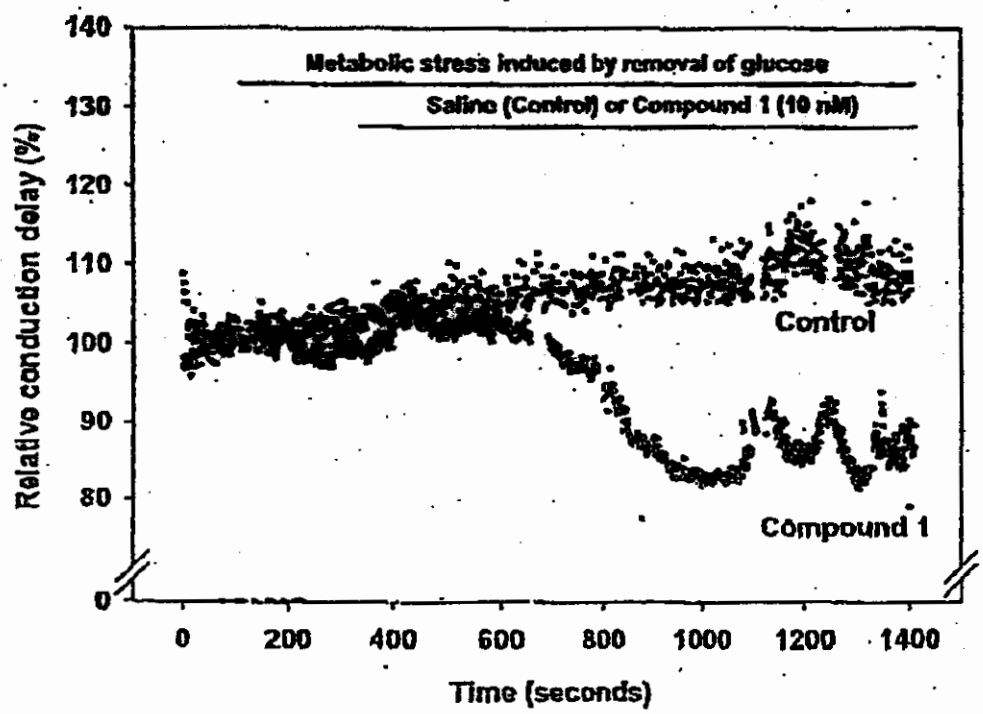

Metabolic stress induced by removal of glucose
Saline (Control) or Compound 1 (10 nM)
Control
Compound 1
Relative conduction delay (%)
Time (seconds)
140
130
120
110
100
90
80
0
0
200
400
600
800
1000
1200
1400

Figure 2

Figure 3A

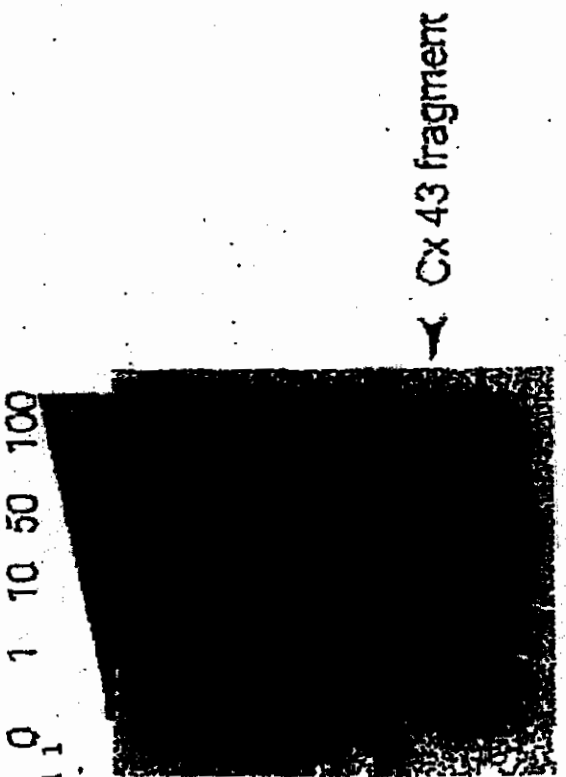
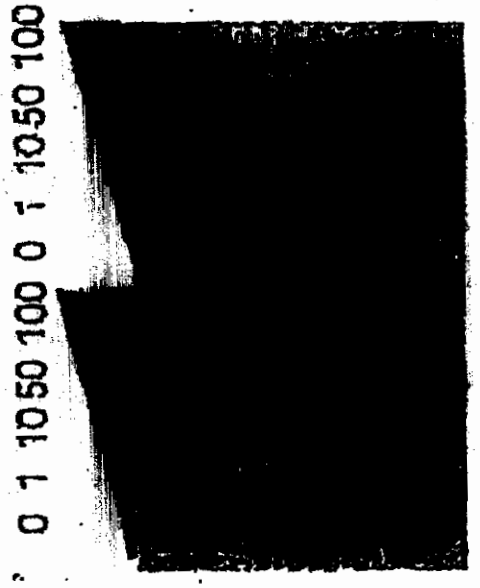


Figure 3B



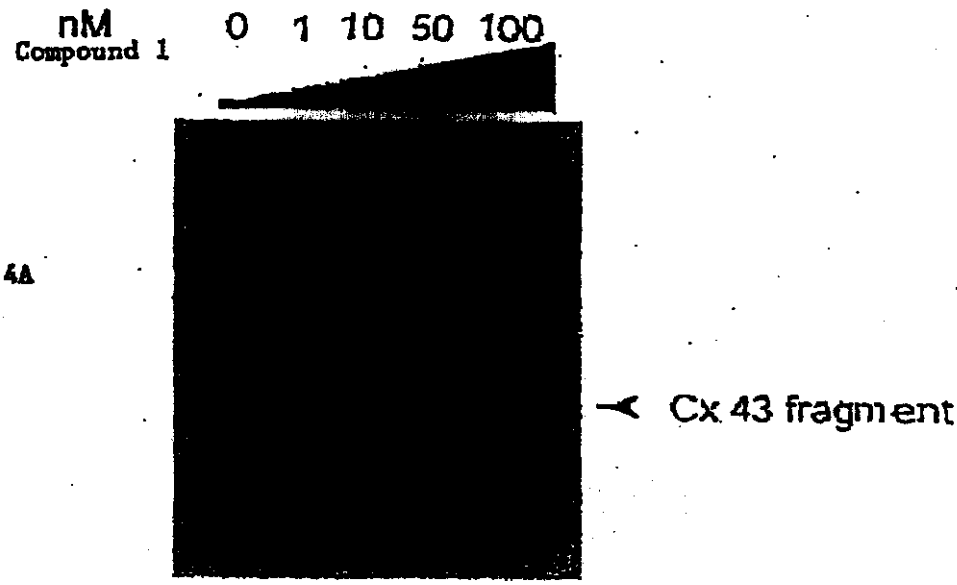


Figure 4A

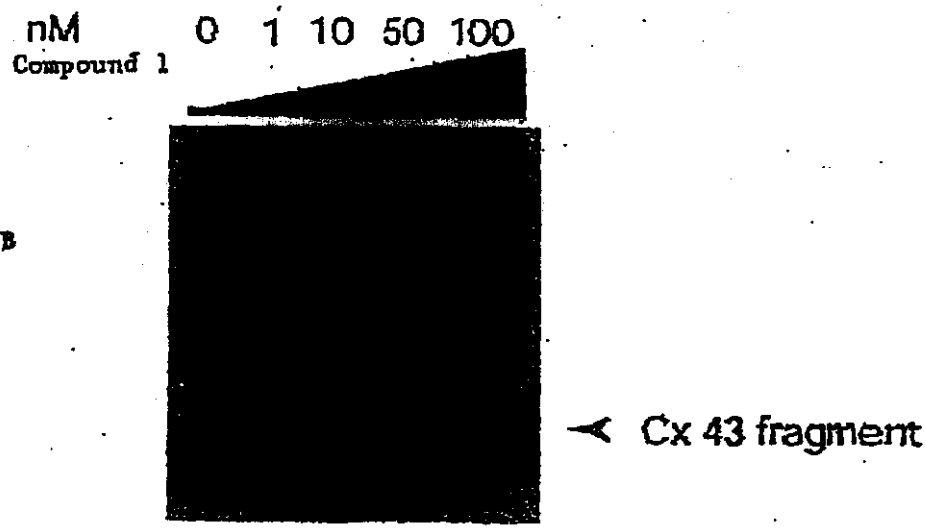


Figure 4B

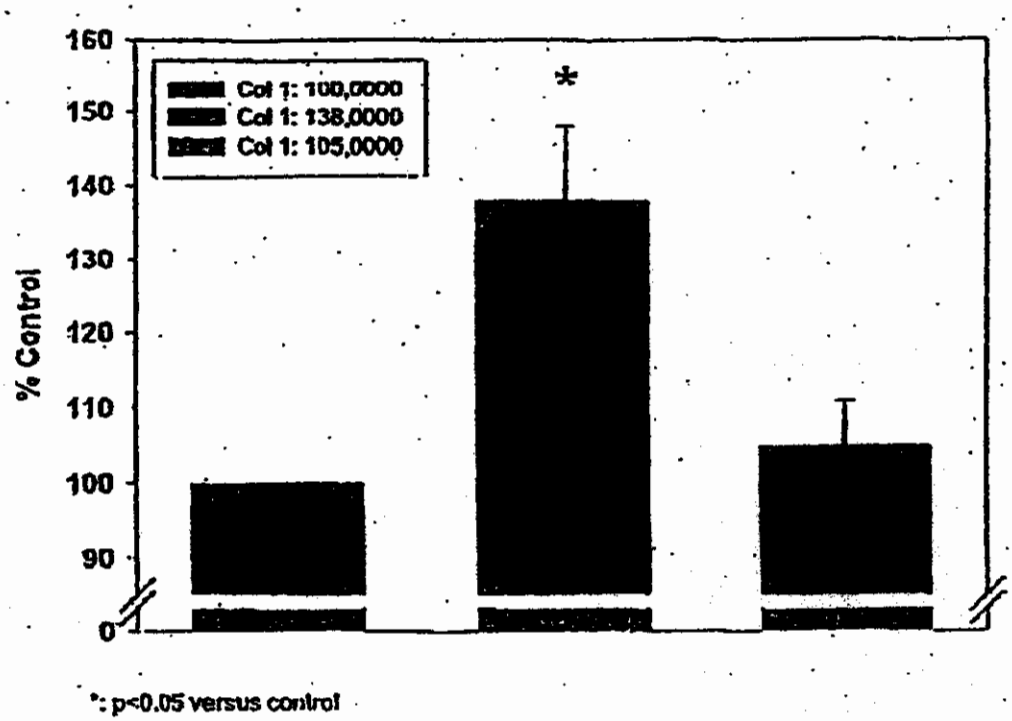

160
150
140
130
120
110
100
90
0
% Control
Col 1: 100,0000
Col 1: 138,0000
Col 1: 105,0000
*
*: p<0.05 versus control

Figure 5

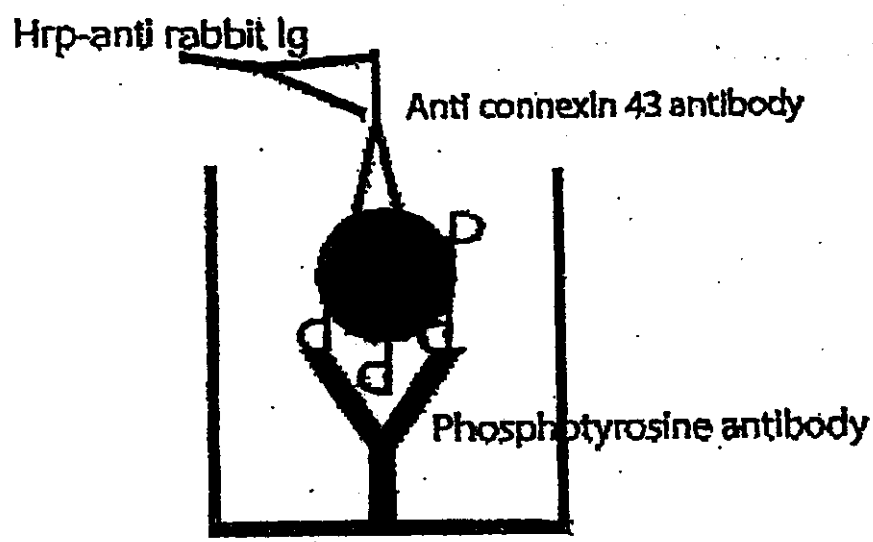

Hrp-anti rabbit Ig
Anti connexin 43 antibody
Phosphotyrosine antibody

Figure 6A

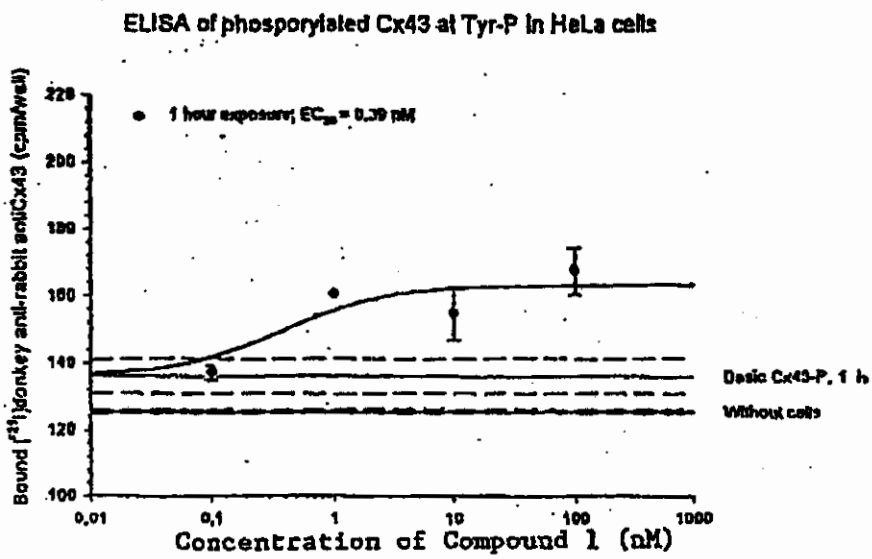


Figure 6B

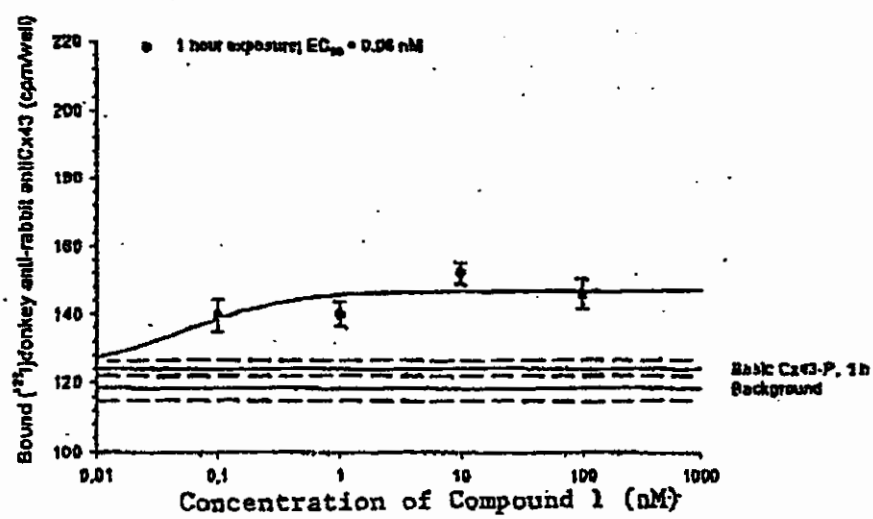


Figure 6C



Fig. 7A Fig. 7B Fig. 7C

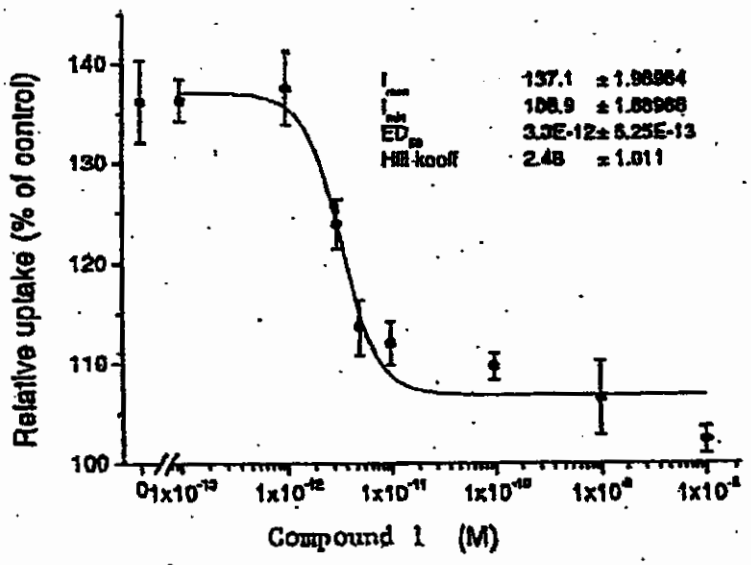

Relative uptake (% of control)
140
130
120
110
100
0
1x10⁻¹³
1x10⁻¹²
1x10⁻¹¹
1x10⁻¹⁰
1x10⁻⁹
1x10⁻⁸
Compound 1 (M)
137.1 ± 1.96864
3.3E-12± 5.25E-13
2.48 ± 1.011

Fig. 8

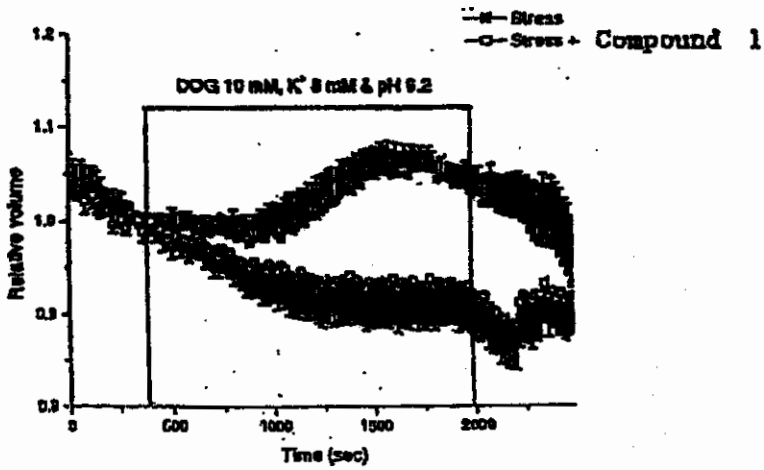

Stress
Stress + Compound 1
DOG 10 mM, K+ 8 mM & pH 8.2
Relative volume
Time (sec)

Fig. 9A

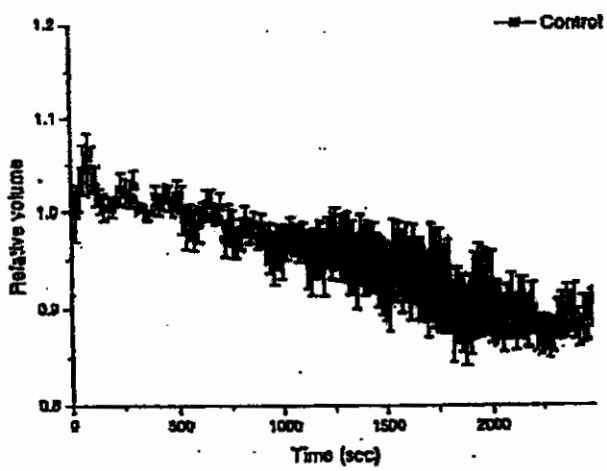

Control
Relative volume
Time (sec)

Fig. 9B

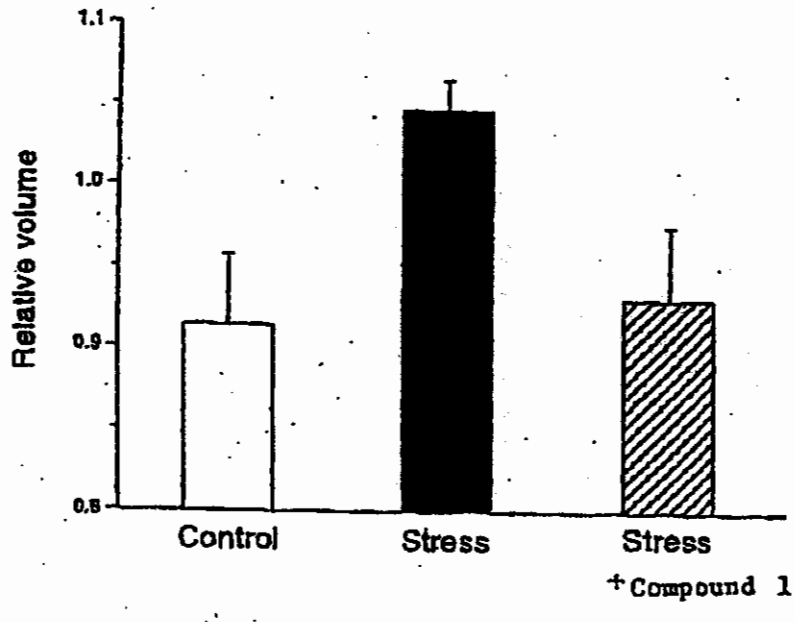

Relative volume
1.1
1.0
0.9
0.8
Control
Stress
Stress
+Compound 1

Fig. 10

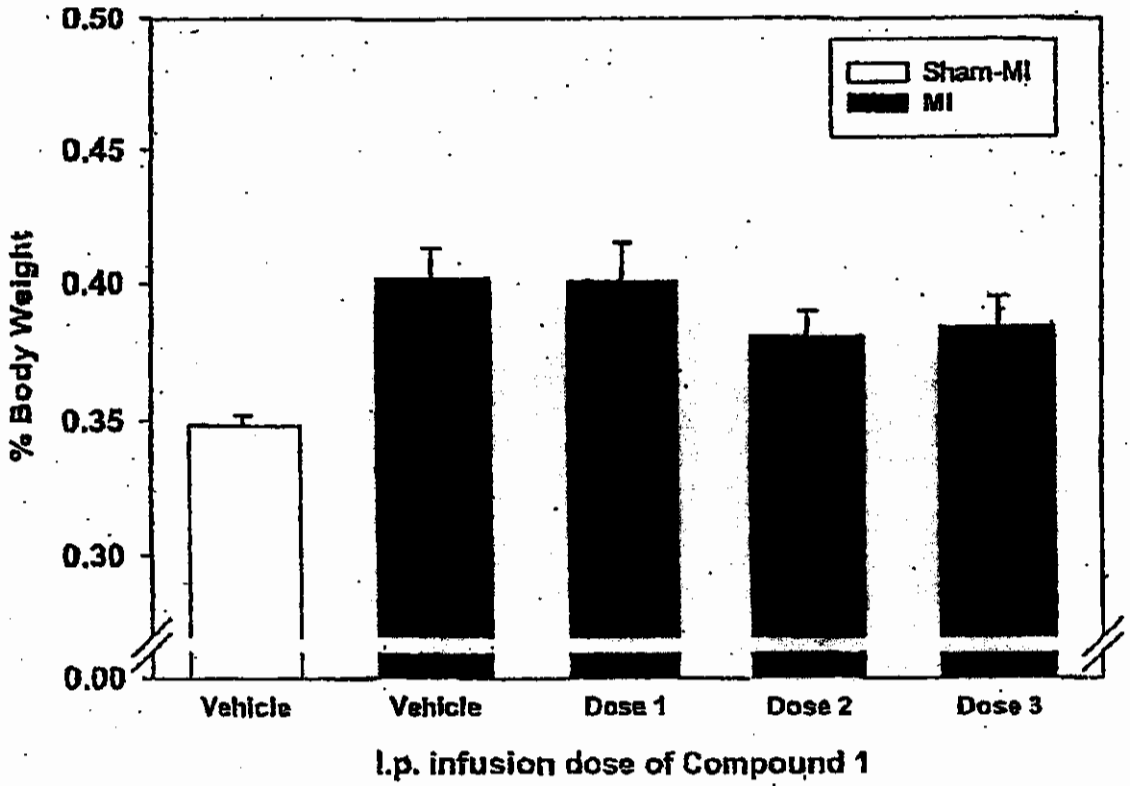
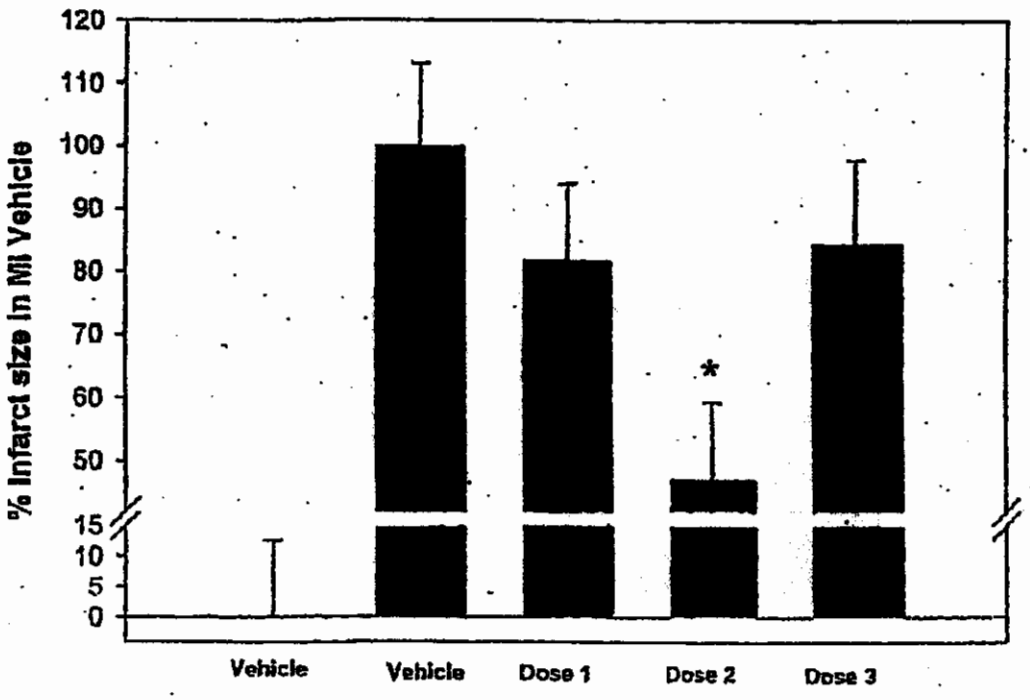

0.50
0.45
0.40
0.35
0.30
0.00
% Body Weight
Sham-MI
MI
Vehicle
Vehicle
Dose 1
Dose 2
Dose 3
I.p. infusion dose of Compound 1

Fig. 11



*: p<0.05 *versus* MI Vehicle

Fig. 12

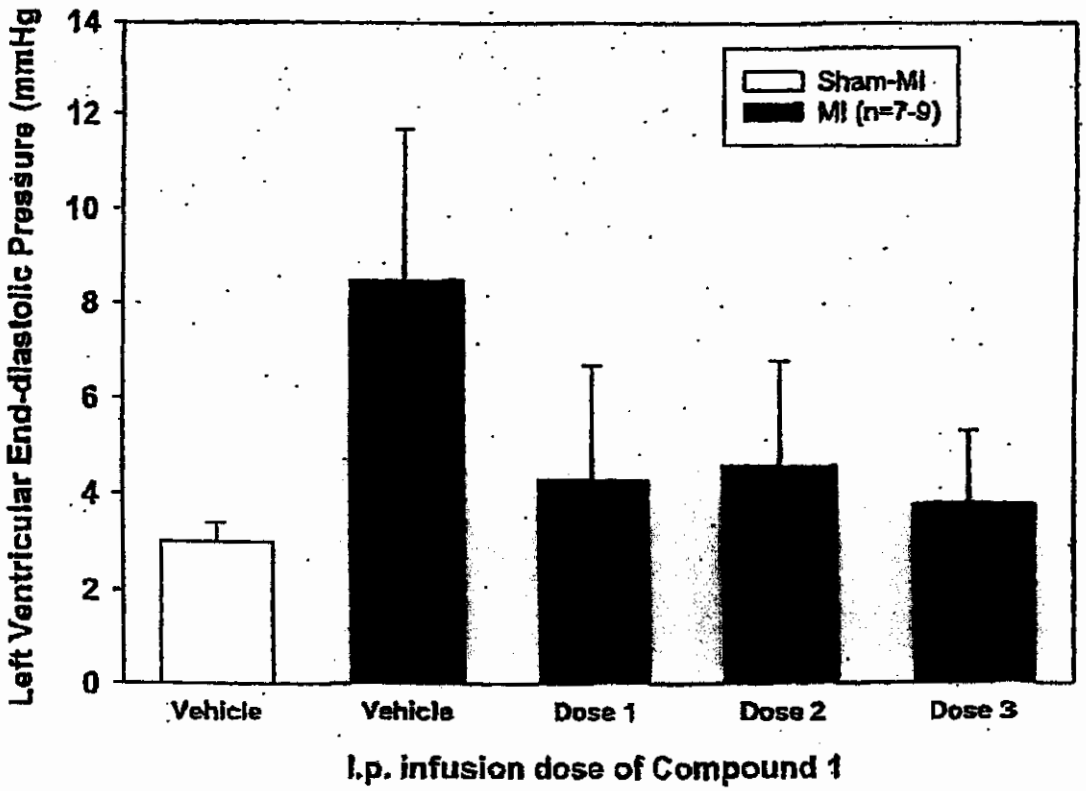

Left Ventricular End-diastolic Pressure (mmHg
14
12
10
8
6
4
2
0
Sham-MI
MI (n=7-9)
Vehicle
Vehicle
Dose 1
Dose 2
Dose 3
I.p. infusion dose of Compound 1

Fig. 13