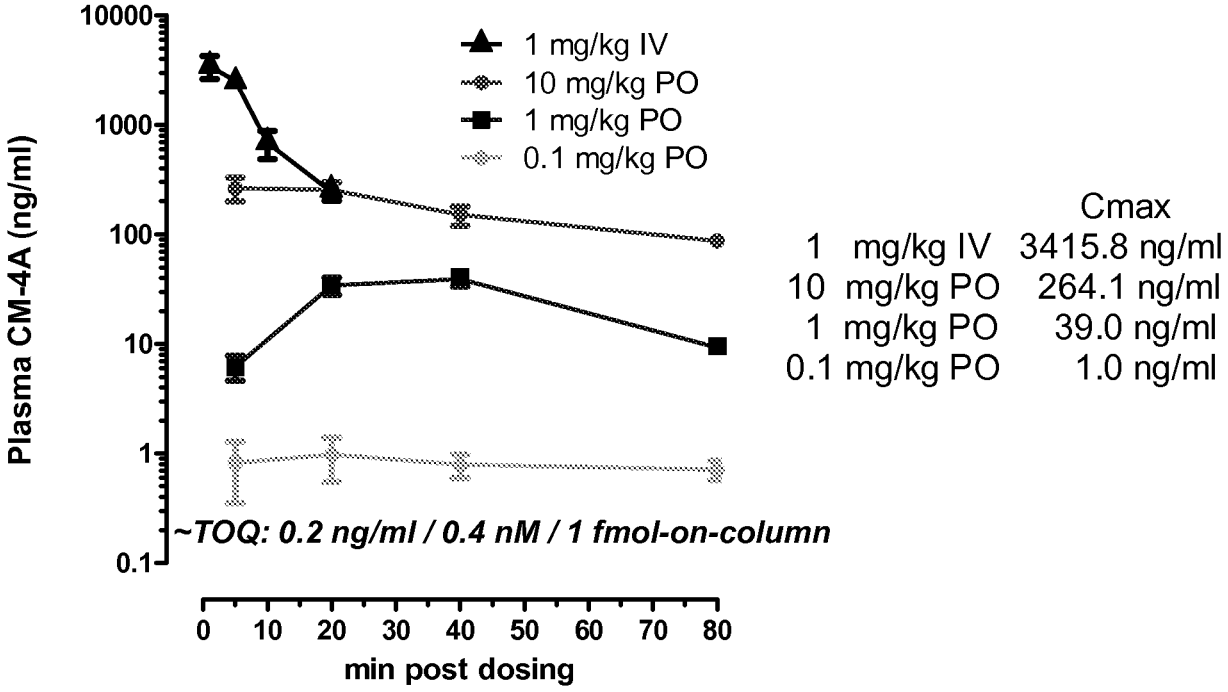

Plasma CM-4A (ng/ml)
10000
1000
100
10
1
0.1
1 mg/kg IV
10 mg/kg PO
1 mg/kg PO
0.1 mg/kg PO
~TOQ: 0.2 ng/ml / 0.4 nM / 1 fmol-on-column
0 10 20 30 40 50 60 70 80
min post dosing
Cmax
1 mg/kg IV 3415.8 ng/ml
10 mg/kg PO 264.1 ng/ml
1 mg/kg PO 39.0 ng/ml
0.1 mg/kg PO 1.0 ng/ml

Fig. 1

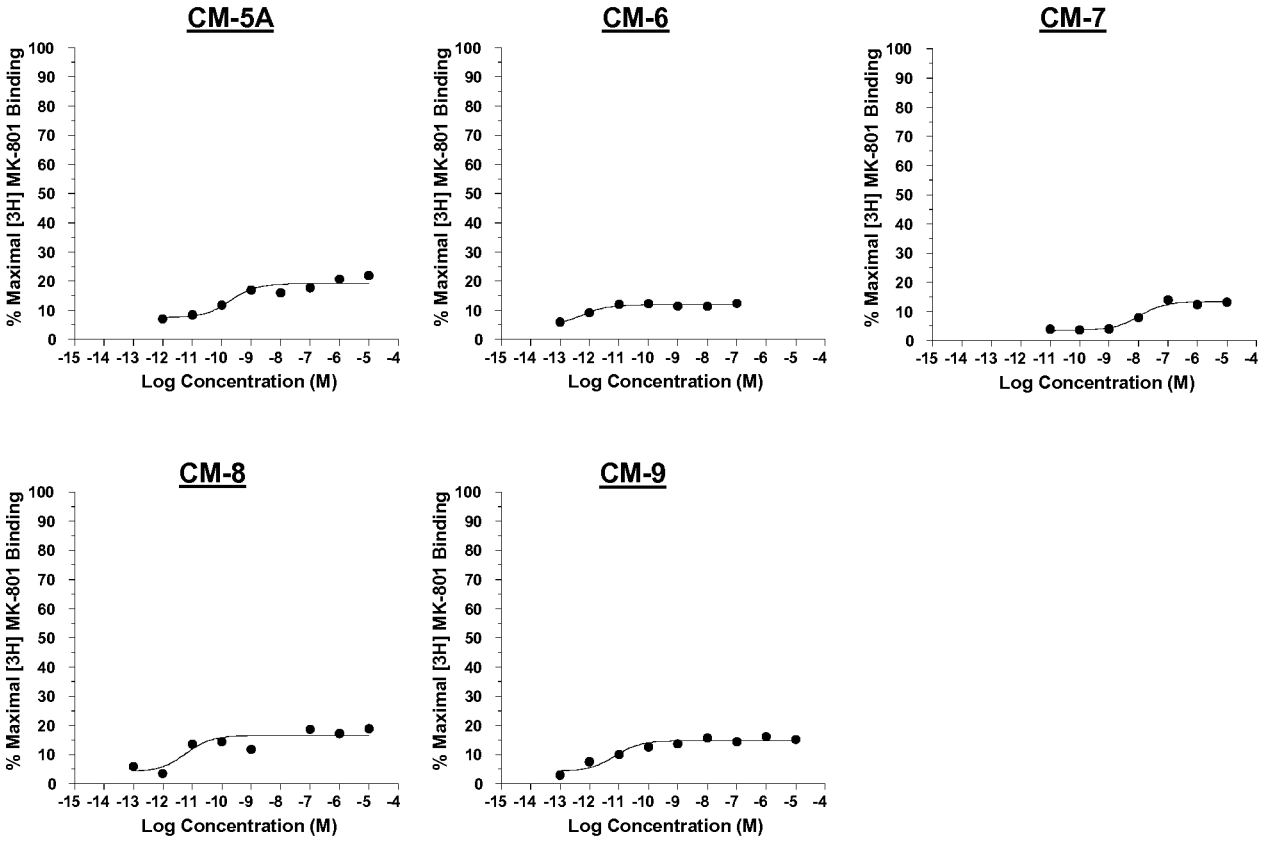

CM-5A
CM-6
CM-7
CM-8
CM-9
% Maximal [3H] MK-801 Binding
Log Concentration (M)
100
90
80
70
60
50
40
30
20
10
0
-15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4

Fig. 2

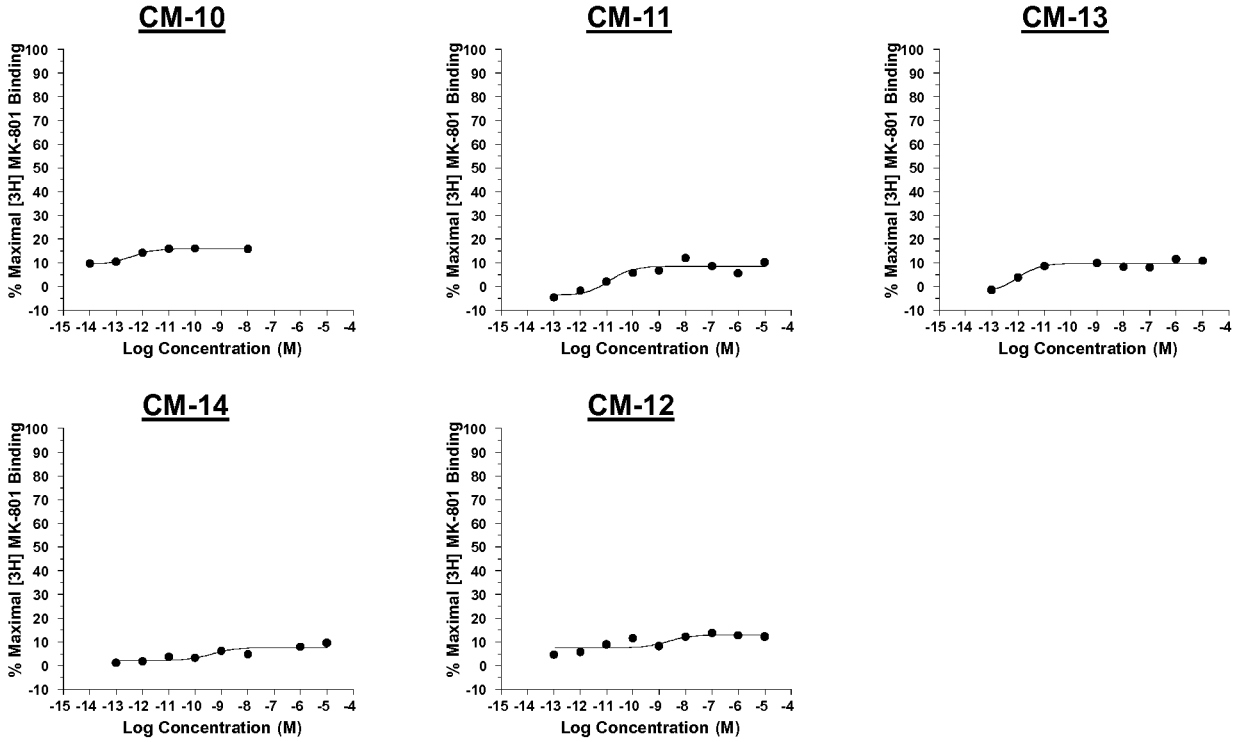

CM-10
CM-11
CM-13
CM-14
CM-12
% Maximal [3H] MK-801 Binding
Log Concentration (M)

Fig. 3

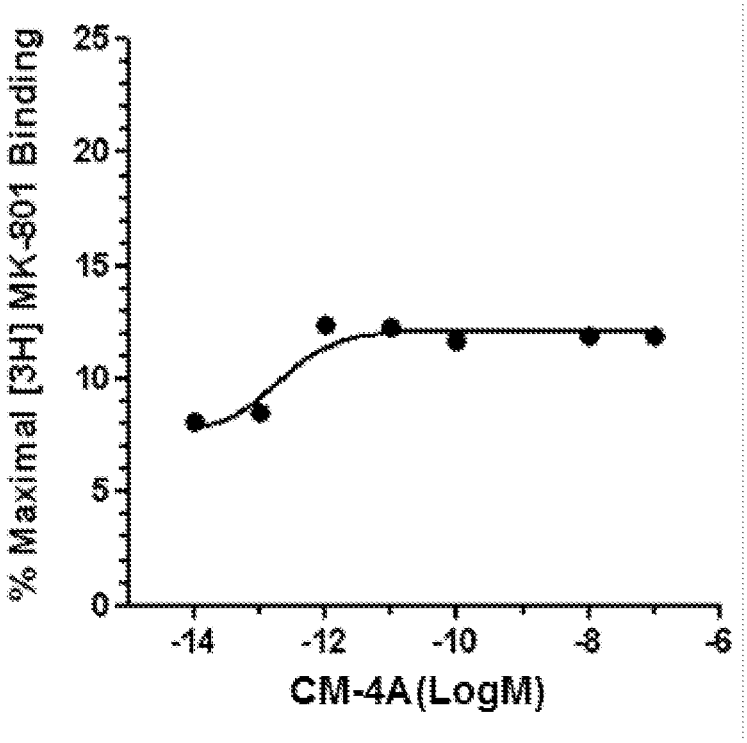

[3H] MK-801 Binding
% Maximal [3H] MK-801 Binding
25
20
15
10
5
0
-14
-12
-10
-8
-6
CM-4A(LogM)

Fig. 4

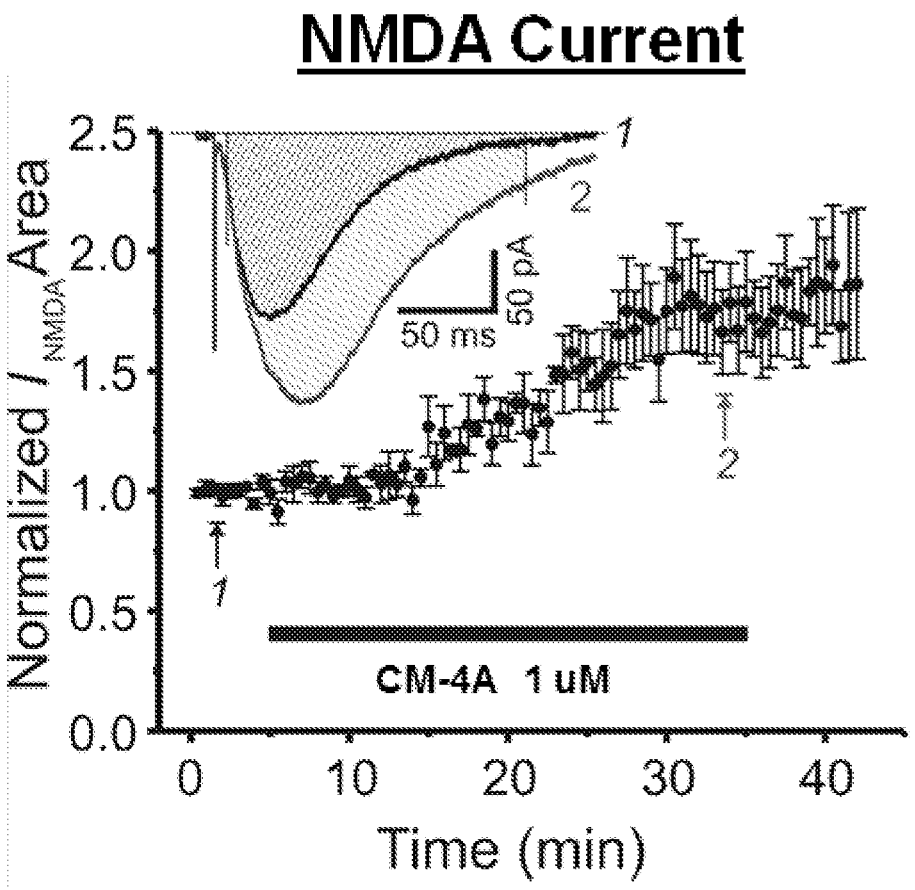

NMDA Current
Normalized I_{NMDA} Area
2.5
2.0
1.5
1.0
0.5
0.0
1
2
50 pA
50 ms
1
2
CM-4A 1 uM
0
10
20
30
40
Time (min)

Fig. 5

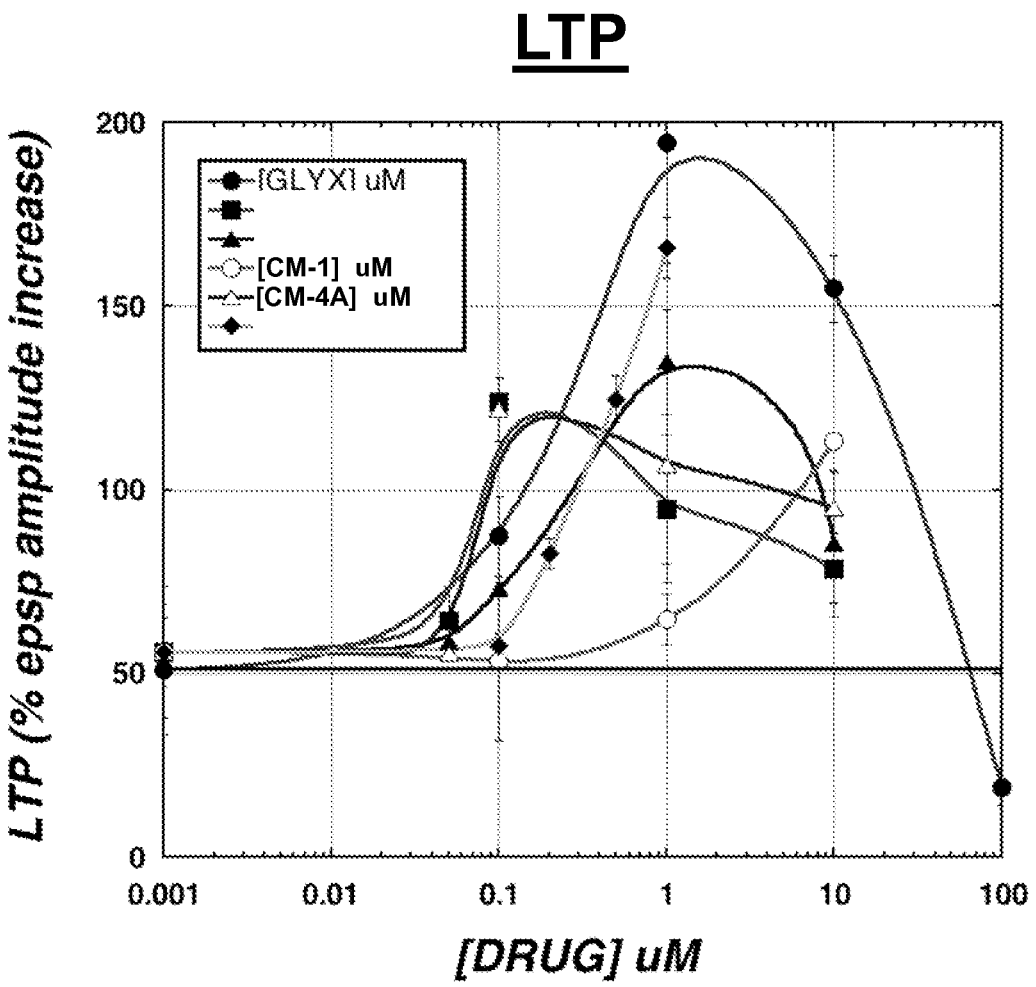

LTP
LTP (% epsp amplitude increase)
200
150
100
50
0
0.001
0.01
0.1
1
10
100
[DRUG] uM
[GLYX1 uM
[CM-1] uM
[CM-4A] uM

Fig. 6

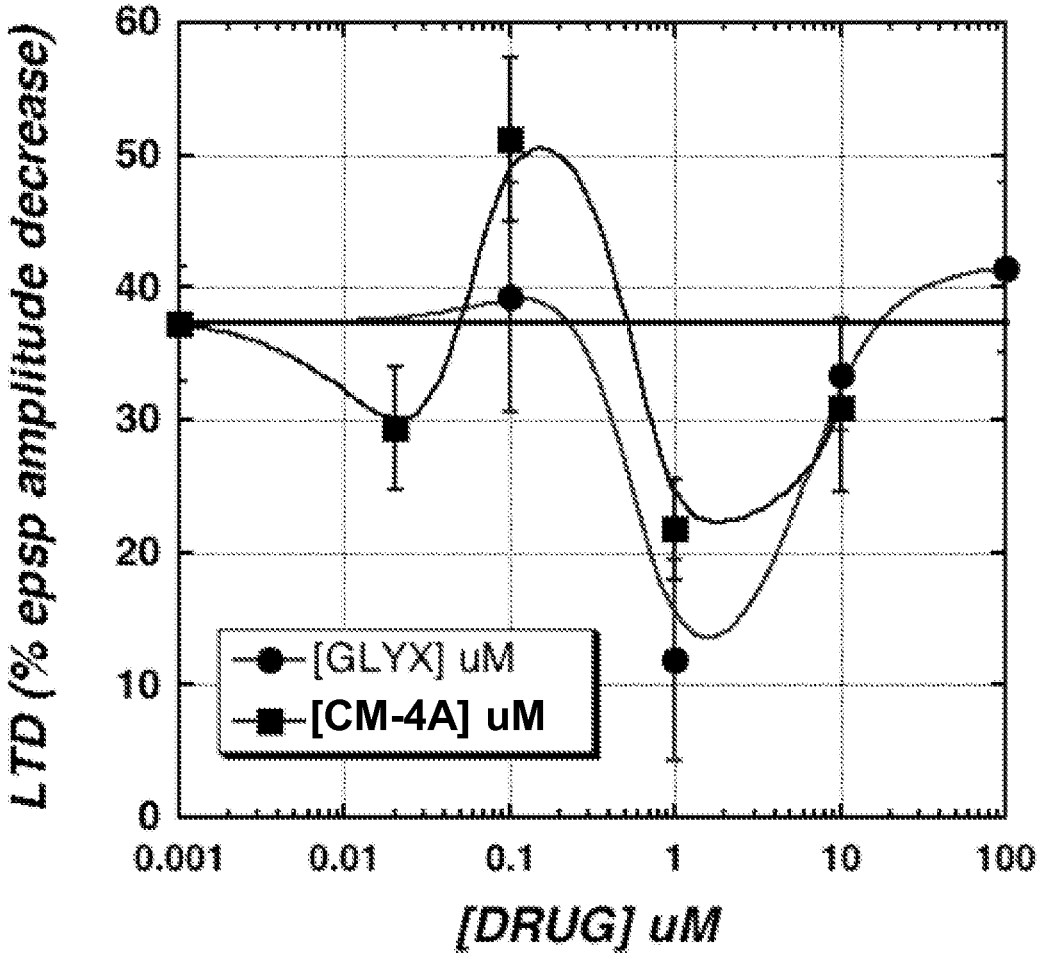

LTD (% epsp amplitude decrease)
60
50
40
30
20
10
0
0.001
0.01
0.1
1
10
100
[DRUG] uM
[GLYX] uM
[CM-4A] uM

Fig. 7

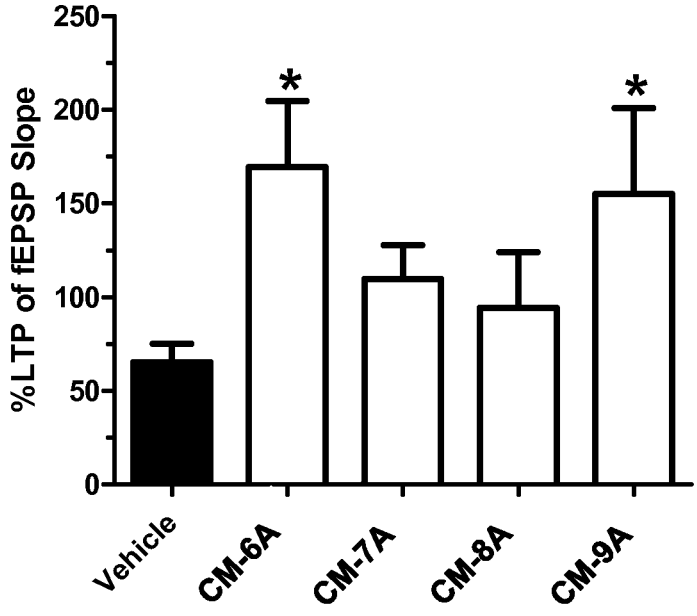

250
200
150
100
50
0
%LTP of fEPSP Slope
*
*
Vehicle
CM-6A
CM-7A
CM-8A
CM-9A

Fig. 8

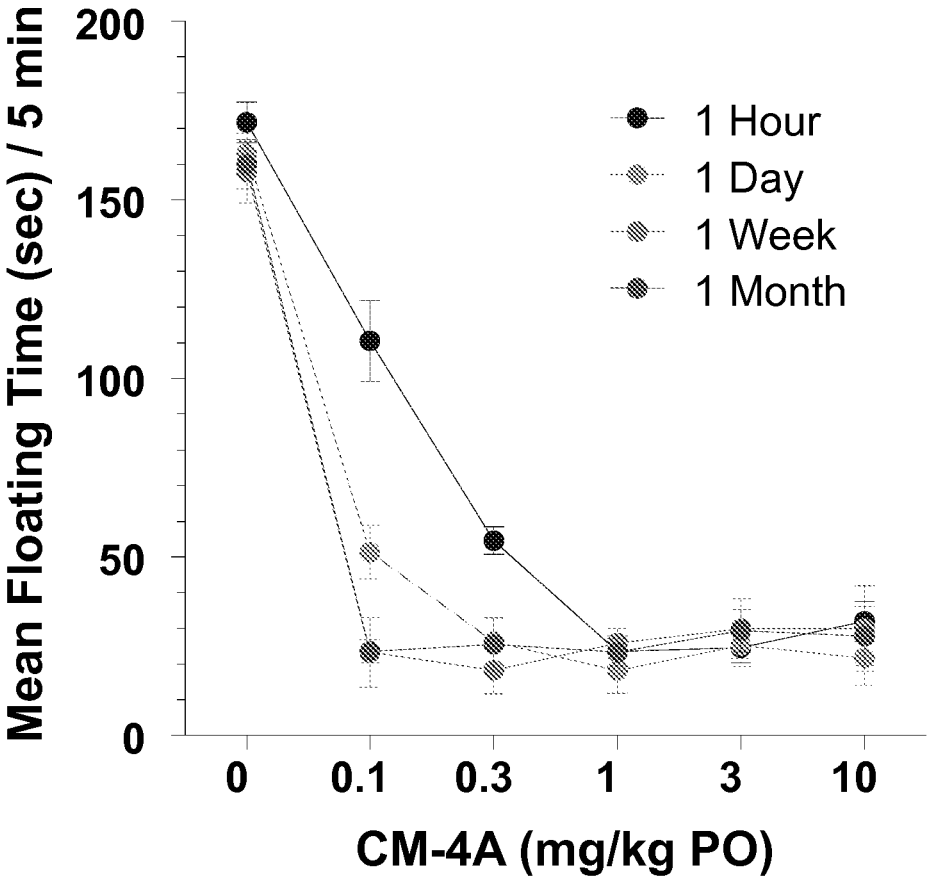

Mean Floating Time (sec) / 5 min
200
150
100
50
0
0
0.1
0.3
1
3
10
CM-4A (mg/kg PO)
1 Hour
1 Day
1 Week
1 Month

Fig. 9

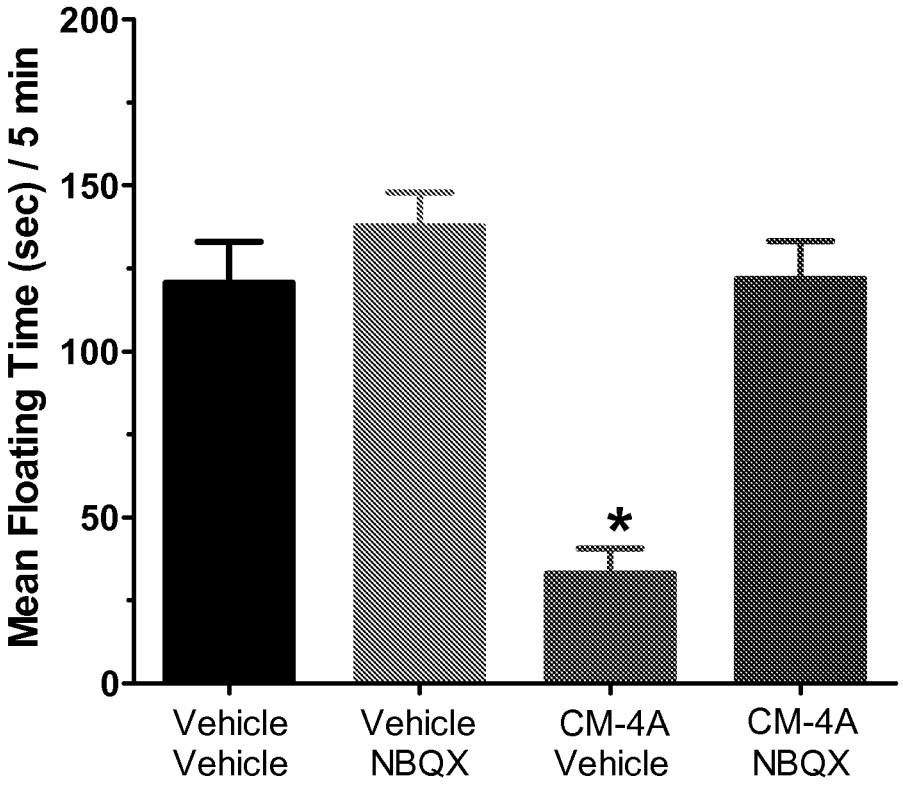

Mean Floating Time (sec) / 5 min
200
150
100
50
0
*
Vehicle
Vehicle
Vehicle
NBQX
CM-4A
Vehicle
CM-4A
NBQX

Fig. 10

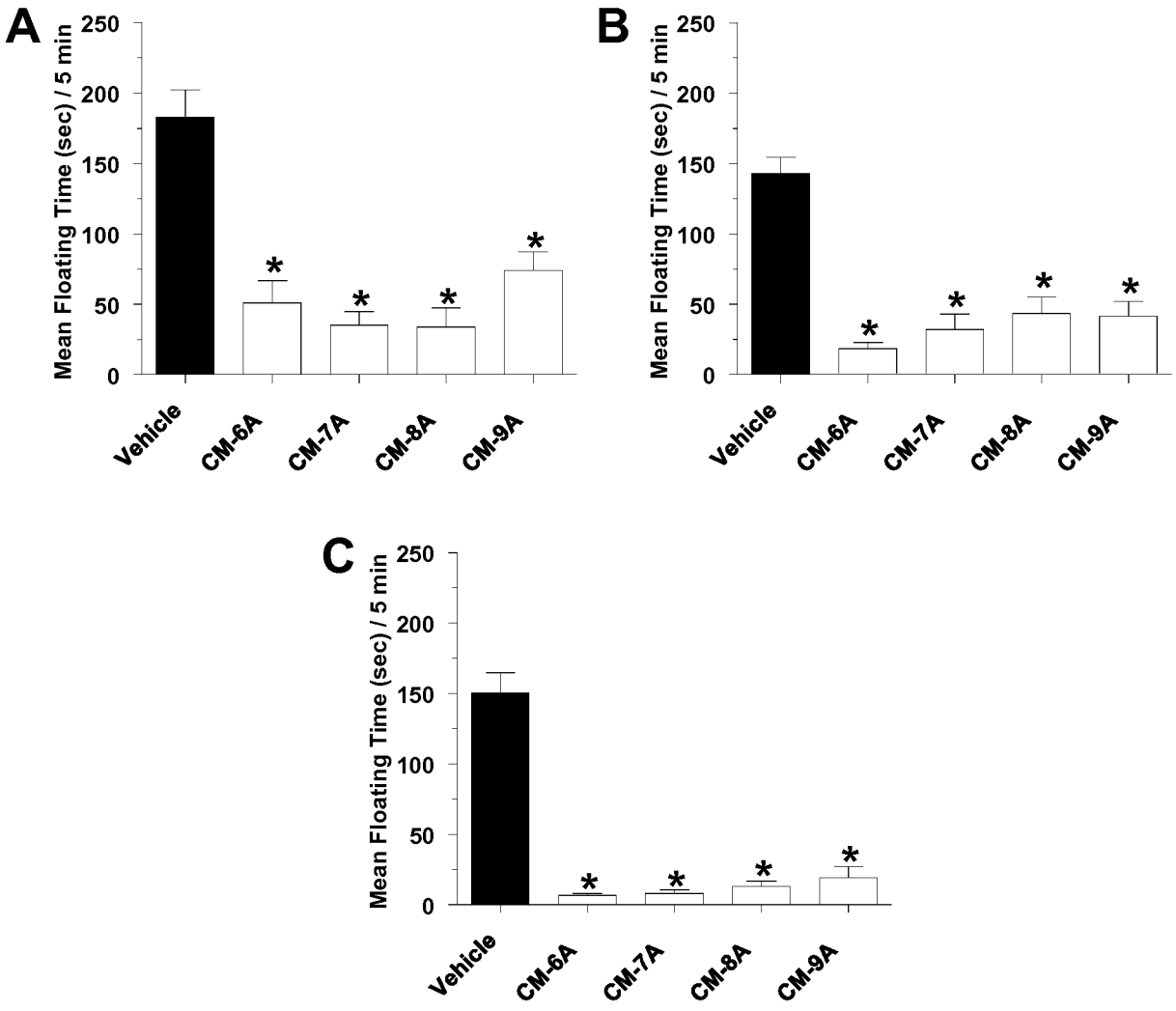

A
B
C
Mean Floating Time (sec) / 5 min
250
200
150
100
50
0
Vehicle
CM-6A
CM-7A
CM-8A
CM-9A
*

Fig. 11

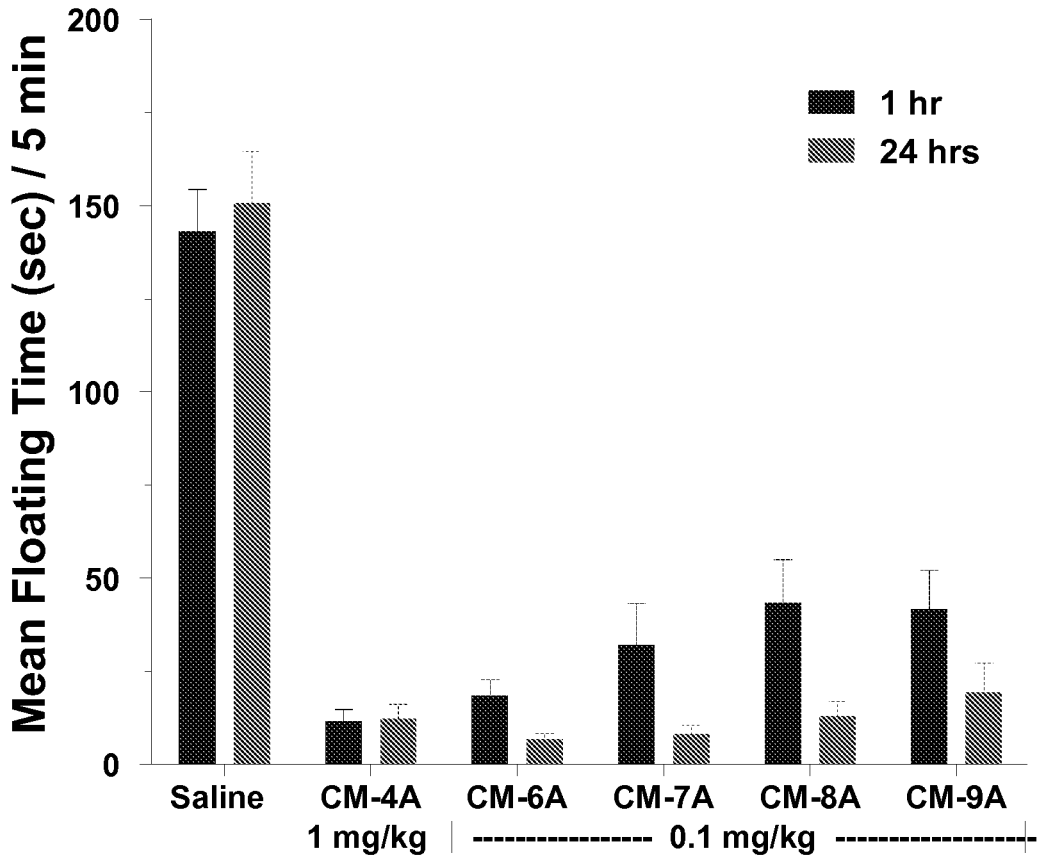

Mean Floating Time (sec) / 5 min
200
150
100
50
0
1 hr
24 hrs
Saline
CM-4A
CM-6A
CM-7A
CM-8A
CM-9A
1 mg/kg
0.1 mg/kg

Fig. 12

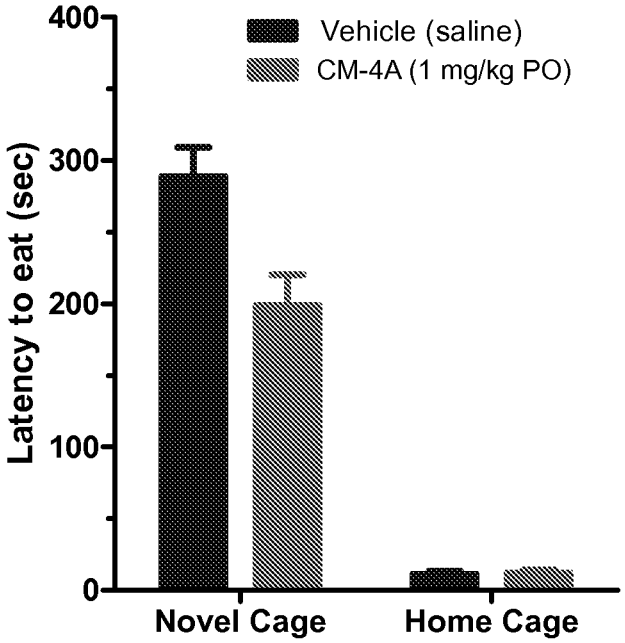
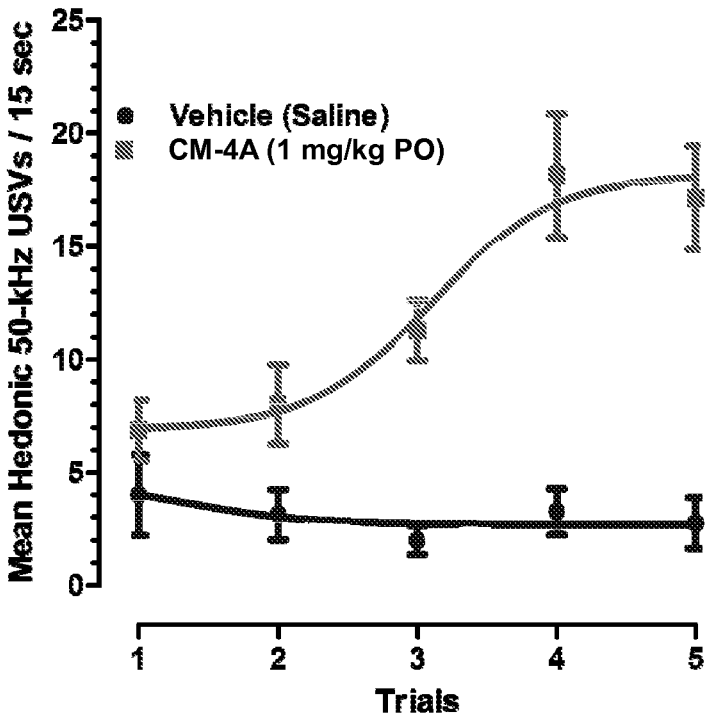
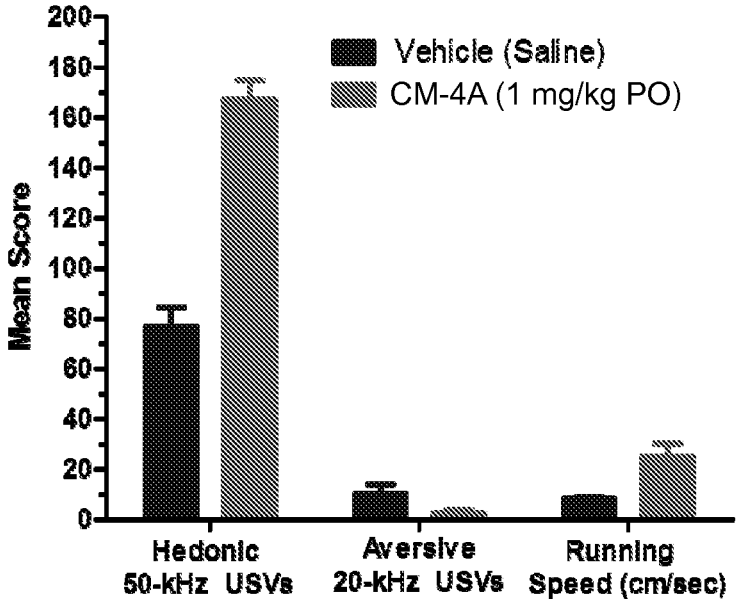

400
300
200
100
0
Latency to eat (sec)
Vehicle (saline)
CM-4A (1 mg/kg PO)
Novel Cage
Home Cage

Fig. 13


Mean Hedonic 50-kHz USVs / 15 sec
25
20
15
10
5
0
Vehicle (Saline)
CM-4A (1 mg/kg PO)
1
2
3
4
5
Trials

A.


Mean Score
200
180
160
140
120
100
80
60
40
20
0
Vehicle (Saline)
CM-4A (1 mg/kg PO)
Hedonic 50-kHz USVs
Aversive 20-kHz USVs
Running Speed (cm/sec)

B.

Fig. 14

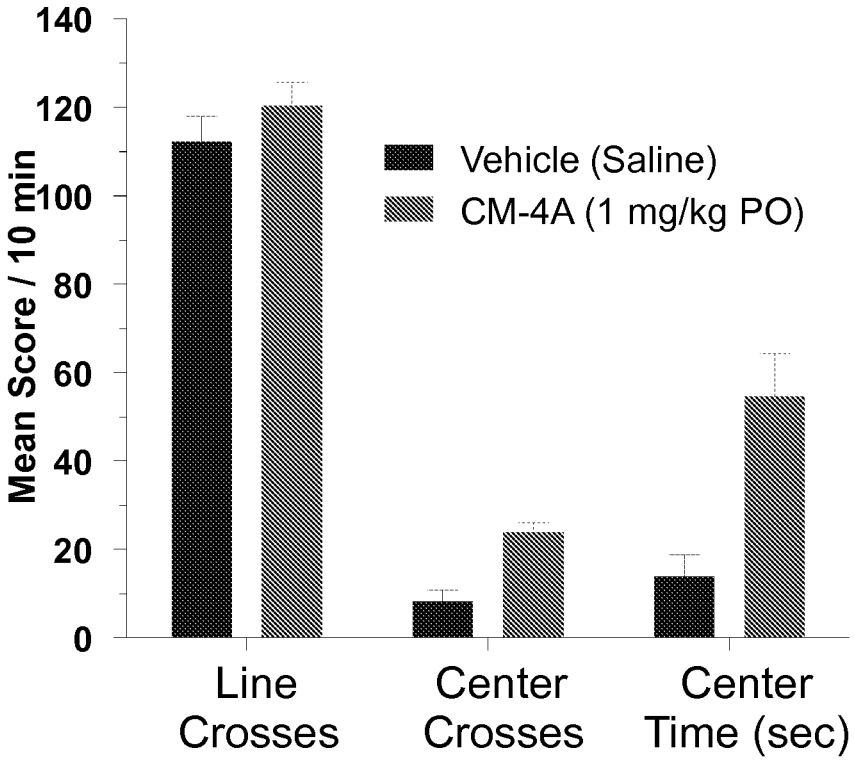

140
120
100
80
60
40
20
0
Mean Score / 10 min
Vehicle (Saline)
CM-4A (1 mg/kg PO)
Line Crosses
Center Crosses
Center Time (sec)

Fig. 15

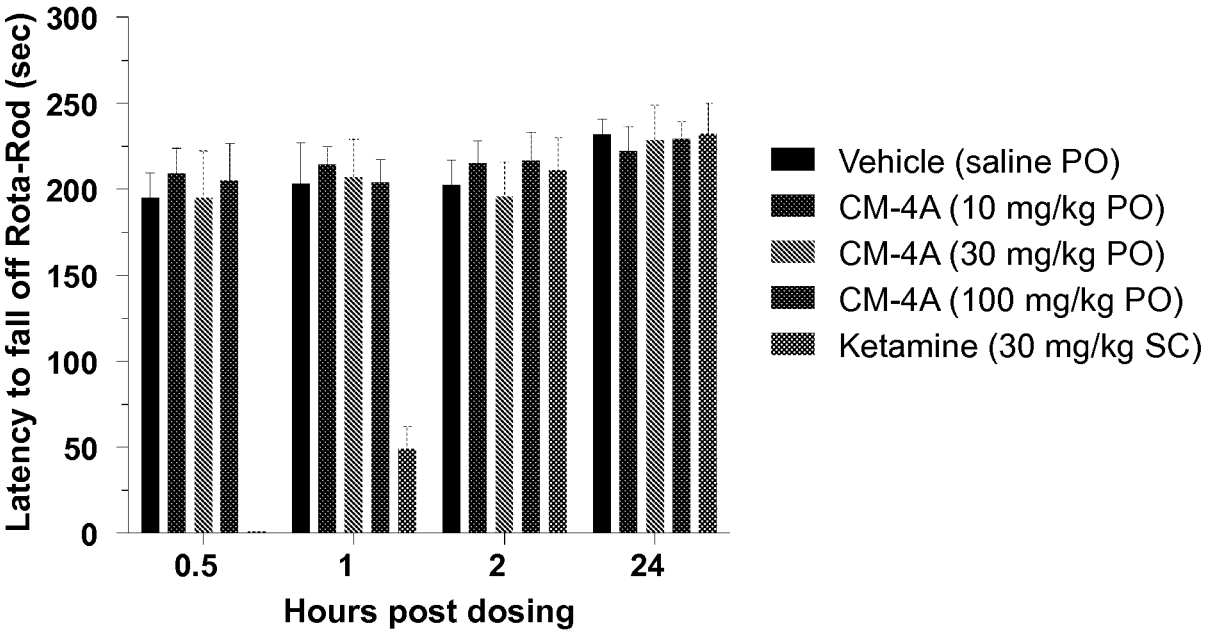

Latency to fall off Rota-Rod (sec)
300
250
200
150
100
50
0
0.5
1
2
24
Hours post dosing
Vehicle (saline PO)
CM-4A (10 mg/kg PO)
CM-4A (30 mg/kg PO)
CM-4A (100 mg/kg PO)
Ketamine (30 mg/kg SC)

Fig. 16