Binding Affinities
Rat hippocampus

Mixture:	**1 nM**
2S,3R (Cpd A):	**1 nM**
2R,3S:	**42 nM**
2R,3R:	**1 nM**
2S,3S:	**25 μM**

Figure 1A.1

Whole cell recordings rat alpha7 in mammalian cells

Compound A vs. its stereoisomers

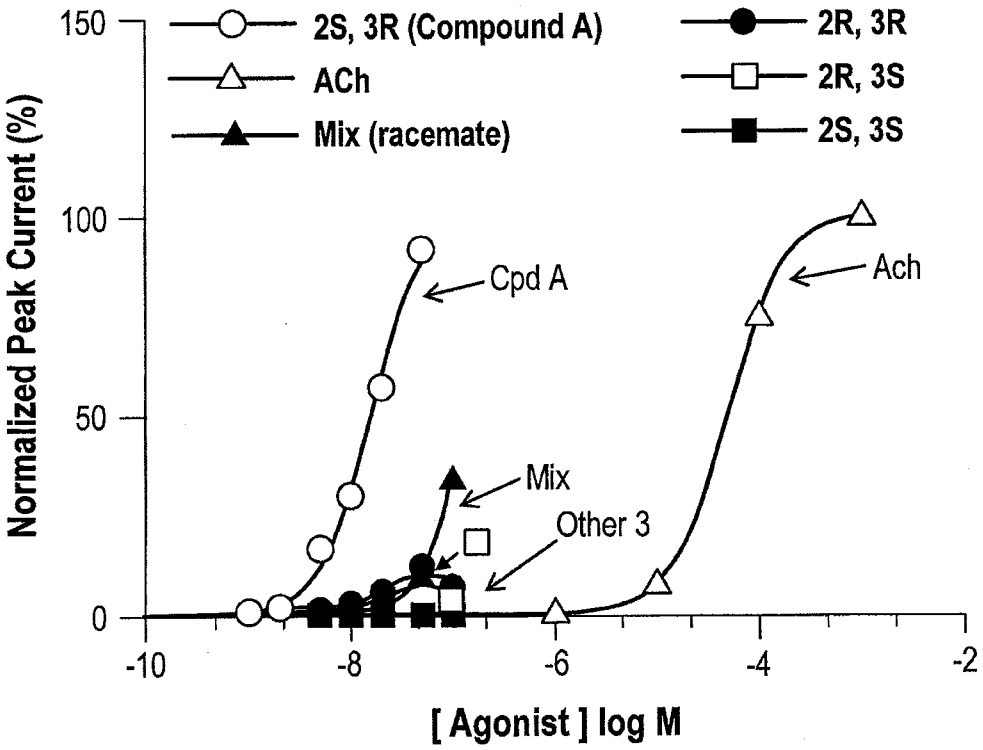


Figure 1A.2

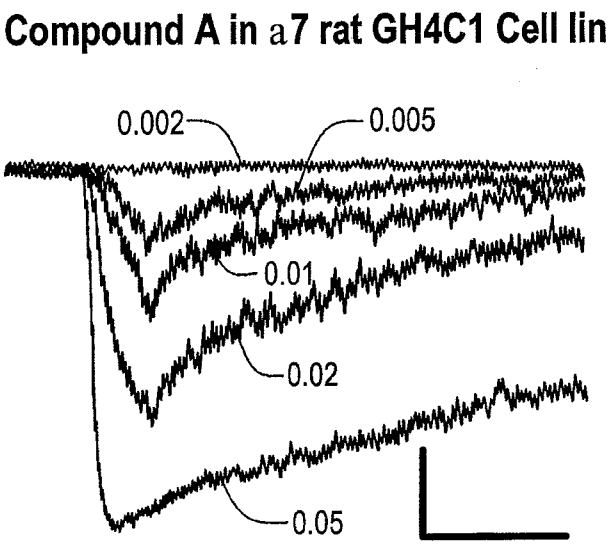


Figure 1A.3

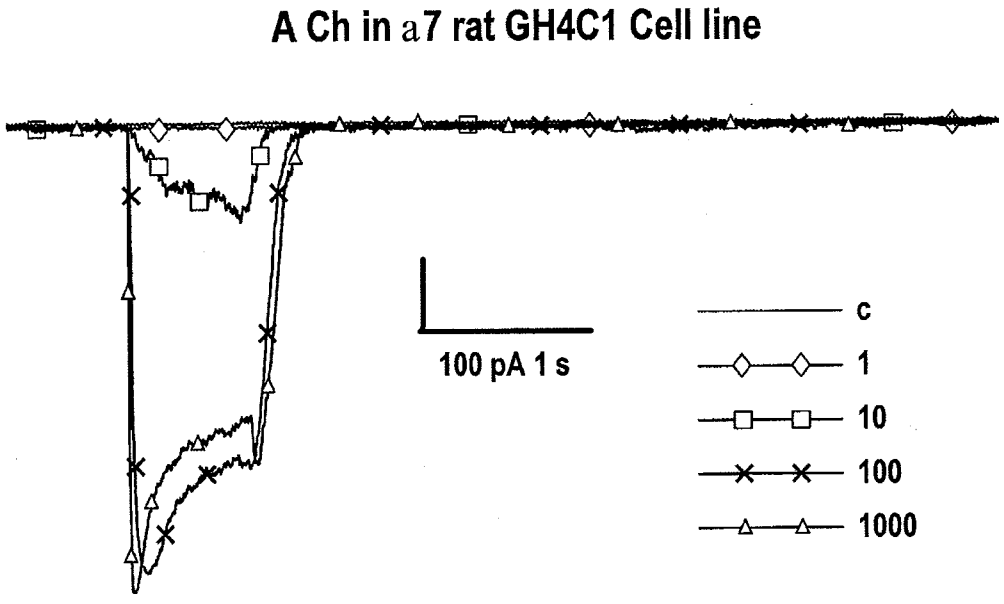


Figure 1A.4

FIG. 1B

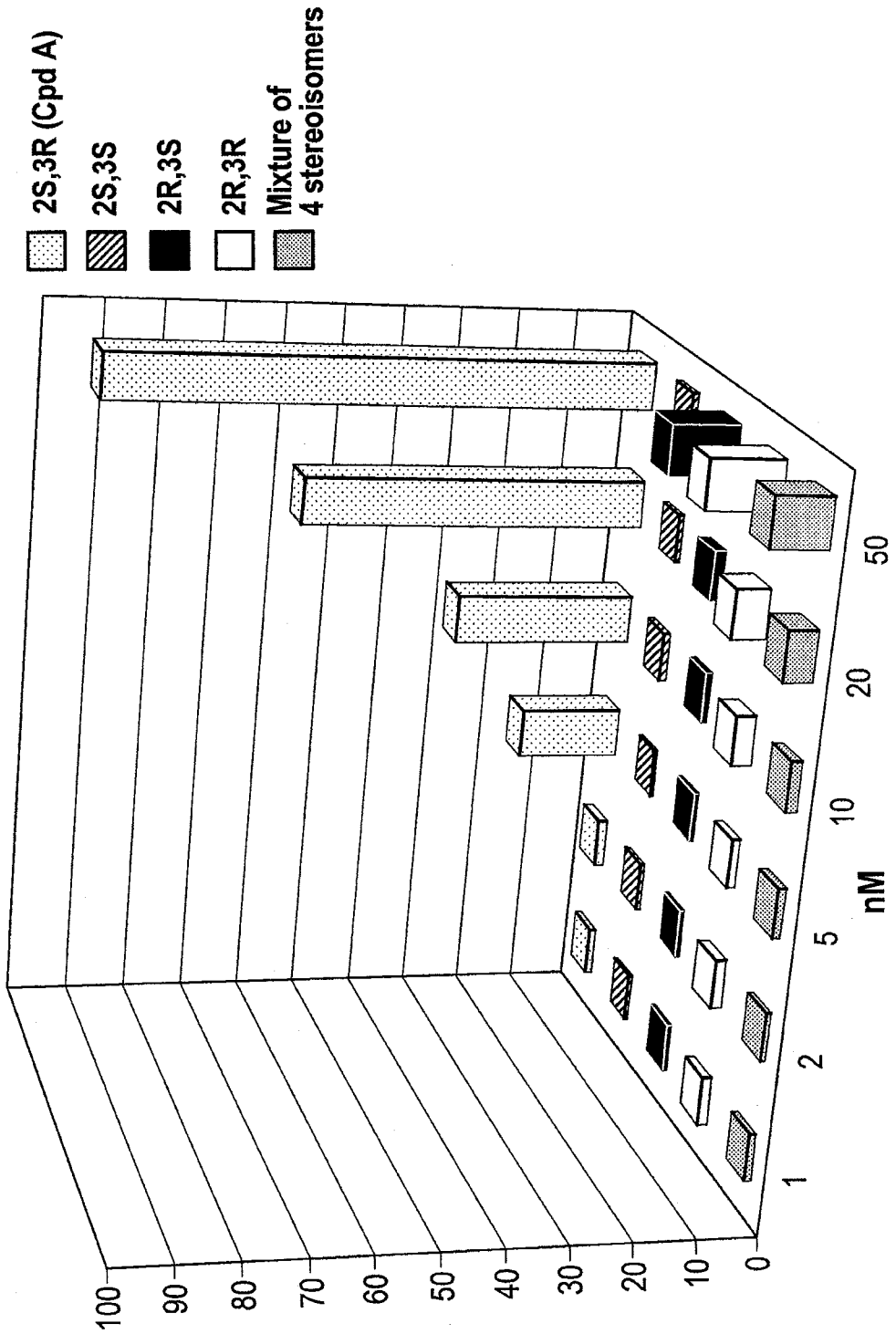

2S,3R (Cpd A)
2S,3S
2R,3S
2R,3R
Mixture of 4 stereoisomers
100
90
80
70
60
50
40
30
20
10
0
1
2
5
10
20
50
nM

FIG. 2A

A

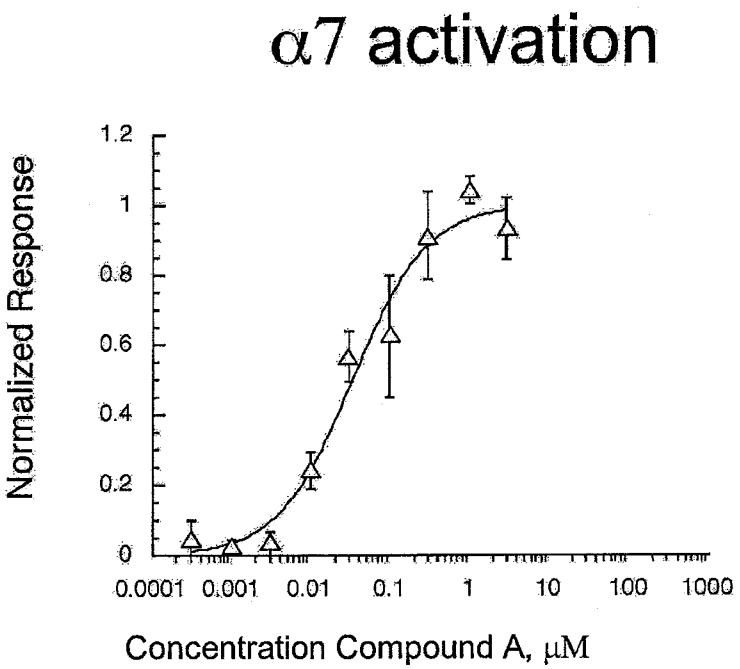


FIG. 2B

B

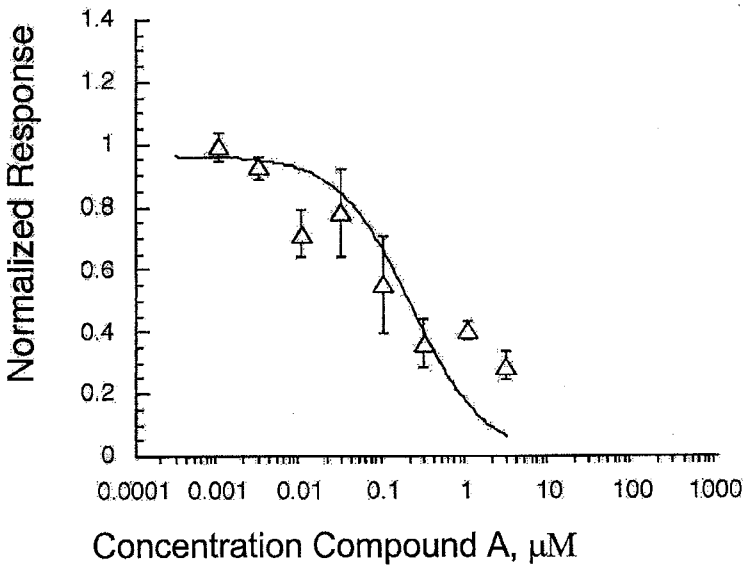


FIG. 3

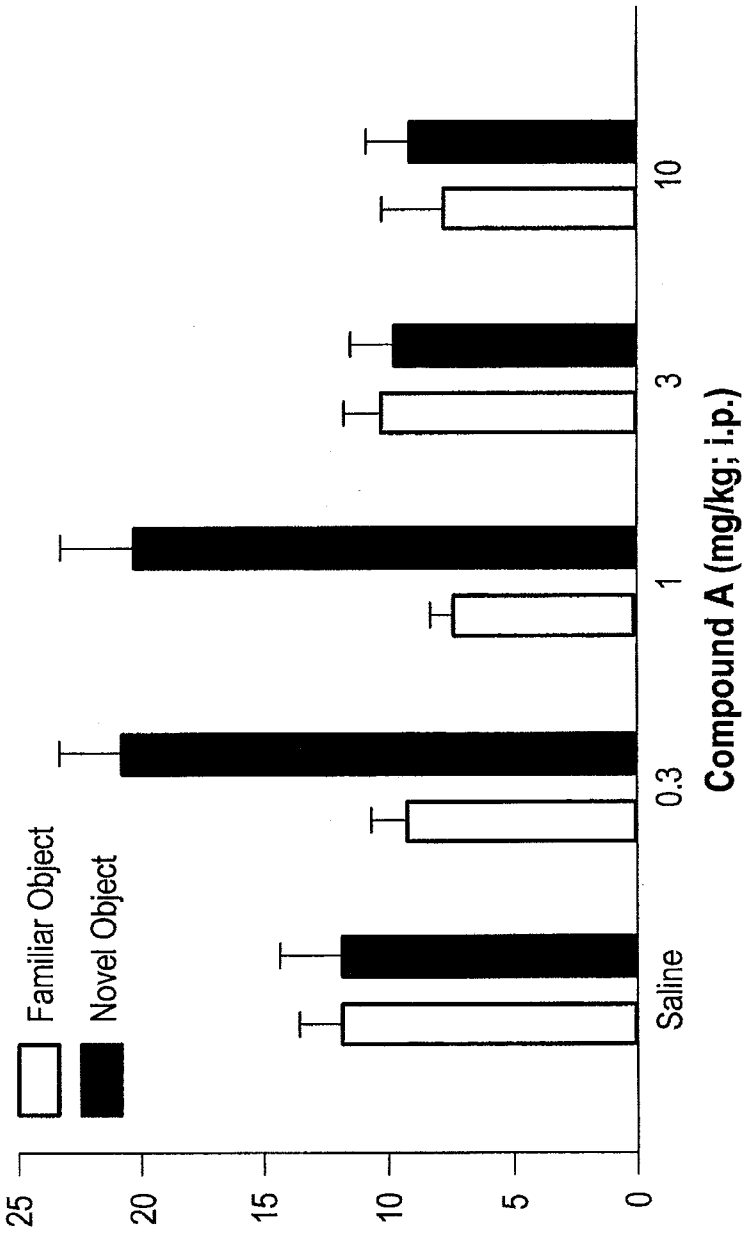

Familiar Object
Novel Object
25
20
15
10
5
0
Saline
0.3
1
3
10
Compound A (mg/kg; i.p.)

FIG. 4

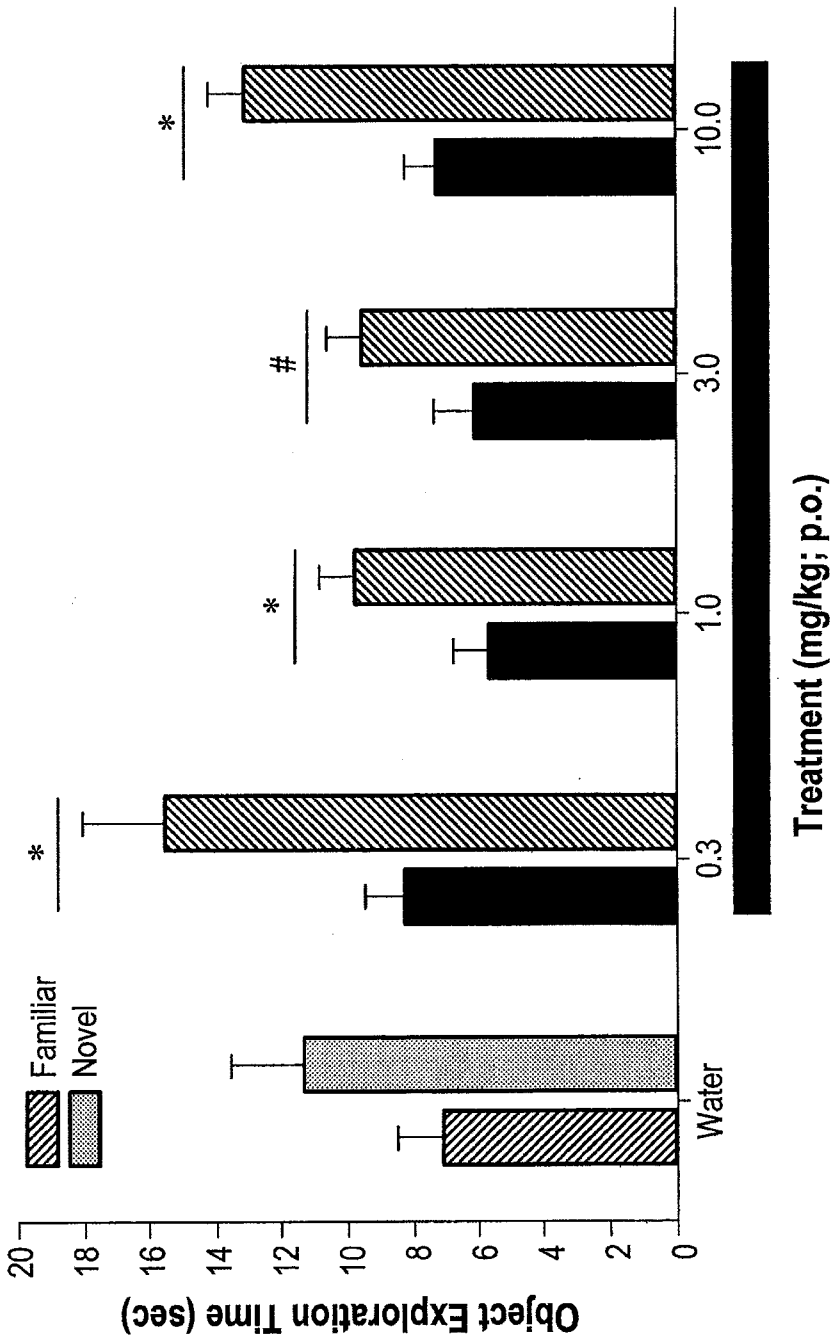

Object Exploration Time (sec)
0
2
4
6
8
10
12
14
16
18
20
Familiar
Novel
*
*
#
*
Water
0.3
1.0
3.0
10.0
Treatment (mg/kg; p.o.)

FIG. 5A

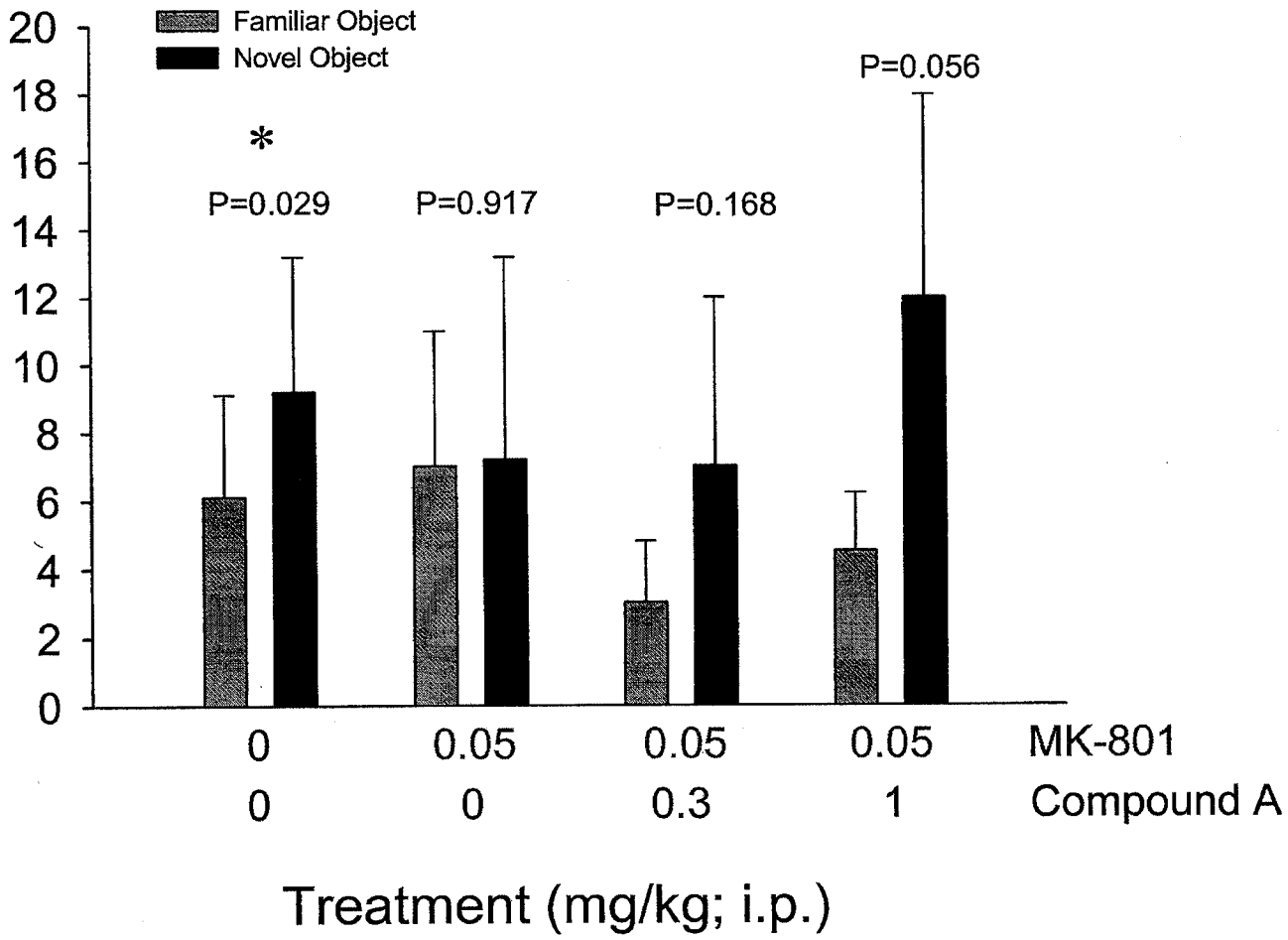

Familiar Object
Novel Object
20
18
16
14
12
10
8
6
4
2
0
*
P=0.029
P=0.917
P=0.168
P=0.056
0
0
0.05
0
0.05
0.3
0.05
1
MK-801
Compound A
Treatment (mg/kg; i.p.)

FIG. 5B

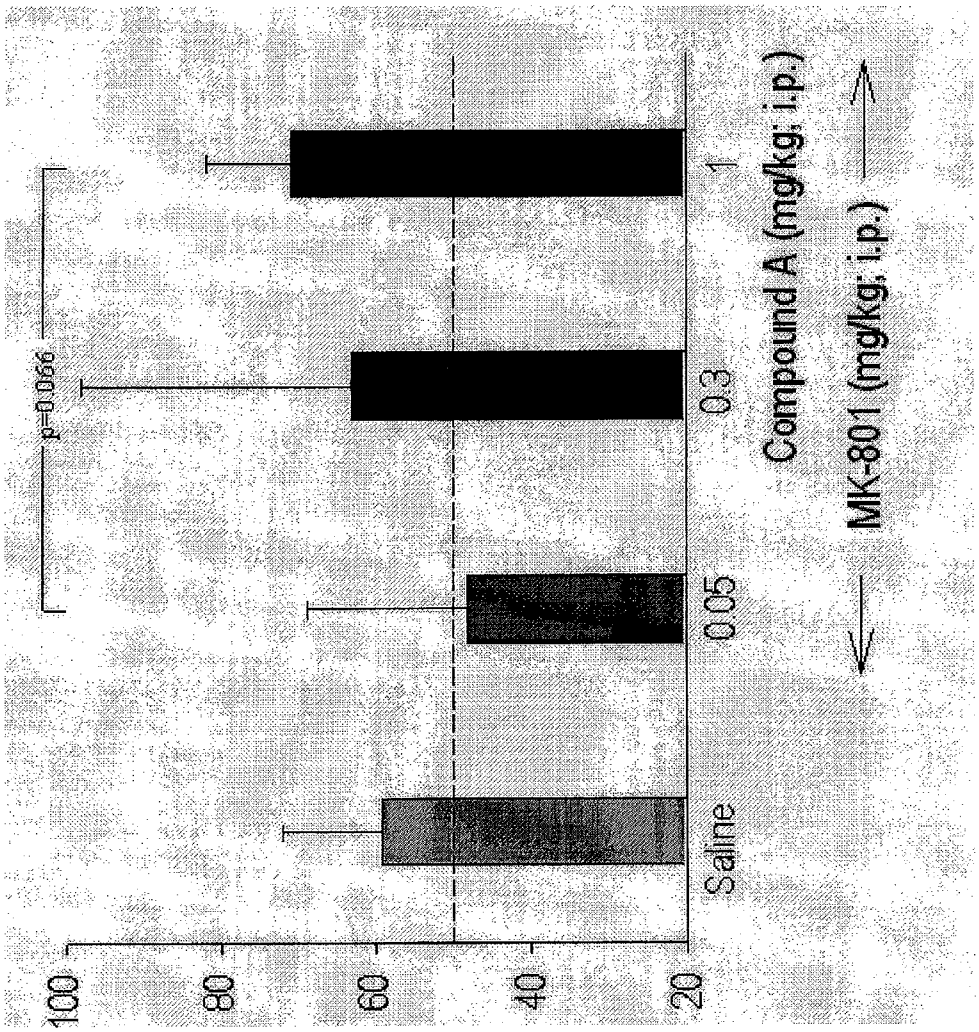

100
80
60
40
20
p=0.066
Saline
0.05
0.3
1
Compound A (mg/kg; i.p.)
MK-801 (mg/kg; i.p.)

FIG. 6

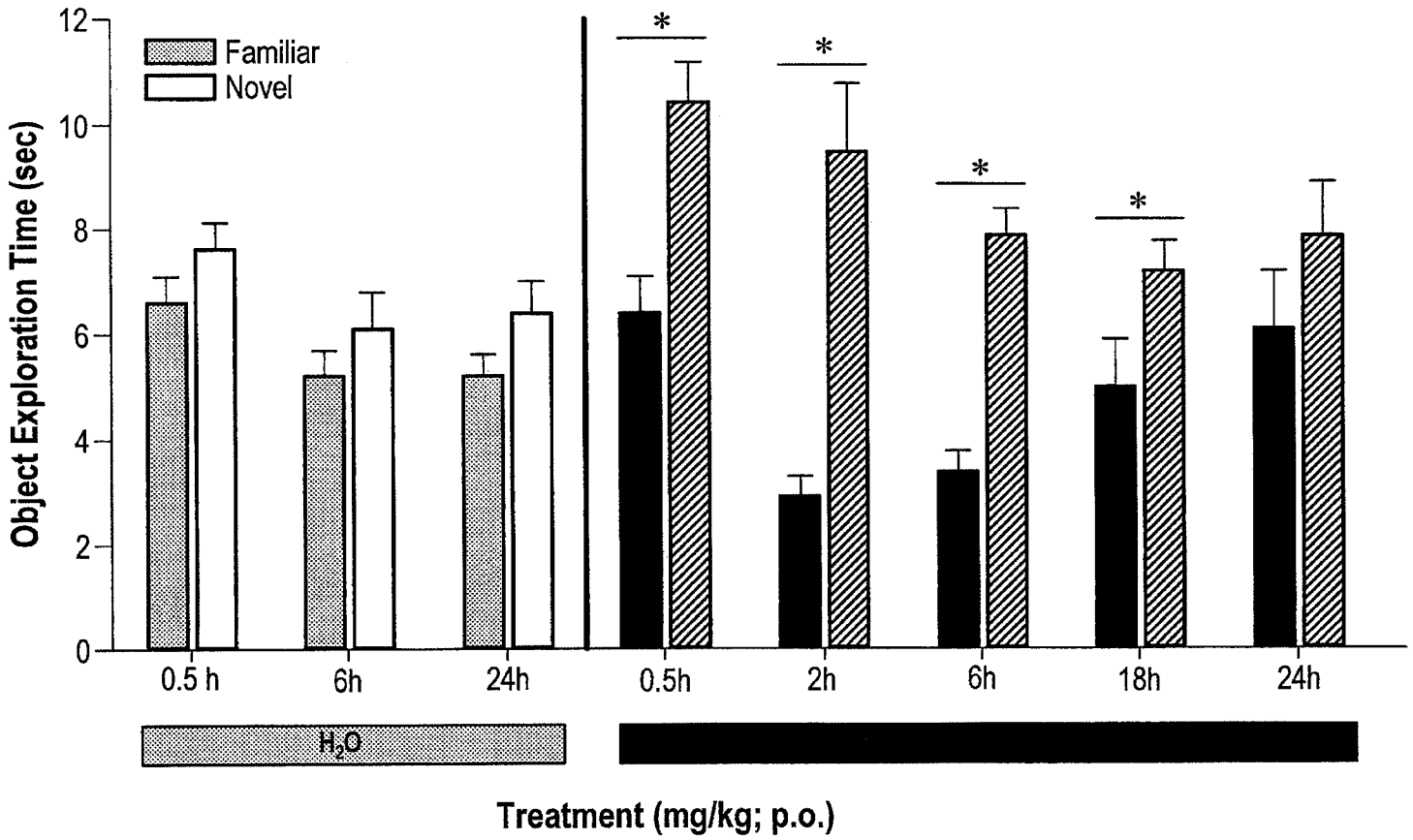

Familiar
Novel
Object Exploration Time (sec)
12
10
8
6
4
2
0
*
*
*
*
0.5 h
6h
24h
0.5h
2h
6h
18h
24h
H2O
Treatment (mg/kg; p.o.)

FIG. 7

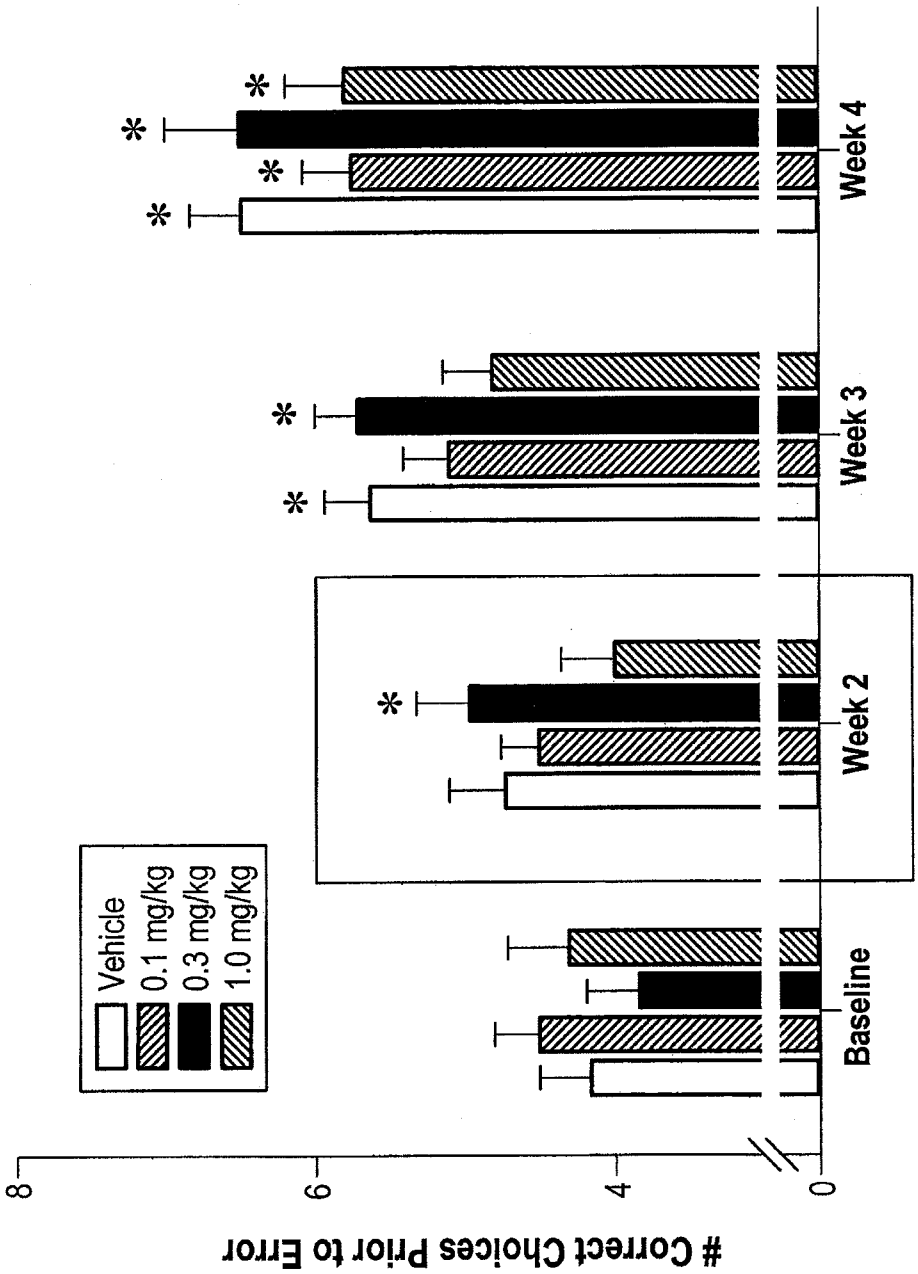

Correct Choices Prior to Error
8
6
4
0
Vehicle
0.1 mg/kg
0.3 mg/kg
1.0 mg/kg
Baseline
Week 2
Week 3
Week 4
*

FIG. 8

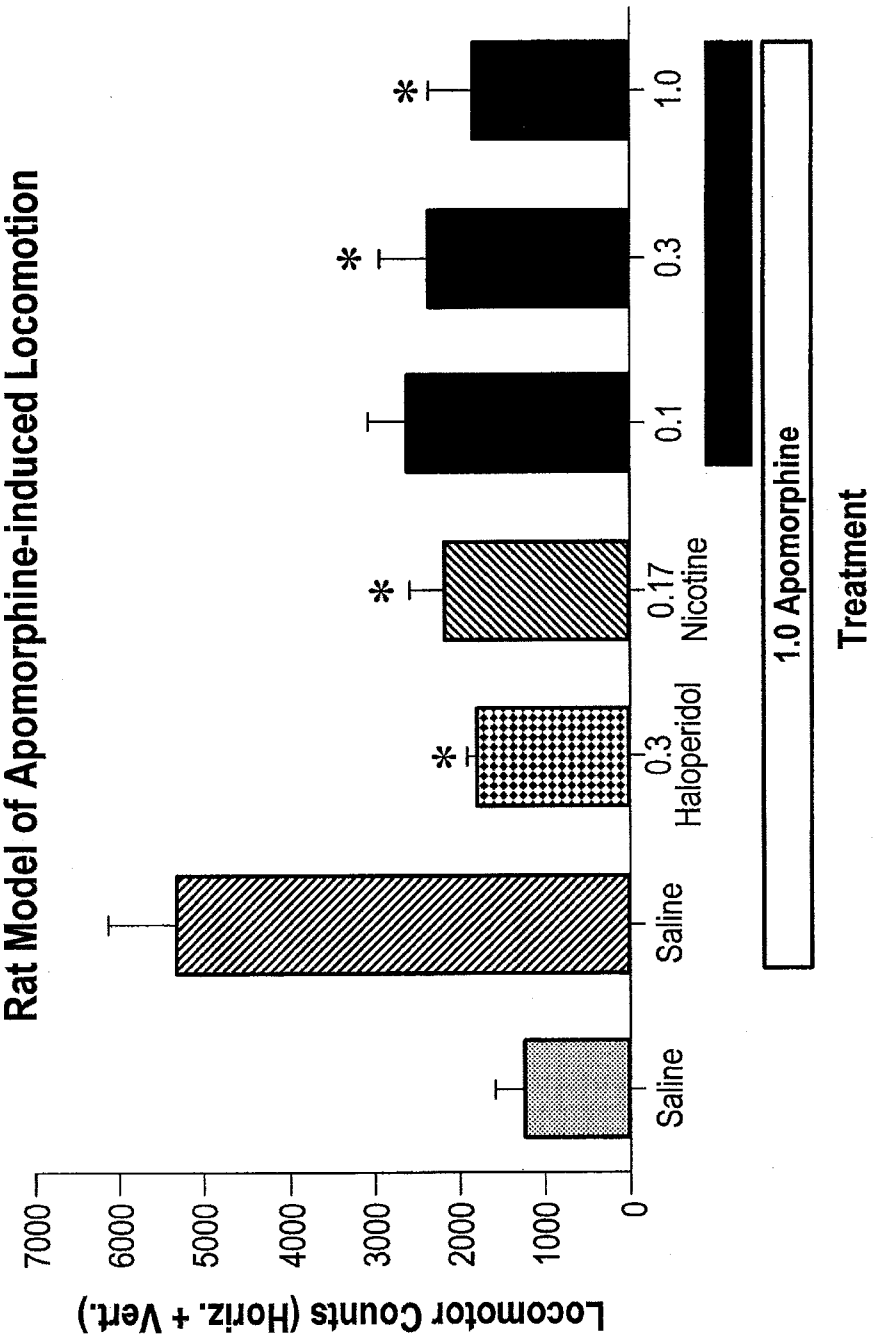
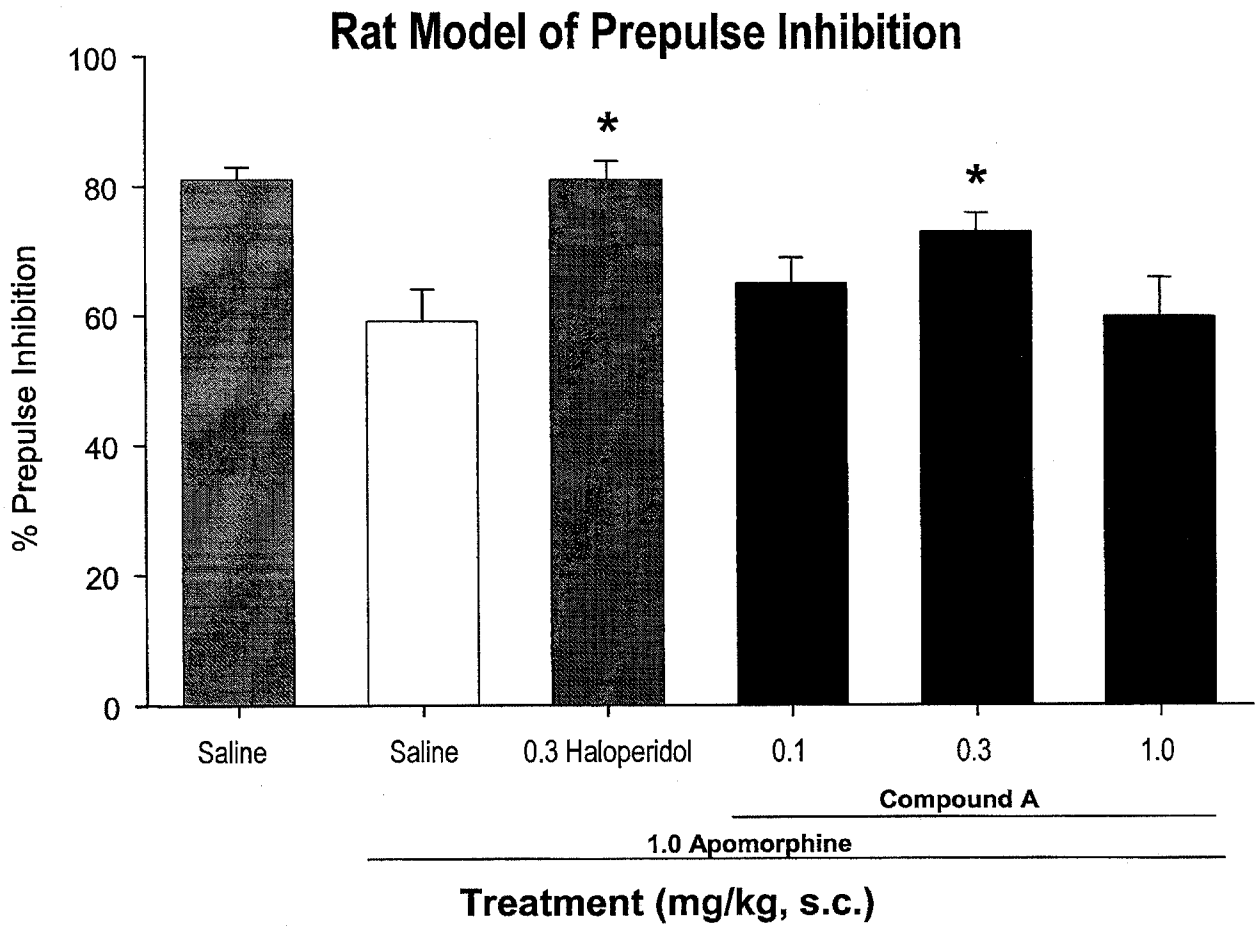

Rat Model of Apomorphine-induced Locomotion
Locomotor Counts (Horiz. + Vert.)
7000
6000
5000
4000
3000
2000
1000
0
Saline
Saline
0.3
Haloperidol
0.17
Nicotine
0.1
0.3
1.0
*
*
*
*
1.0 Apomorphine
Treatment

FIG. 9



Significantly different from Saline + 1.0 mg/kg Apomorphine, P<0.05

FIG. 10A

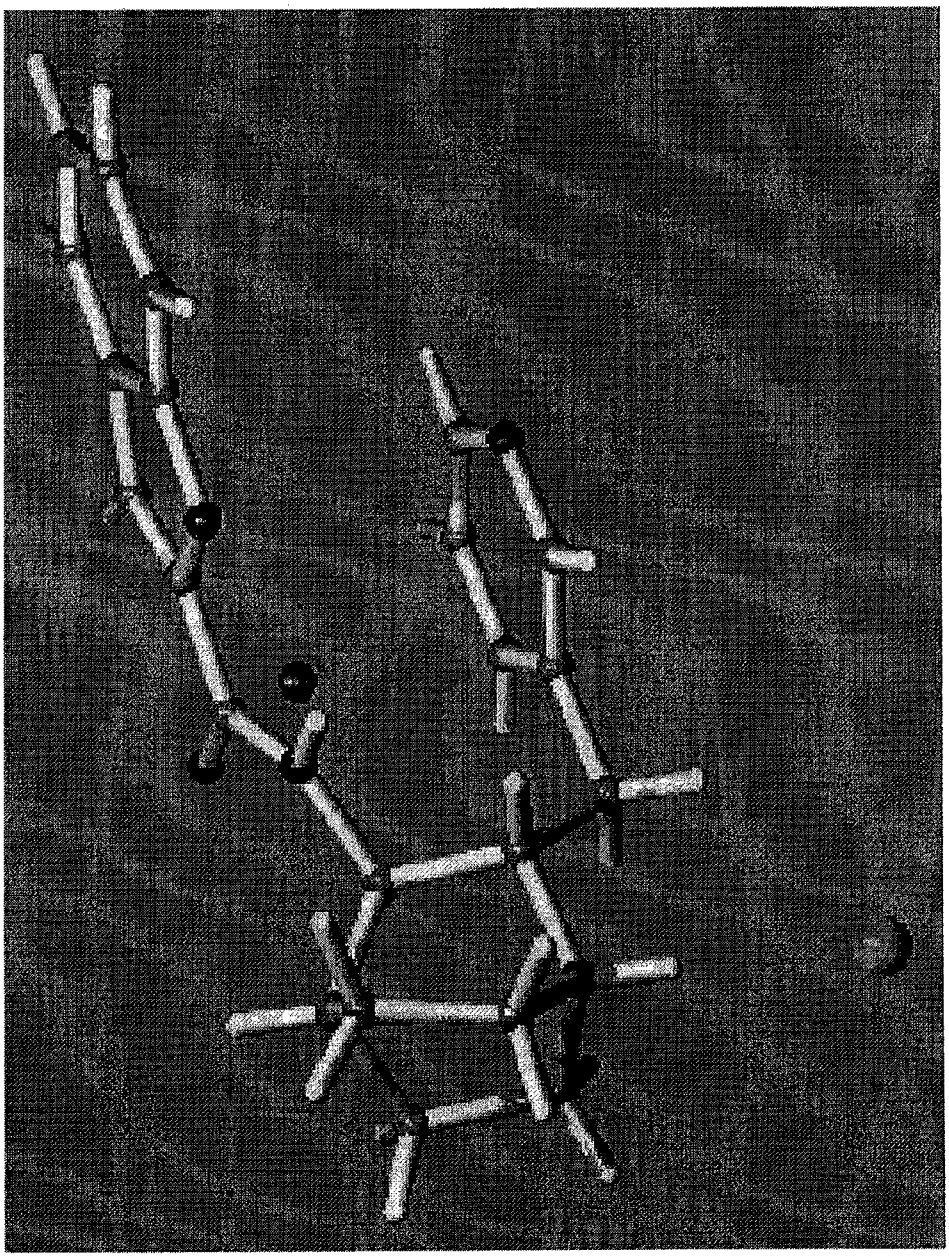


FIG. 10B

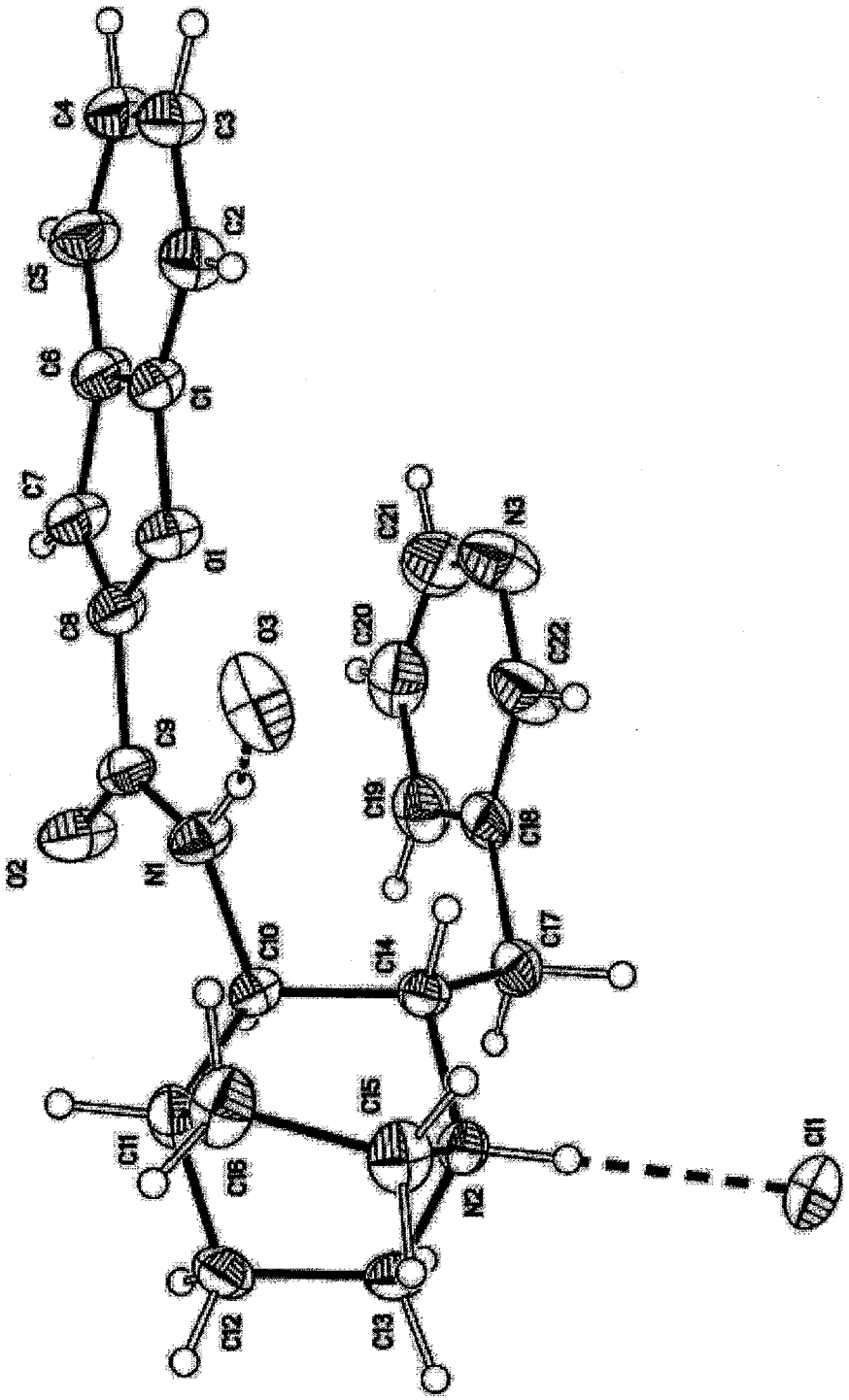

C4
C3
C2
C1
C6
C7
O1
O4
C8
O3
O2
N1
C10
C14
C17
C18
C19
C20
C22
N3
C21
C15
C11
C16
N2
Cl1
C12
C13

FIG. 11A

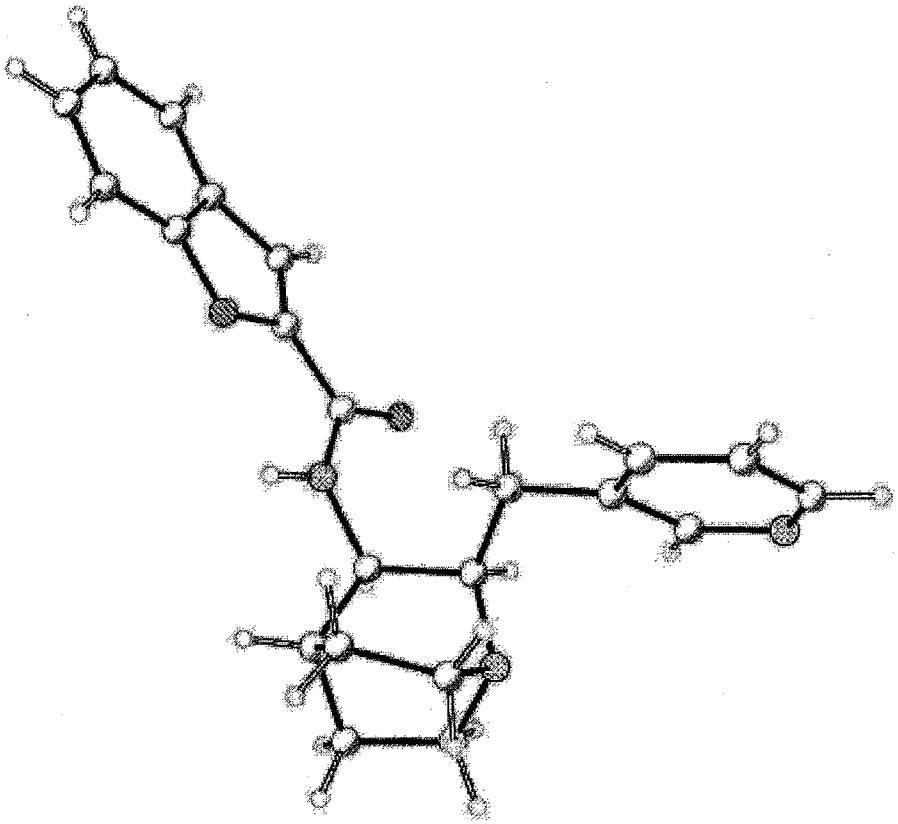


FIG. 11B

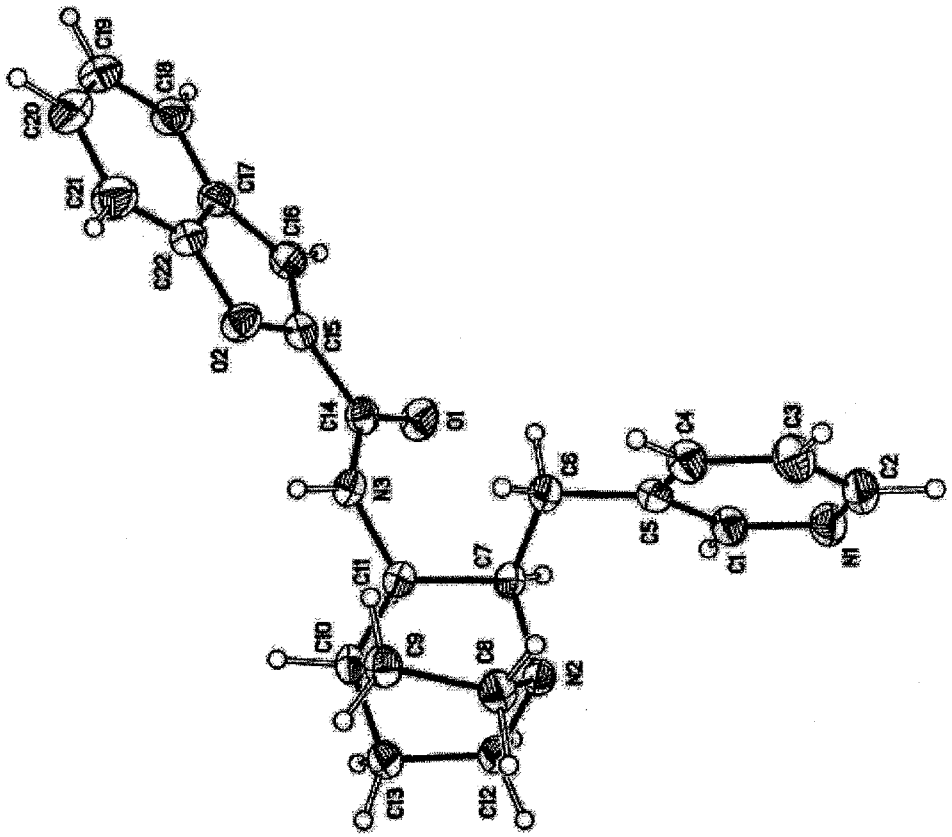

C19
C18
C20
C17
C21
C16
C22
C15
N2
C14
O1
N3
C8
C24
C23
C5
C22
C1
N1
C11
C7
C9
C10
C6
N2
C12
C13

FIG. 12

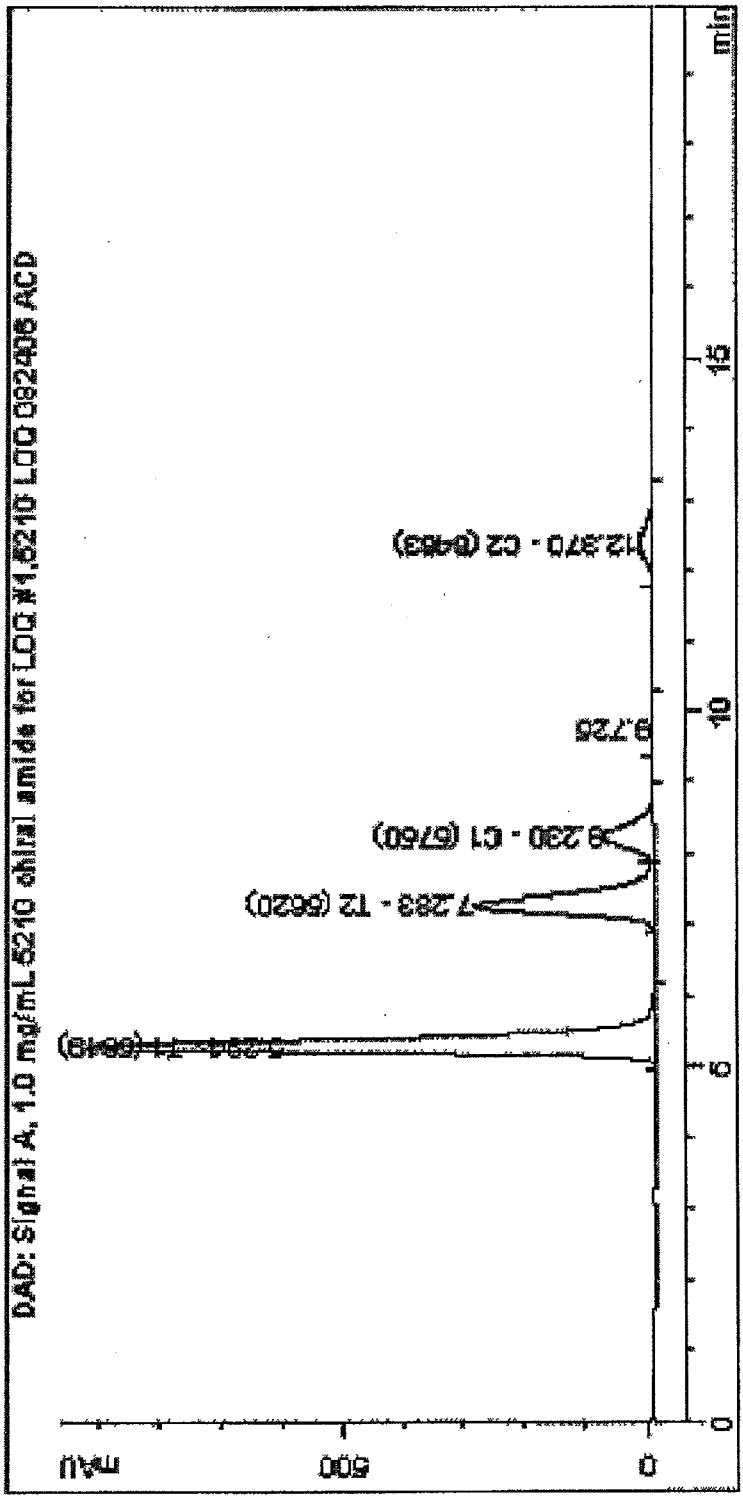

DAD: Signal A, 1.0 mg/mL 5210 chiral amide for LOQ #1,5210 LOQ 092406 ACD
mAU
500
0
0
5
10
15
min
12.370 - C2 (6483)
9.725
8.230 - C1 (5760)
7.283 - T2 (5620)

FIG. 13

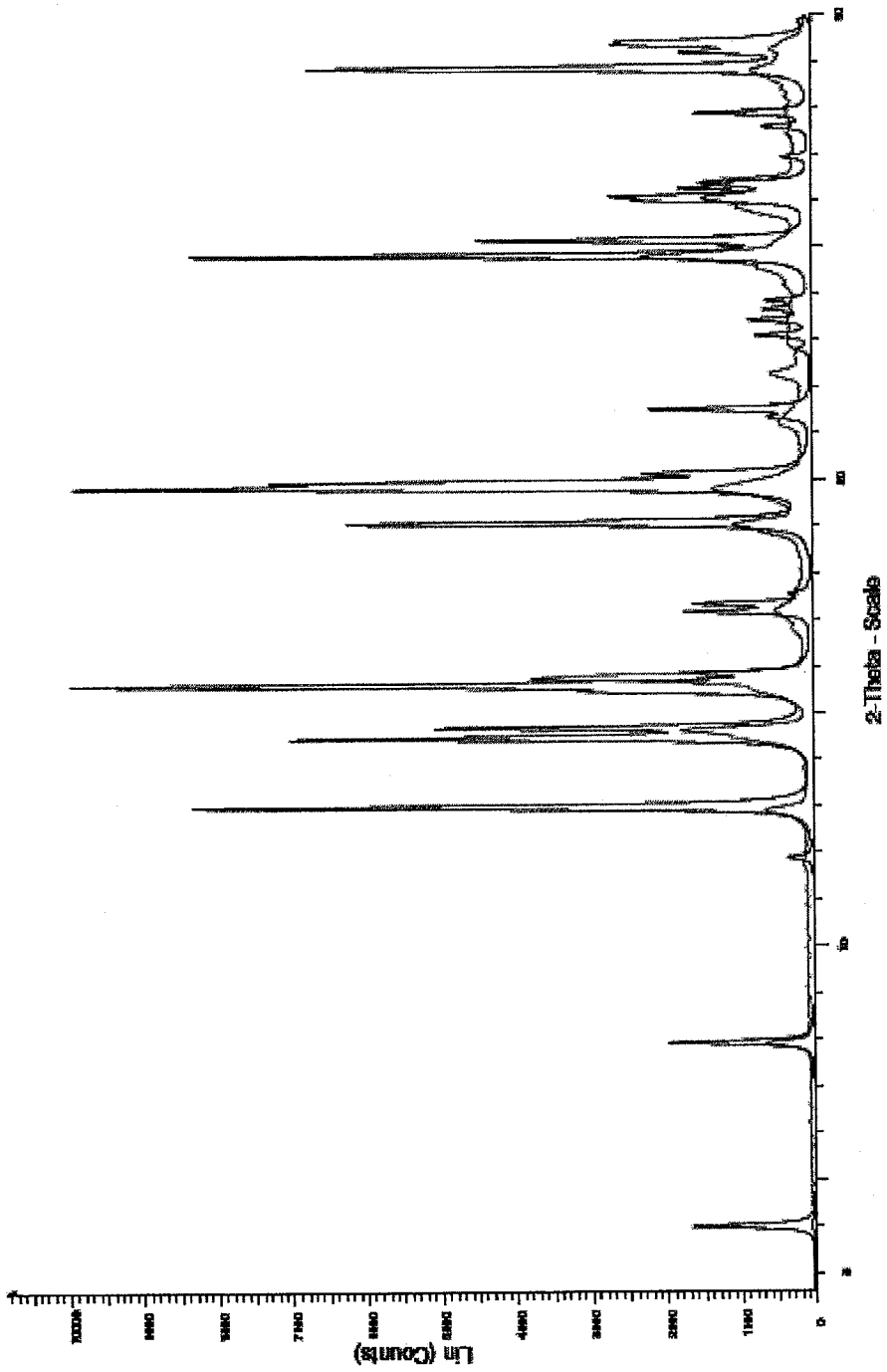


FIG. 14

