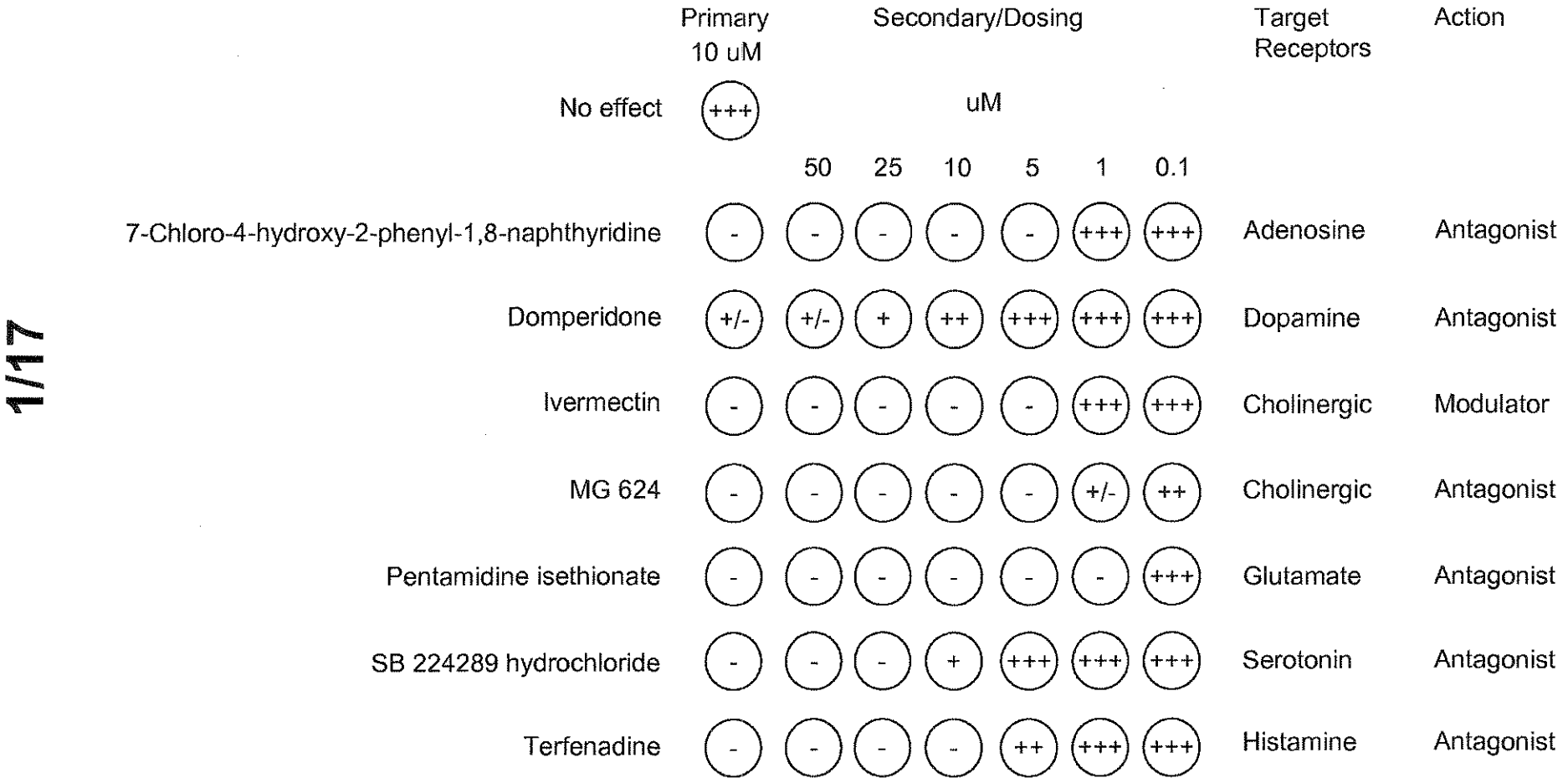

Primary
10 uM
Secondary/Dosing
Target
Receptors
Action
No effect
+++
uM
50
25
10
5
1
0.1
7-Chloro-4-hydroxy-2-phenyl-1,8-naphthyridine
- - - - - +++ +++
Adenosine
Antagonist
Domperidone
+/- +/- + ++ +++ +++ +++
Dopamine
Antagonist
Ivermectin
- - - - - +++ +++
Cholinergic
Modulator
MG 624
- - - - - +/- ++
Cholinergic
Antagonist
Pentamidine isethionate
- - - - - - +++
Glutamate
Antagonist
SB 224289 hydrochloride
- - - + +++ +++ +++
Serotonin
Antagonist
Terfenadine
- - - - ++ +++ +++
Histamine
Antagonist

Figure 1

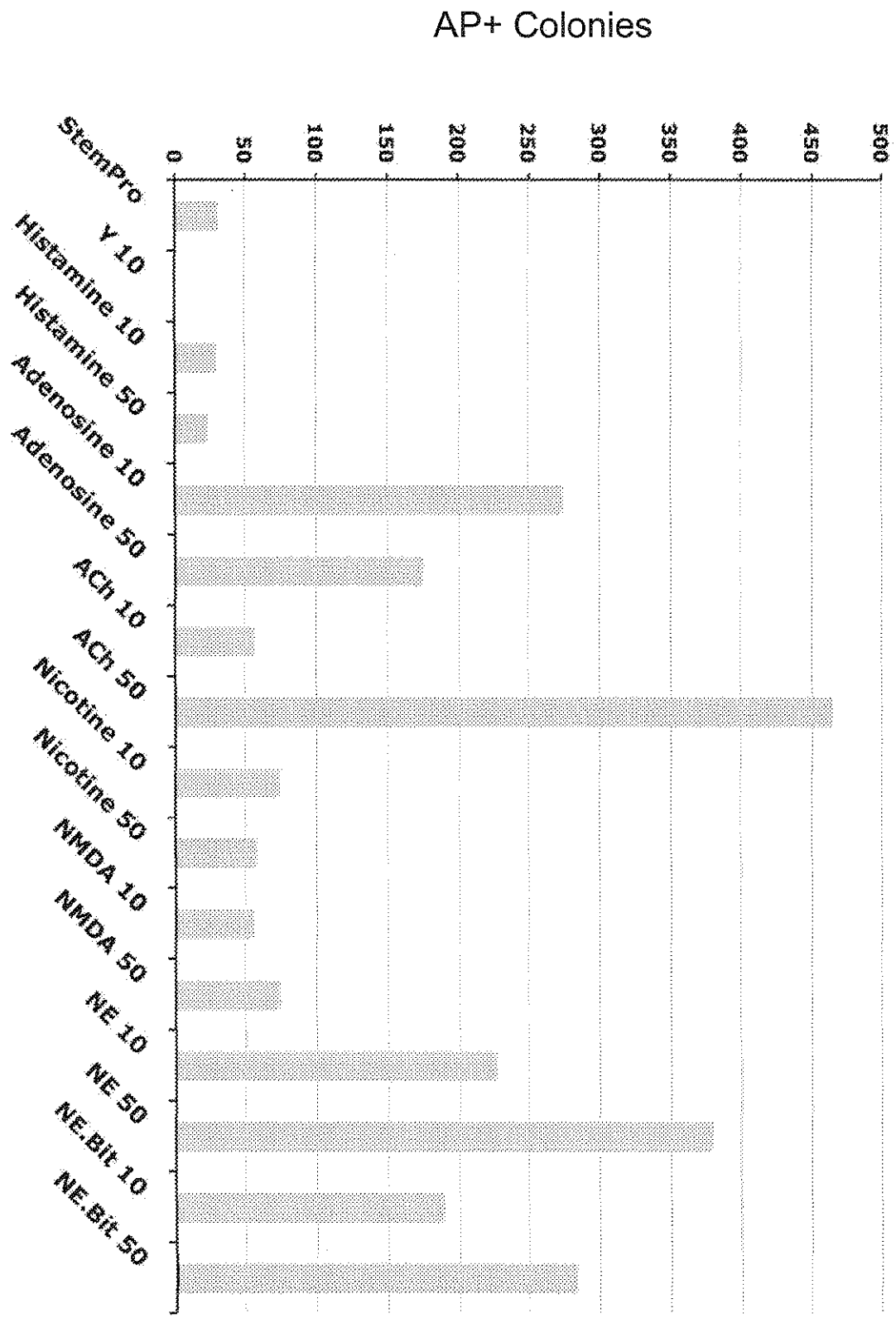

AP+ Colonies
0
50
100
150
200
250
300
350
400
450
500
StemPro
Y 10
Histamine 10
Histamine 50
Adenosine 10
Adenosine 50
ACh 10
ACh 50
Nicotine 10
Nicotine 50
NMDA 10
NMDA 50
NE 10
NE 50
NE.Bit 10
NE.Bit 50

Figure 2

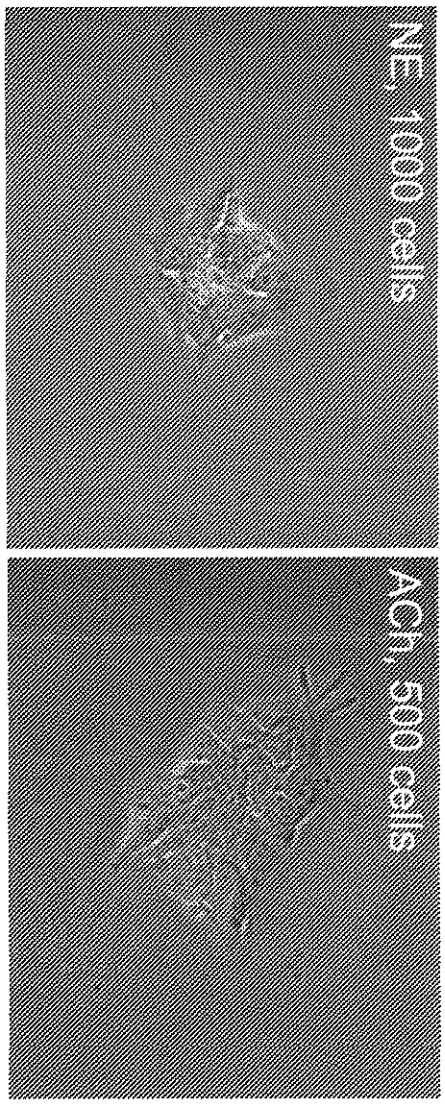

A
AP+ Colonies
600
400
200
0
10000
5000
2000
1000
500
200
Cells Plated
StemPro
NE
ACh
B
NE, 1000 cells
ACh, 500 cells

Figure 3

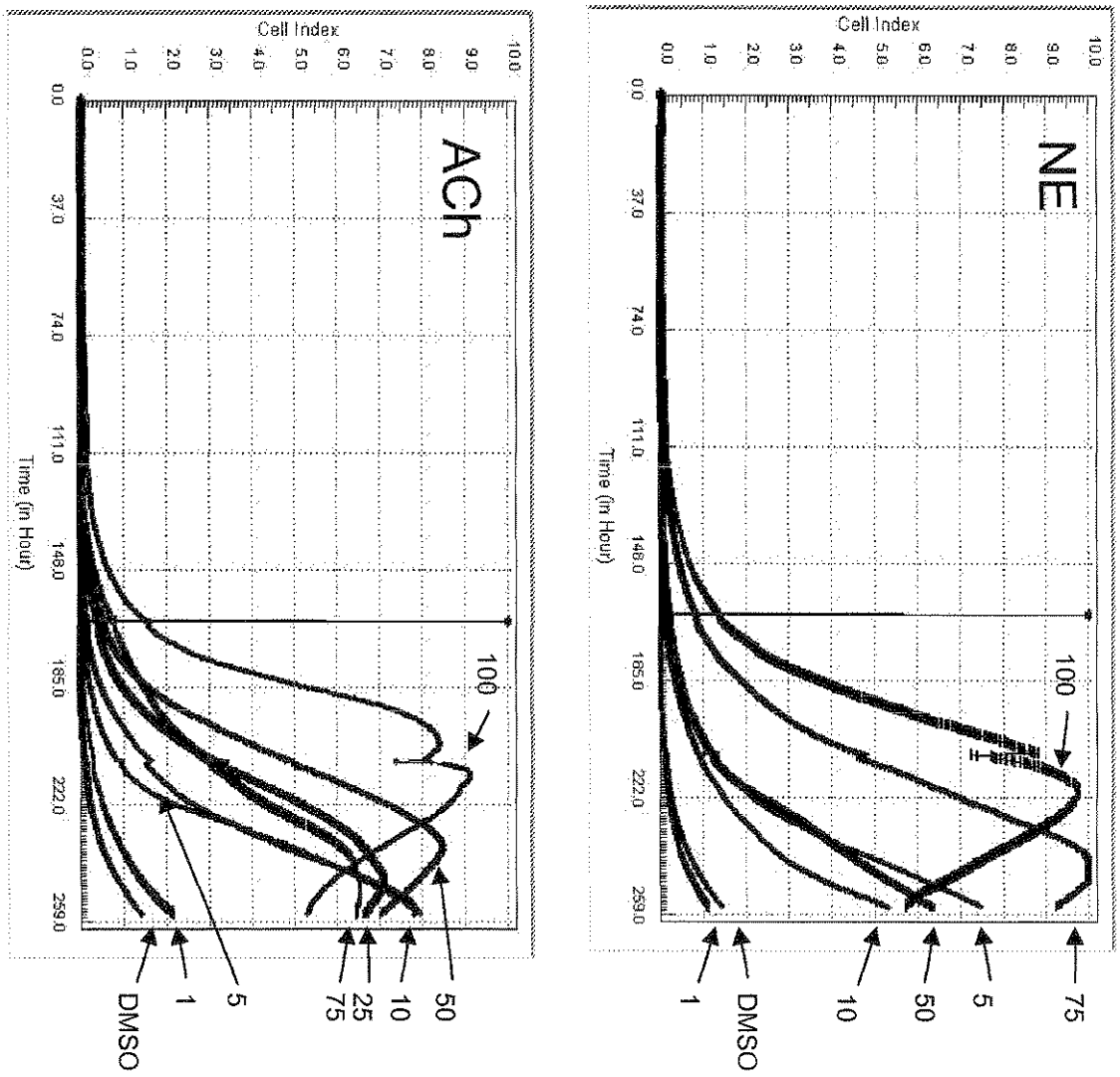
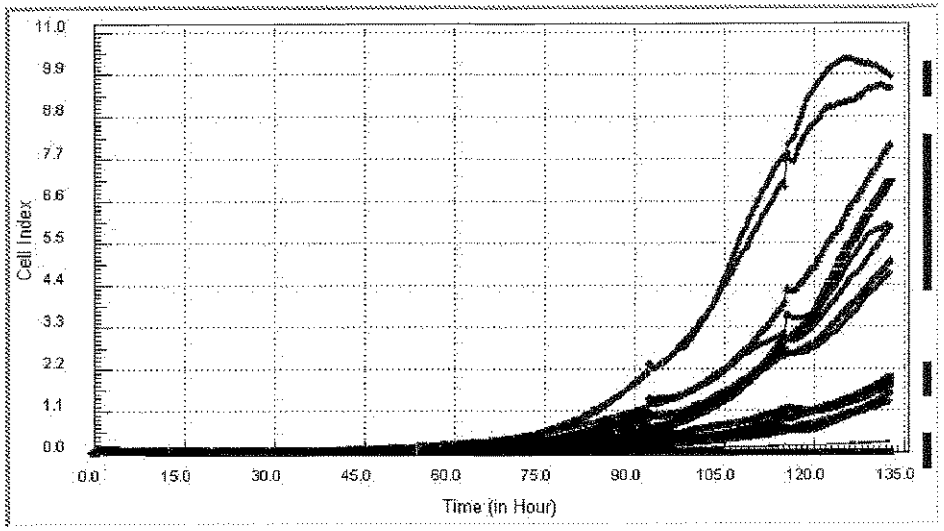


Figure 4

A



NE/Adenosine
NE/ACh

ACh/GABA
NE/GABA
ACh/Adenosine
ACh, NE
GABA/Adenosine

Adenosine, GABA
ACh/Y, NE/Y

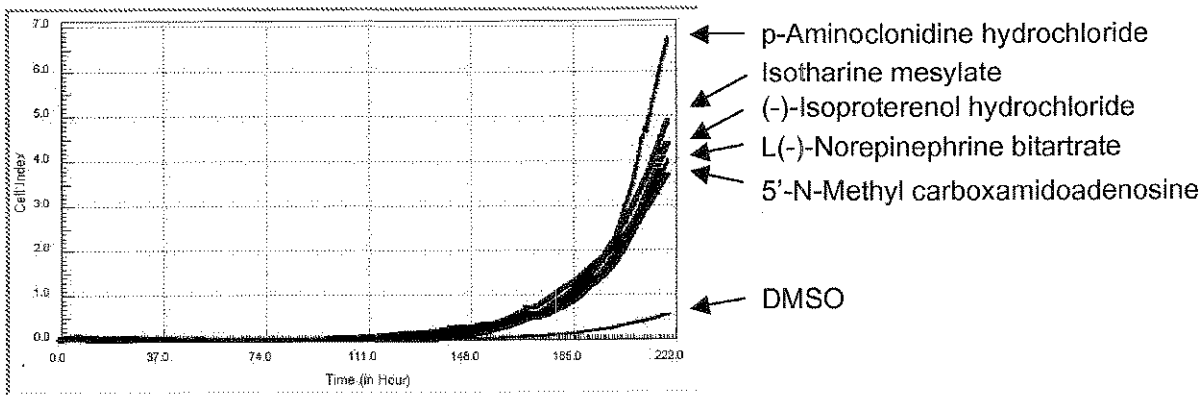
DMSO, Y, GABA/Y
Adenosine/Y

B

	StemPro	NE	ACh	Adenosine	GABA	Y
DMSO	-					
NE	++		+++	+++	++	+
ACh	++	+++		++	++	+
Adenosine	+	+++	++		++	-
GABA	+	++	++	++		-
Y	-	+	+	-	-	

Figure 5

A



B

Name	Class	Action	Selectivity	Description
5'-N-Methyl carboxamidoadenosine	Adenosine	Agonist	A2 > A1	Adenosine receptor agonist with selectivity for A2 over A1
p-Aminoclonidine hydrochloride	Adrenoceptor	Agonist	alpha2	alpha2 Adrenoceptor agonist
L(-)-Norepinephrine bitartrate	Adrenoceptor	Agonist	alpha, beta1	Adrenergic neurotransmitter; vasoconstrictor
Isotharine mesylate	Adrenoceptor	Agonist	beta	beta-Adrenoceptor agonist; bronchodilator
(-)-Isoproterenol hydrochloride	Adrenoceptor	Agonist	beta	beta-Adrenoceptor agonist; increases cytosolic cAMP

C

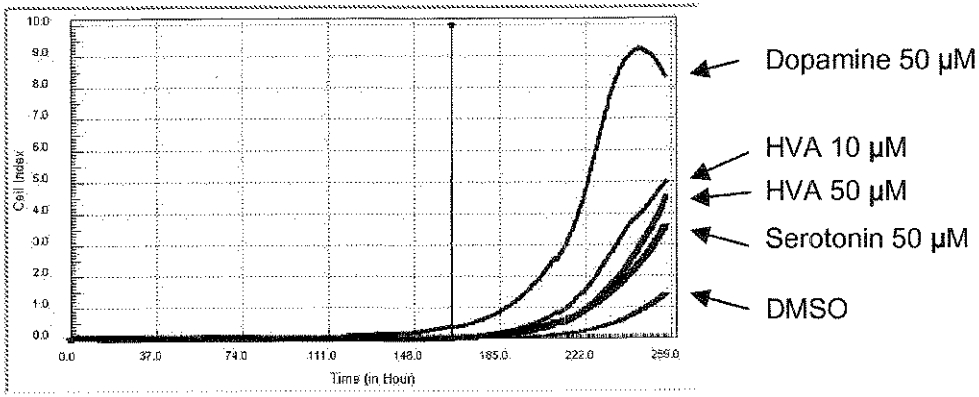


Figure 6

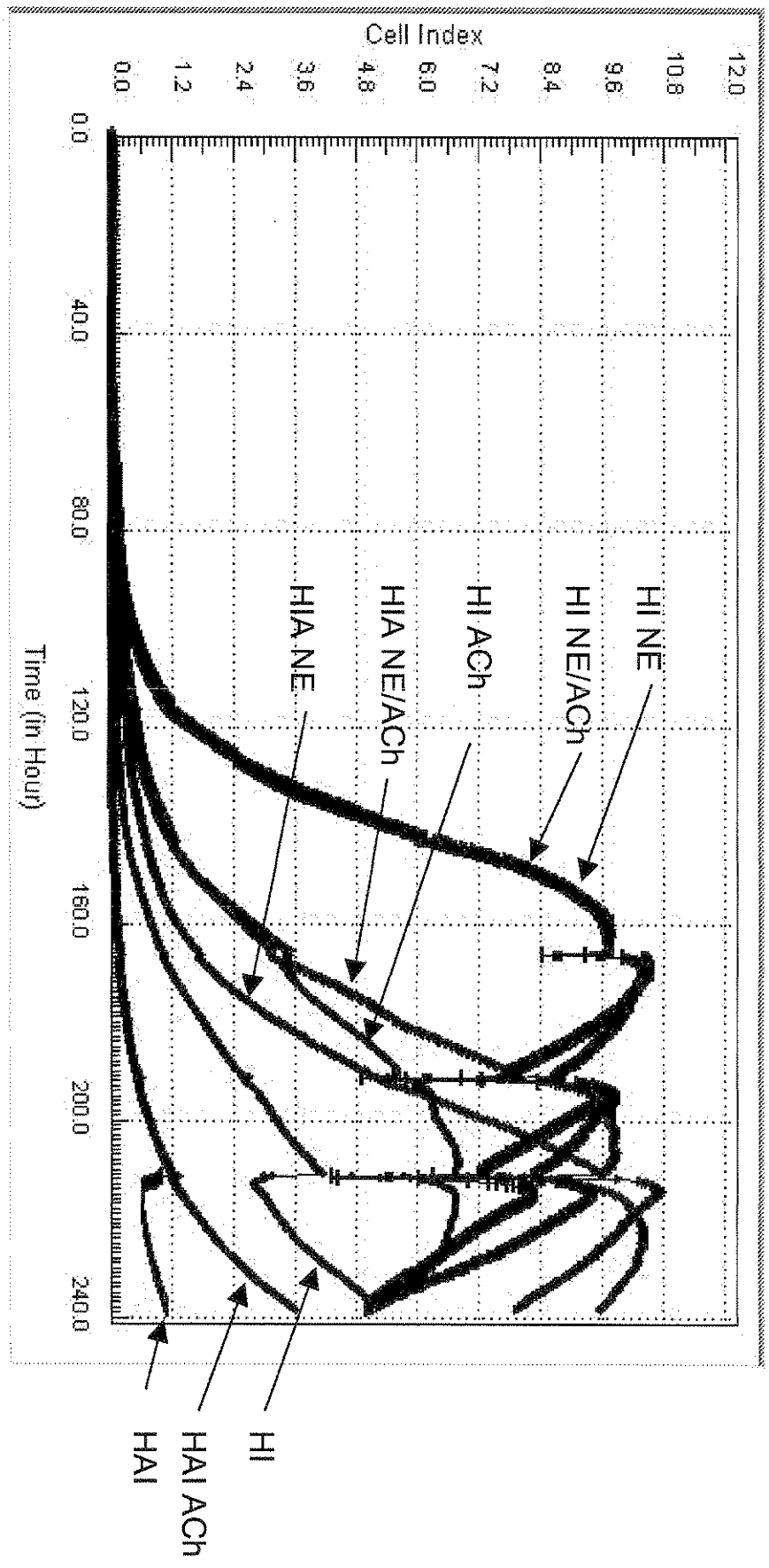

Cell Index
12.0
10.8
9.6
8.4
7.2
6.0
4.8
3.6
2.4
1.2
0.0
0.0
40.0
80.0
120.0
160.0
200.0
240.0
Time (in Hour)
HI NE
HI NE/ACh
HI ACh
HIA NE/ACh
HIA NE
HAI
HAI ACh
HI

Figure 7

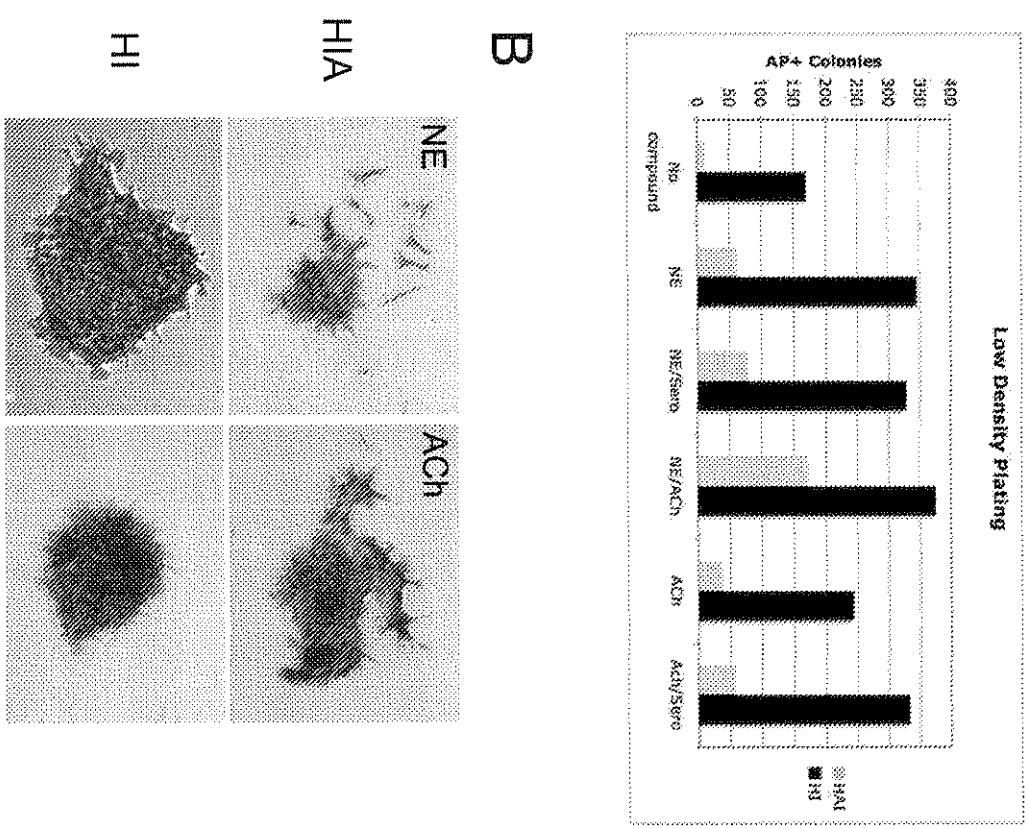
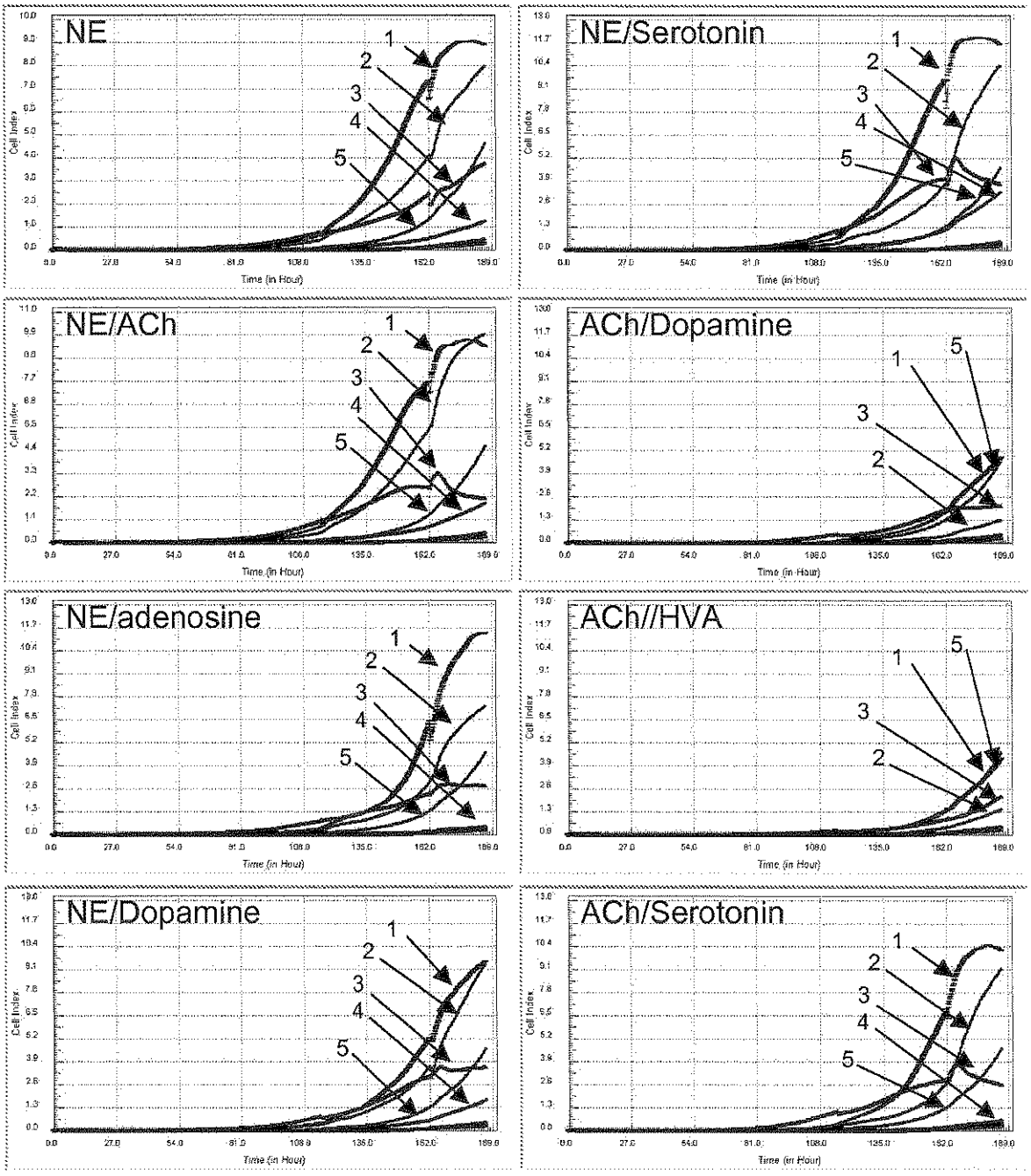

A
Low Density Plating
AP+ Colonies
600
550
300
250
200
150
100
50
0
No cytokine
NE
NE/Sero
NE/ACh
ACh
ACh/Sero
HAI
HI
B
HIA
HI
NE
ACh

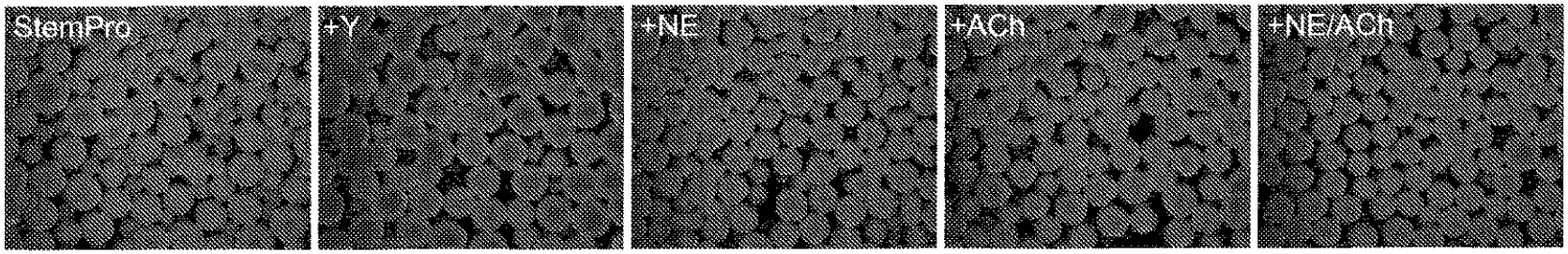
Figure 8



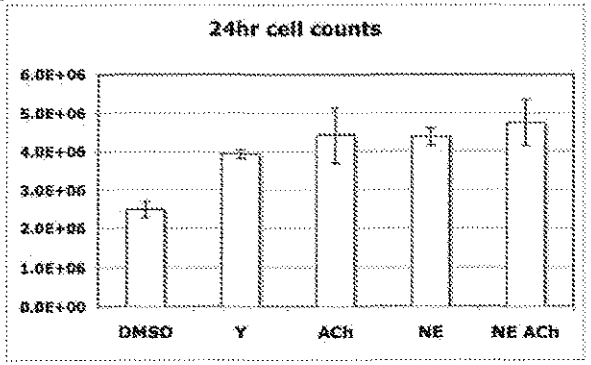
1=HI drug
2=H drug
3=HAI drug
4=I drug
5=HI

Figure 9

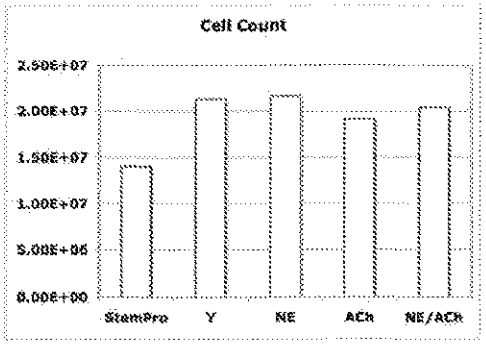
A



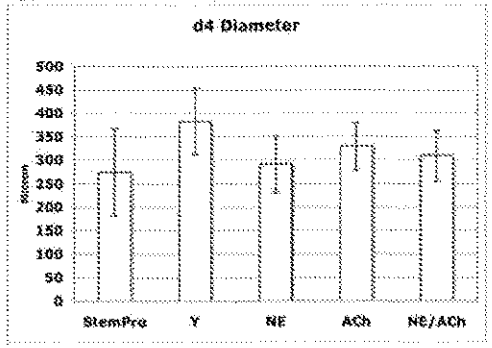
B



C



D



E

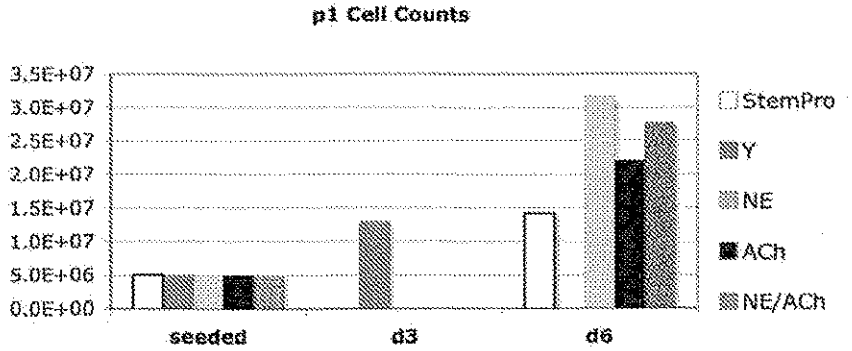
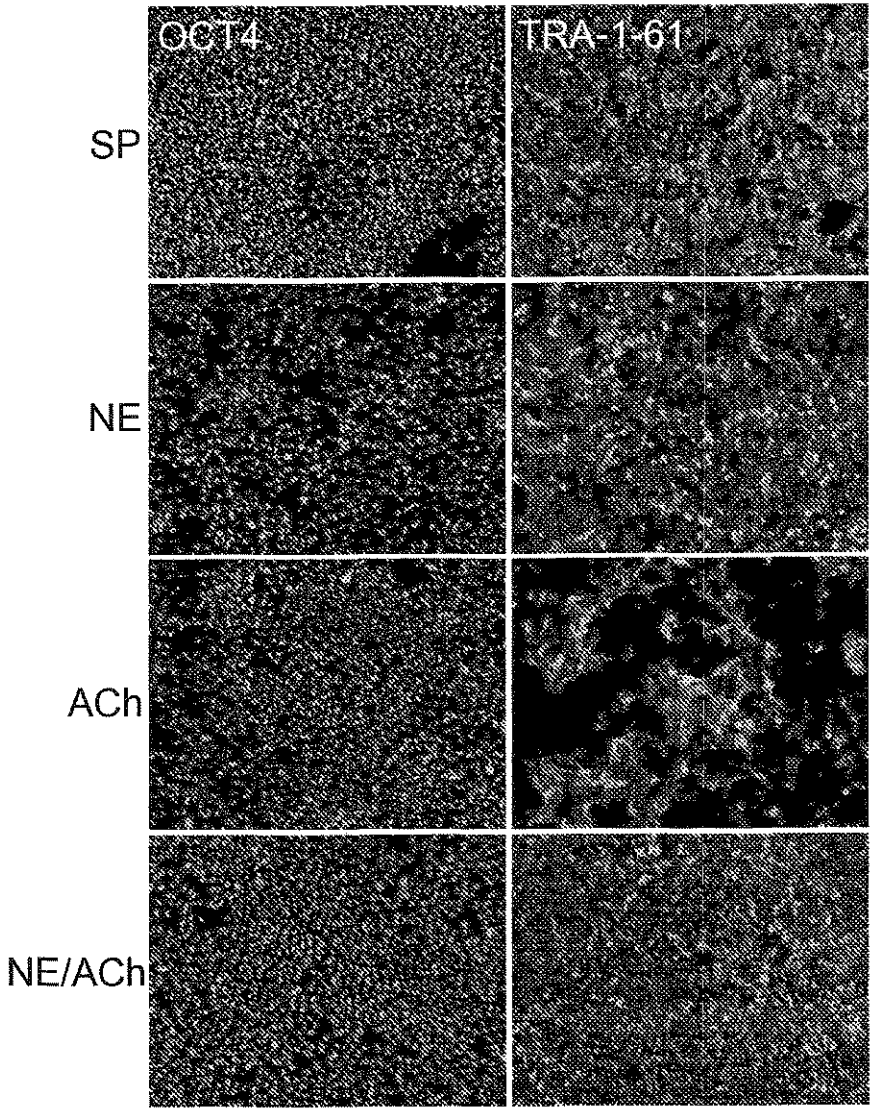
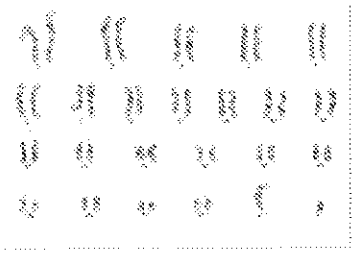


Figure 10





46,XY [20/20]



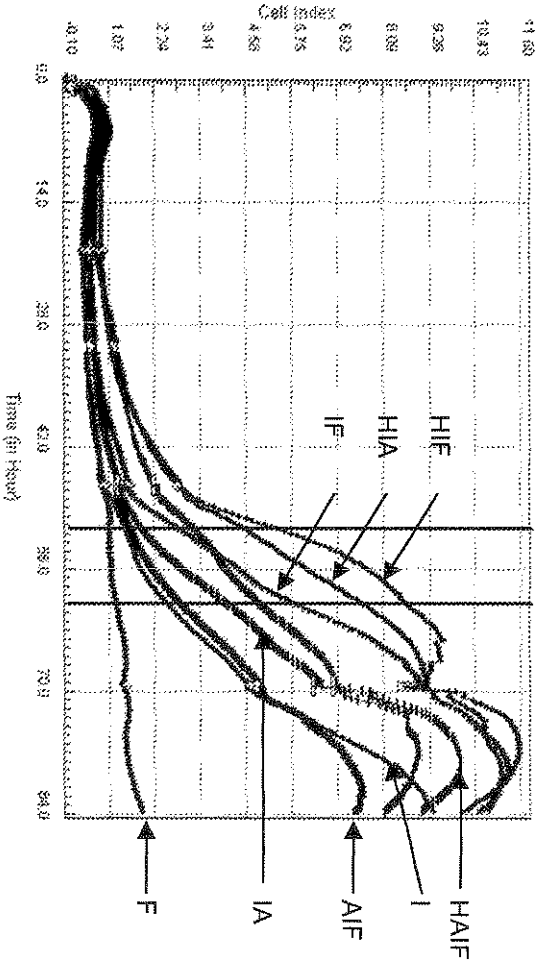
46,XY [19/20]
-21 [1/20]

46,XY [15/20]
47,XY+5 [4/20]
46,XY,t(10;15;19)(q11.2;q15;p13.3),
dup(12)(q13q22),del(17)(q25) [1/20]

46,XY [16/20]
46,XY,del(9)(q10)x2 [1/20]
50,XY,+3,+5,+6,+12 [1/20]
47,XY,+5 [1/20]
45,XY,-20 [1/20]

Figure 11

A


HIF
HIA
IF
HAIF
I
AIF
IA
F
Time (in Hour)

B

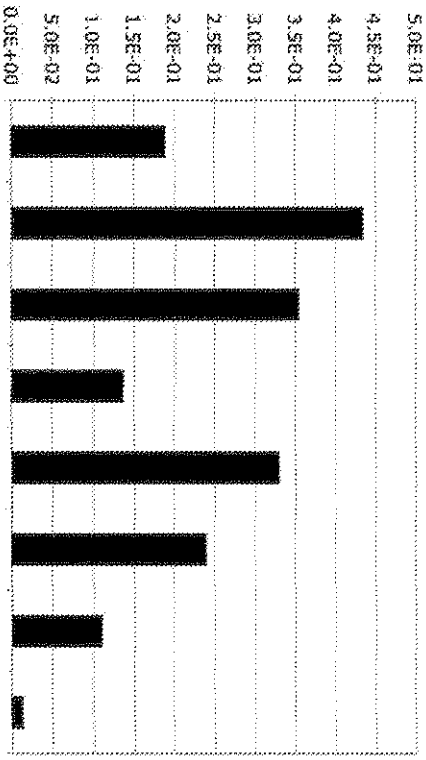

Slope of Cell Index 50-60 hr Post Plating
5.0E-01
4.5E-01
4.0E-01
3.5E-01
3.0E-01
2.5E-01
2.0E-01
1.5E-01
1.0E-01
5.0E-02
0.0E+00
HAIF
HIF
HIA
AIF
IF
IA
I
F

Figure 12

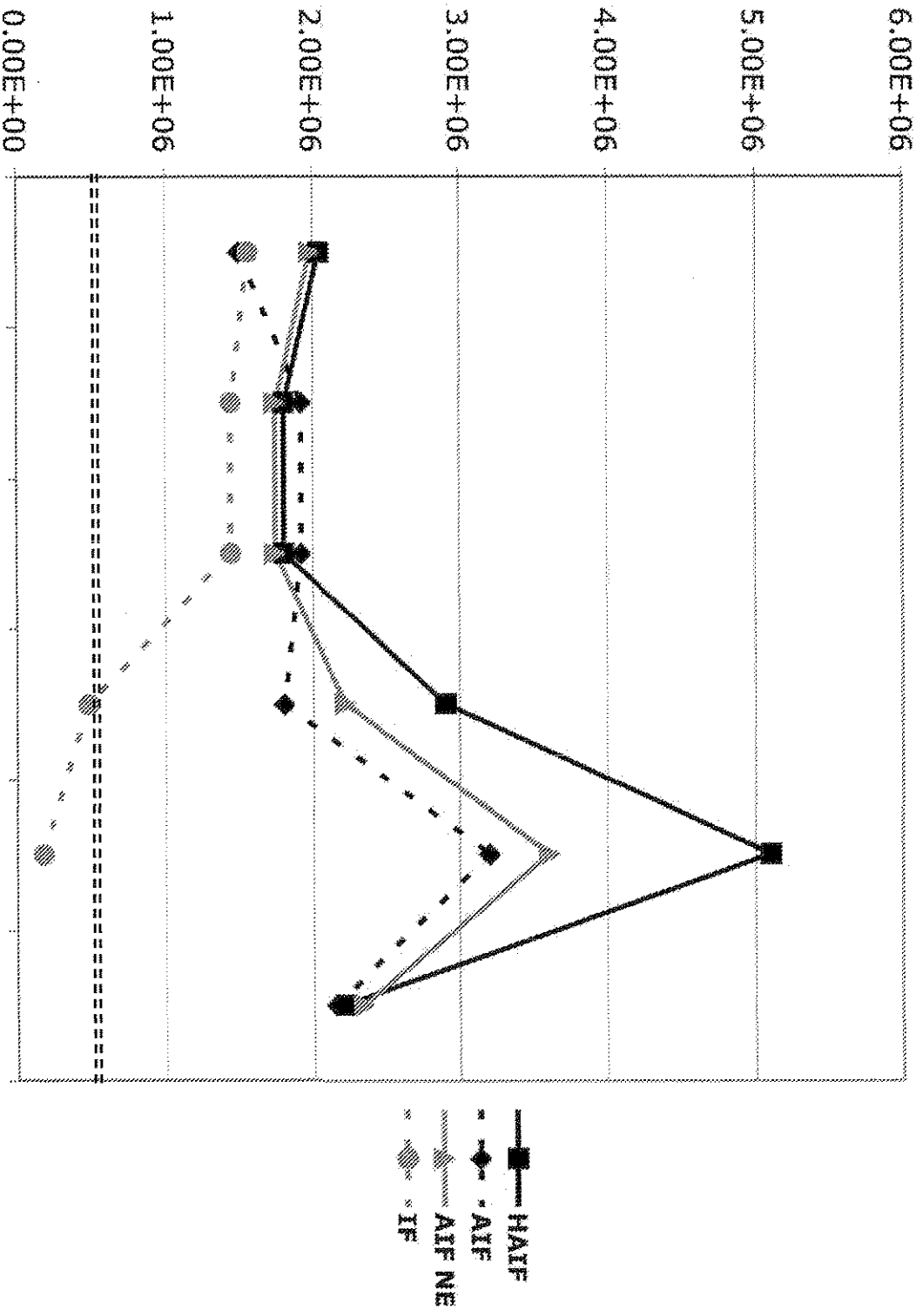

6.00E+06
5.00E+06
4.00E+06
3.00E+06
2.00E+06
1.00E+06
0.00E+00
p0
p1
p2
p3
p4
p5
HAIF
AIF
AIF NE
IF

Figure 13

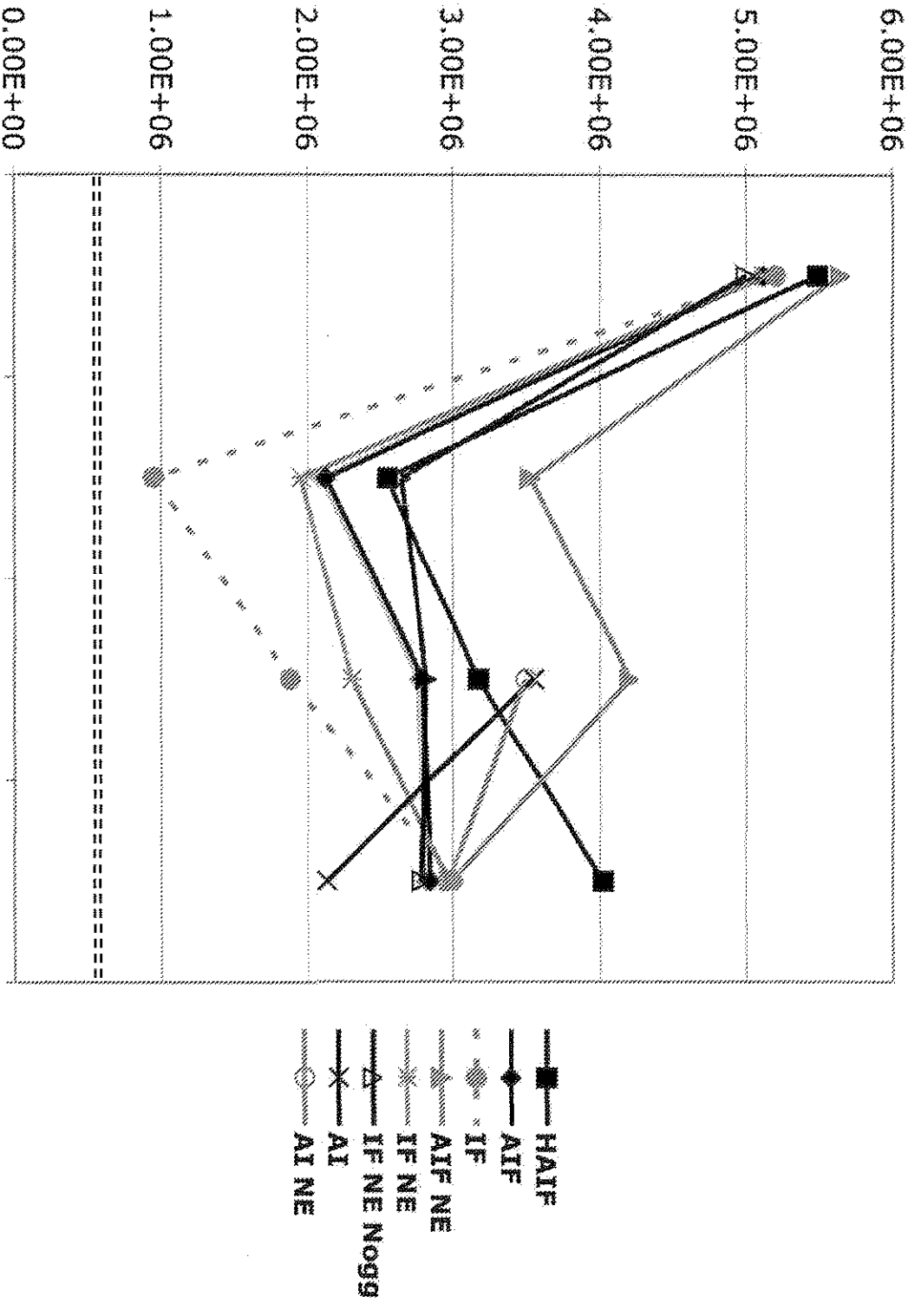

6.00E+06
5.00E+06
4.00E+06
3.00E+06
2.00E+06
1.00E+06
0.00E+00
p0
p1
p3
p4
HAIF
AIF
IF
AIF NE
IF NE
IF NE Nogg
AI
AI NE

Figure 14

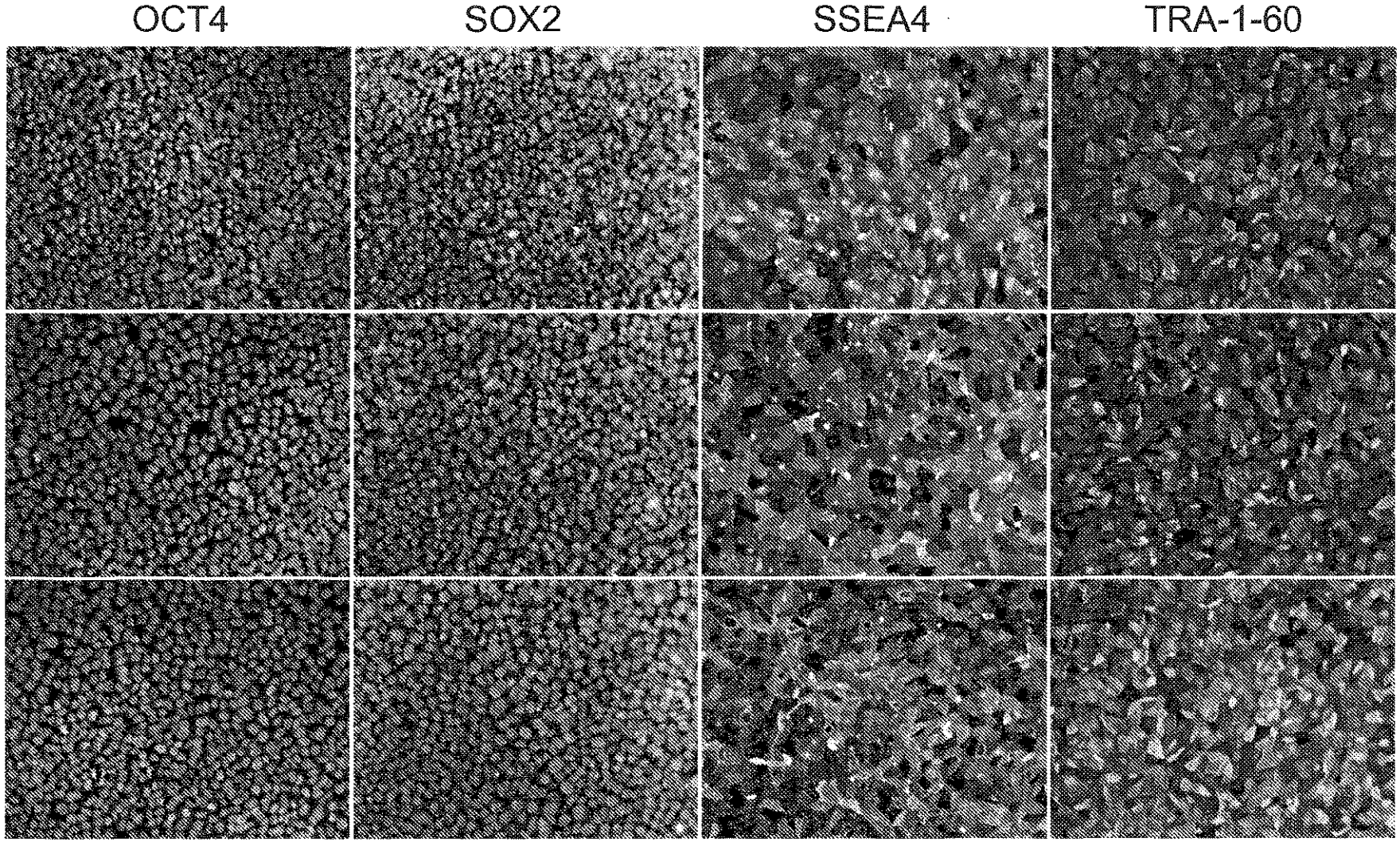


Figure 15

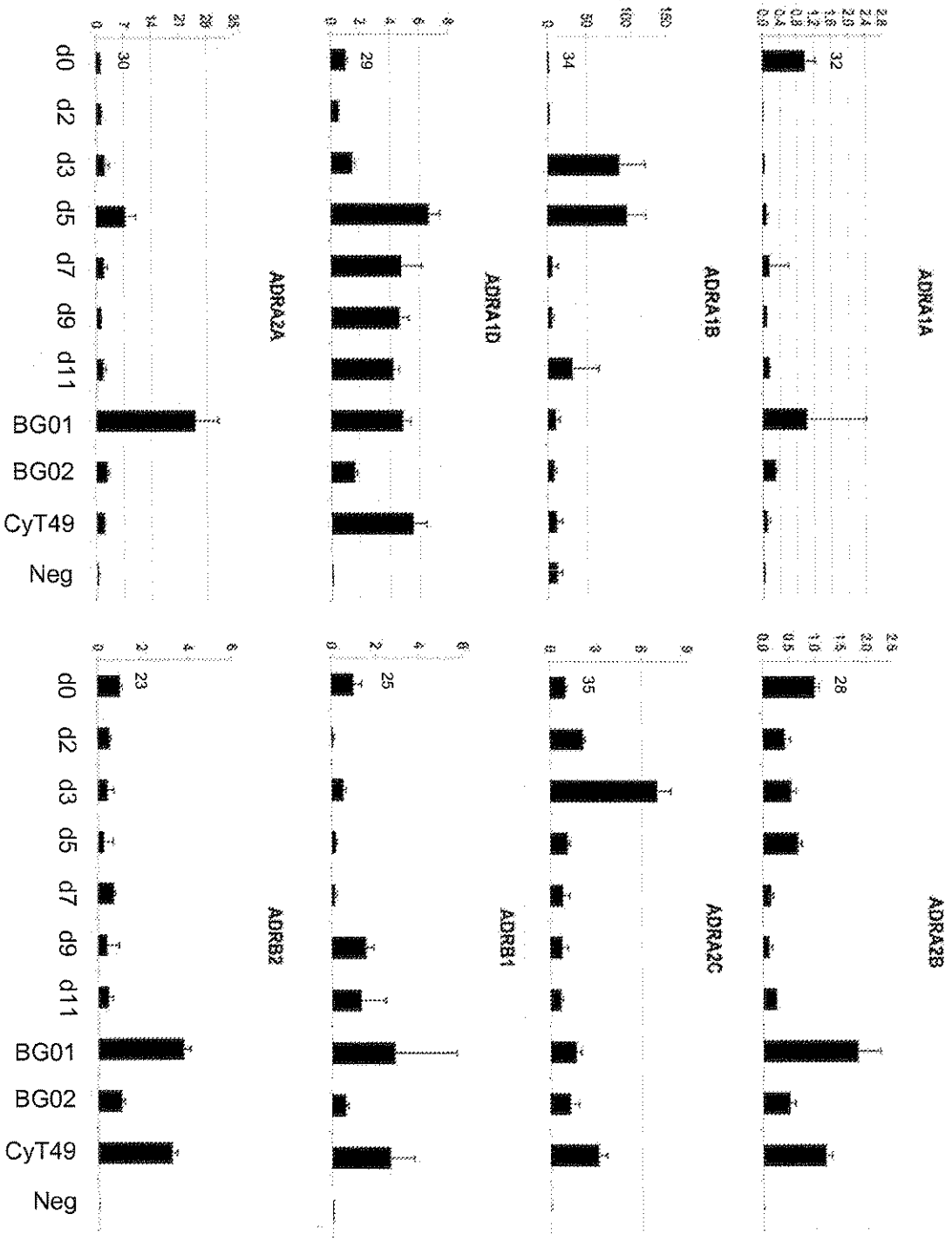
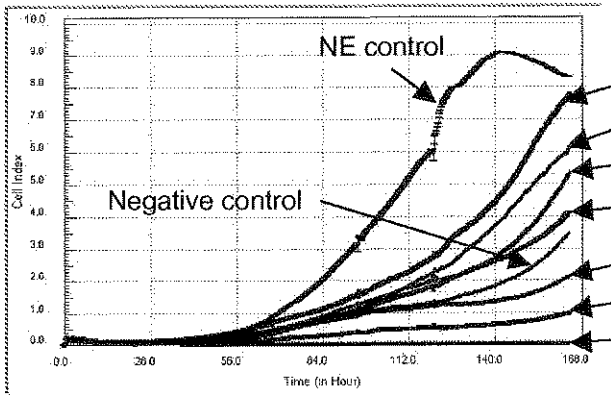

ADRA1A
ADRA1B
ADRA1D
ADRA2A
ADRA2B
ADRA2C
ADRB1
ADRB2
d0
d2
d3
d5
d7
d9
d11
BG01
BG02
CyT49
Neg

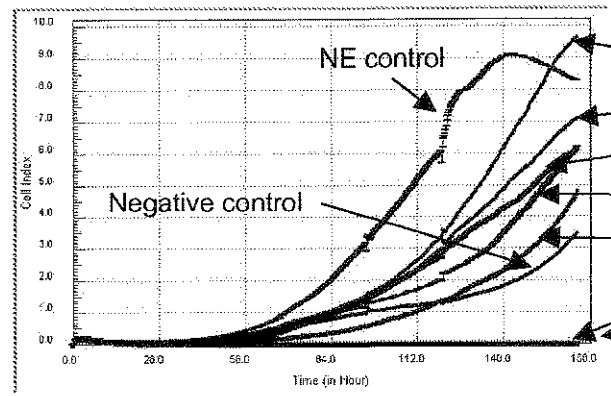
Figure 16

Alpha-Adrenoceptor Inhibitors



Name	Action	Selectivity	Description
Yohimbine hydrochloride	Ant.	α2	α2-Adrenoceptor antagonist isolated from Cortnanthe johimbe
Chloroethylclonidine dihydrochloride	Ant.	α1B	Irreversible α1B-adrenoceptor alkylating agent
Fenspiride hydrochloride	Ant.	α	α-Adrenoceptor antagonist; NSAID
Fiduxosin hydrochloride	Ant.	α1	α1-Adrenoceptor antagonist
L-765,314	Ant.	α1B	Potent, selective α1B adrenoceptor antagonist.
Benoxathian hydrochloride	Ant.	α1	Selective α1 adrenoceptor antagonist
Prazosin hydrochloride	Ant.	α1	Peripheral α1 adrenoceptor antagonist

Beta-Adrenoceptor Inhibitors



Name	Action	Selectivity	Description
(±)-Propranolol hydrochloride	Ant.	β1	β-- Adrenoceptor antagonist
(S)-Propranolol hydrochloride	Blk.	β	Active β-adrenoceptor receptor blocking enantiomer
(S)-(-)-propafenone hydrochloride	Blk.	β	β-Adrenoceptor blocker
(±)-Metoprolol (+)-tartrate	Ant.	β1	β1-Adrenoceptor antagonist
Labetalol hydrochloride	Ant.	β	Competitive β-adrenoceptor antagonist
CGP 20712A methanesulfonate	Ant.	β1	Selective β1-adrenoceptor antagonist
Bromoacetyl alprenolol menthane	Ant.	β	Alkylating β-adrenoceptor antagonist

Figure 17