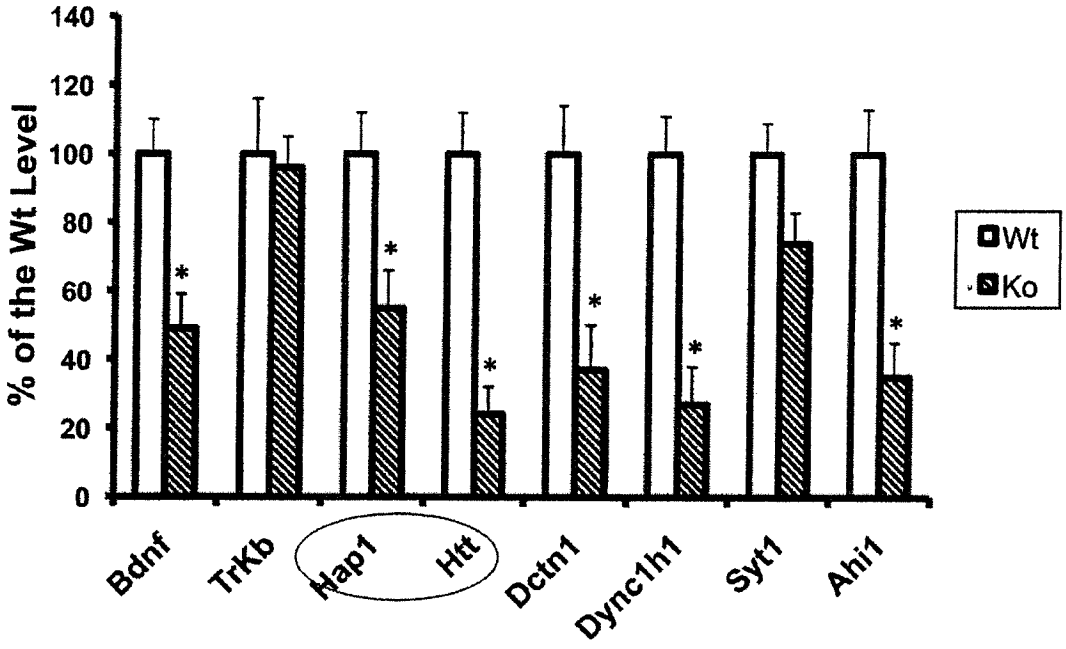

140
120
100
80
60
40
20
0
% of the Wt Level
Wt
Ko
Bdnf
TrKb
Hap1
Htt
Dctn1
Dync1h1
Syt1
Ahi1

Figure 1

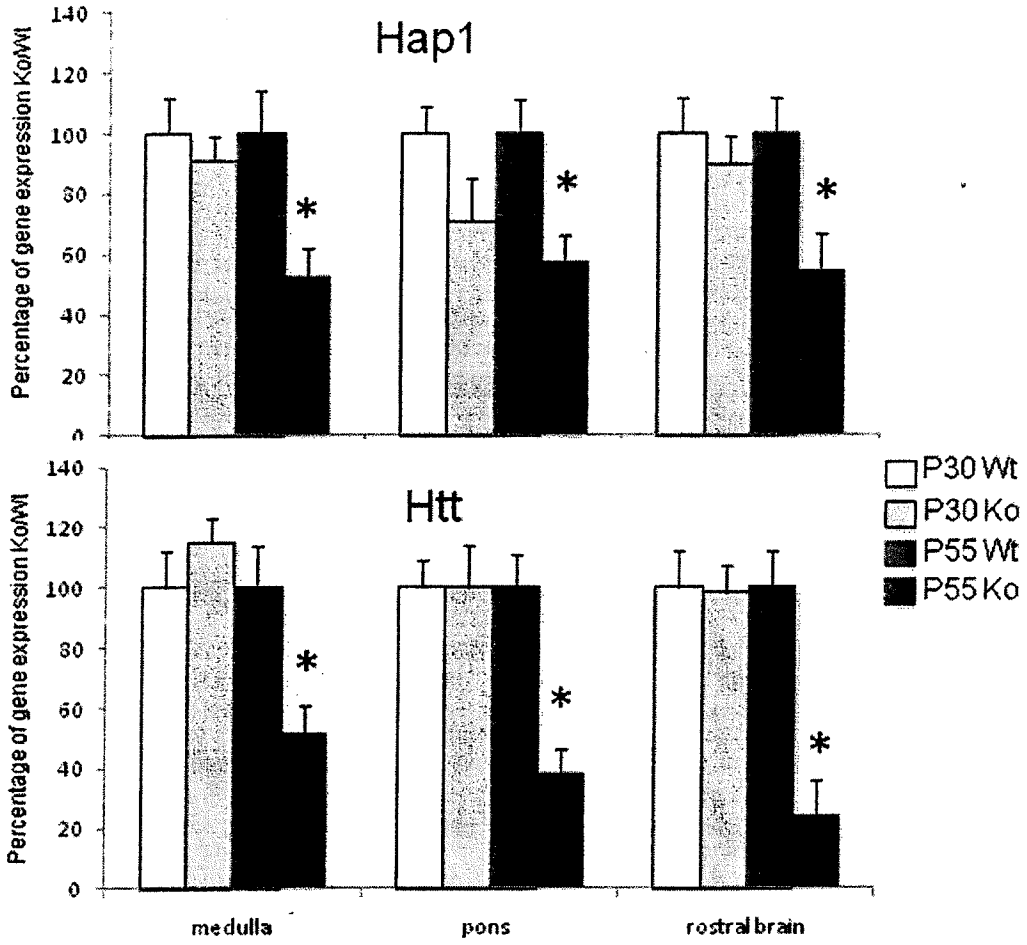

Hap1
Htt
Percentage of gene expression Ko/Wt
140
120
100
80
60
40
20
0
*
P30 Wt
P30 Ko
P55 Wt
P55 Ko
medulla
pons
rostral brain

Figure 2

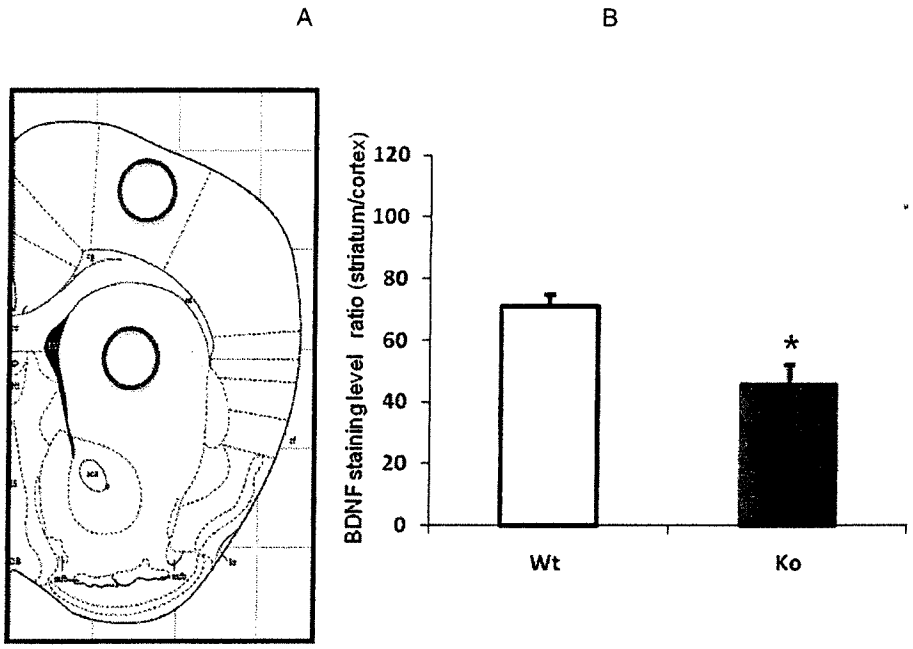


Figure 3

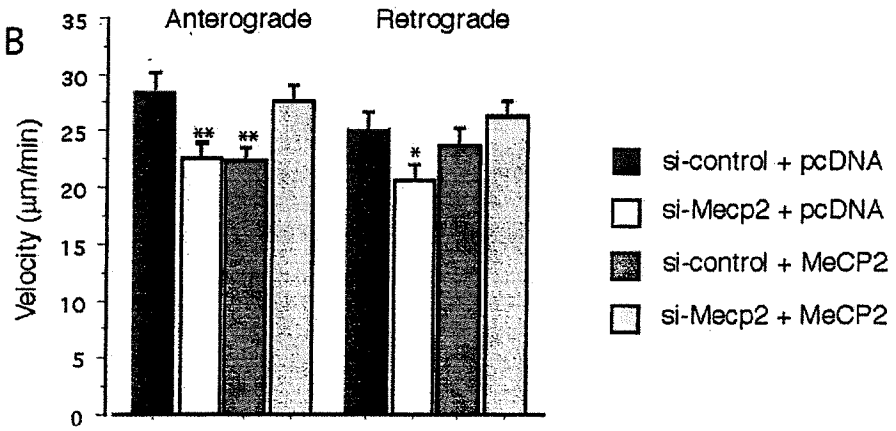


Figure 4

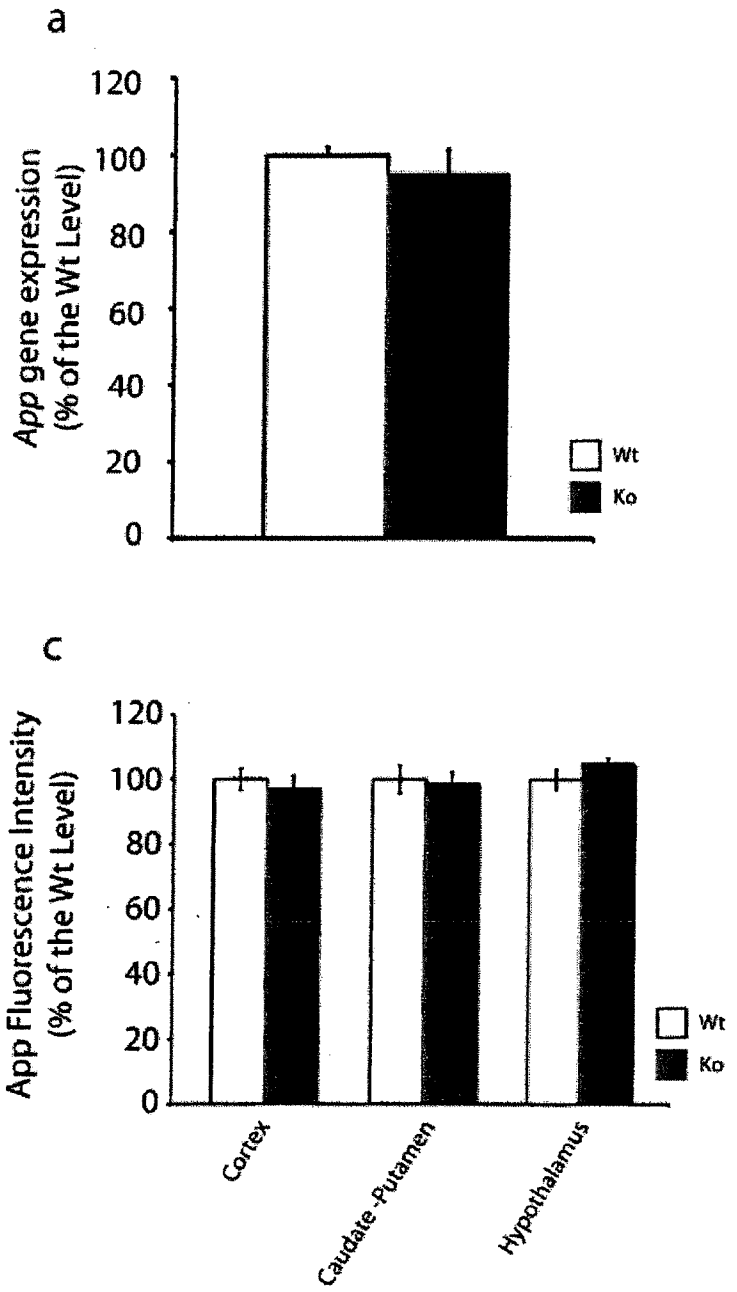

a
120
100
80
60
40
20
0
App gene expression
(% of the Wt Level)
Wt
Ko
c
120
100
80
60
40
20
0
App Fluorescence Intensity
(% of the Wt Level)
Wt
Ko
Cortex
Caudate -Putamen
Hypothalamus

Figure 5

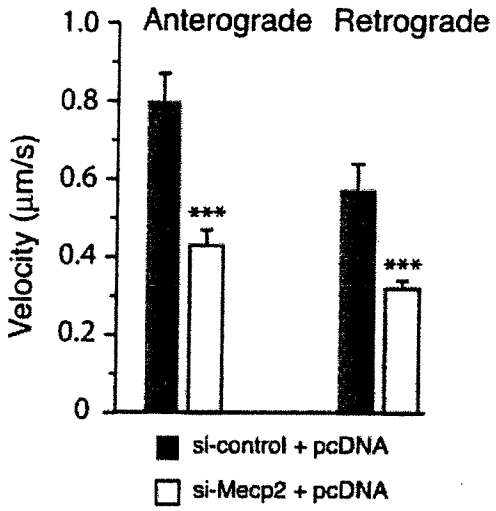

1.0
0.8
0.6
0.4
0.2
0
Velocity (µm/s)
Anterograde
Retrograde
***
***
si-control + pcDNA
si-Mecp2 + pcDNA

Figure 6

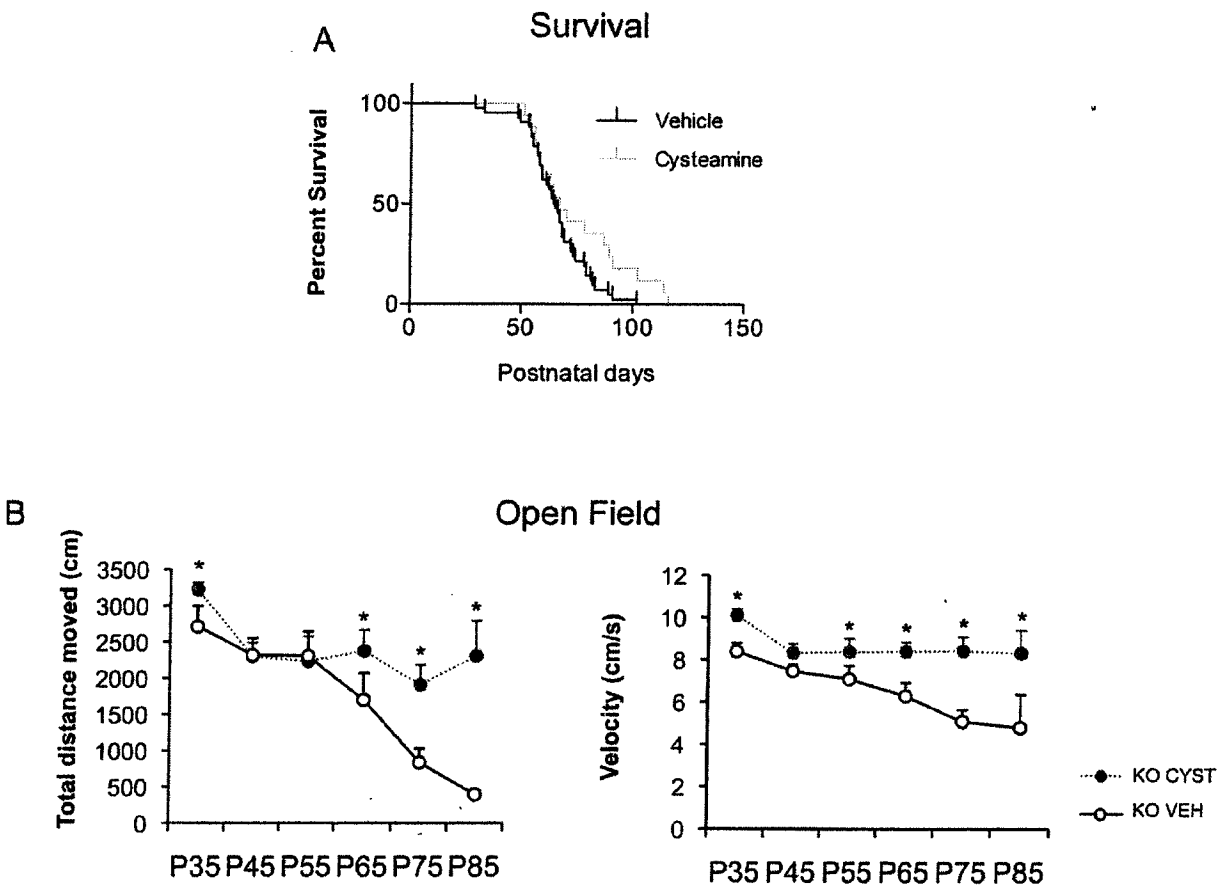

A
Survival
Percent Survival
100
50
0
0
50
100
150
Postnatal days
Vehicle
Cysteamine
B
Open Field
Total distance moved (cm)
3500
3000
2500
2000
1500
1000
500
0
P35 P45 P55 P65 P75 P85
Velocity (cm/s)
12
10
8
6
4
2
0
P35 P45 P55 P65 P75 P85
KO CYST
KO VEH

Figure 7