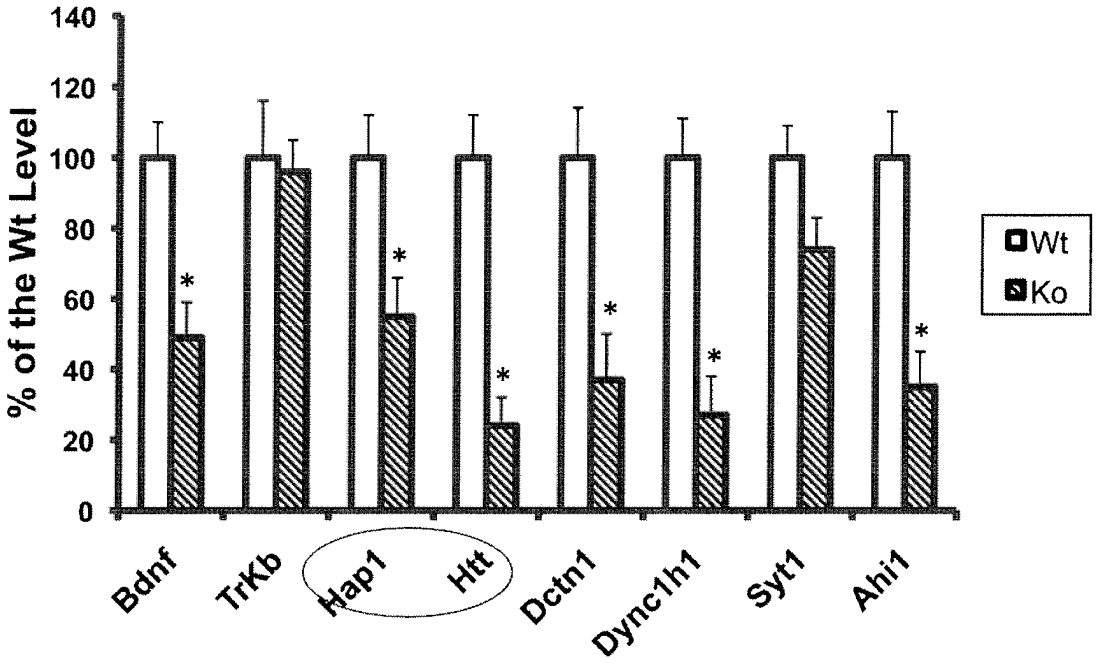

% of the Wt Level
140
120
100
80
60
40
20
0
Bdnf
TrKb
Hap1
Htt
Dctn1
Dync1h1
Syt1
Ahi1
Wt
Ko
*

Figure 1

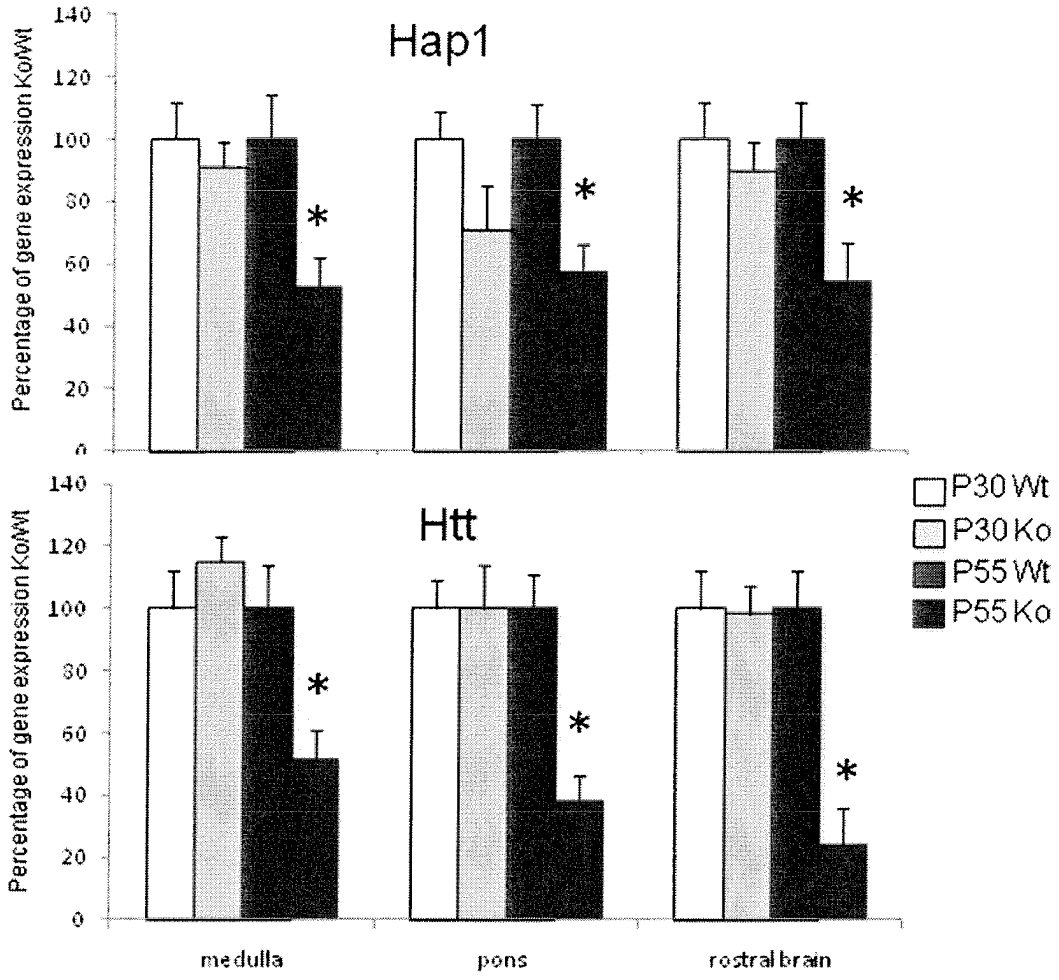

Hap1
Htt
Percentage of gene expression KoWt
140
120
100
80
60
40
20
0
*
medulla
pons
rostral brain
P30 Wt
P30 Ko
P55 Wt
P55 Ko

Figure 2

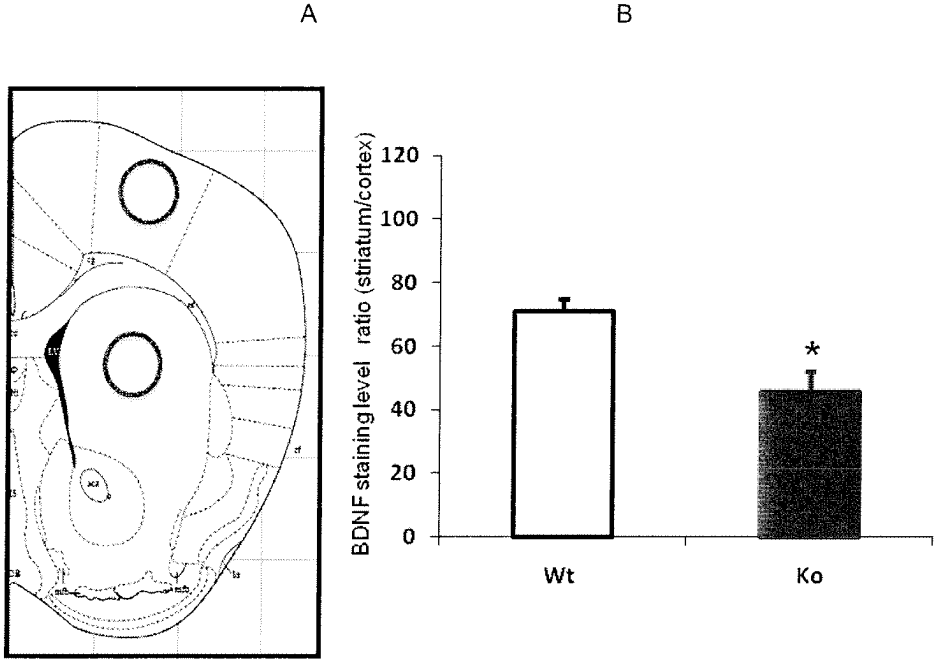


Figure 3

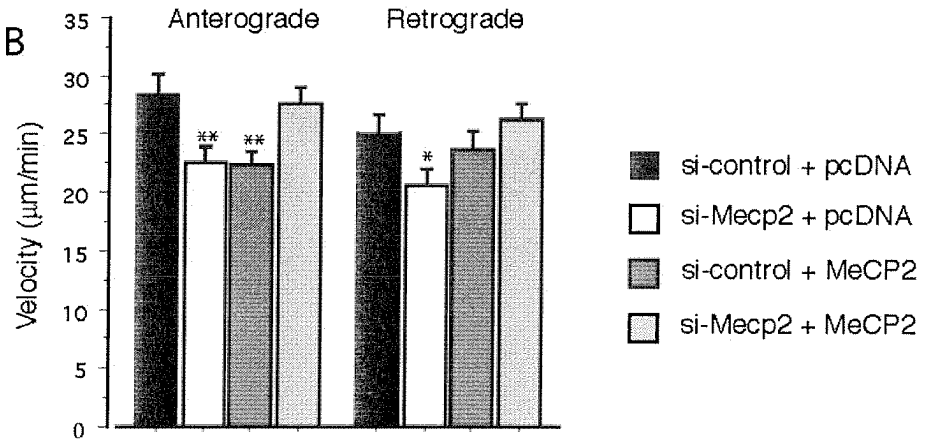


Figure 4

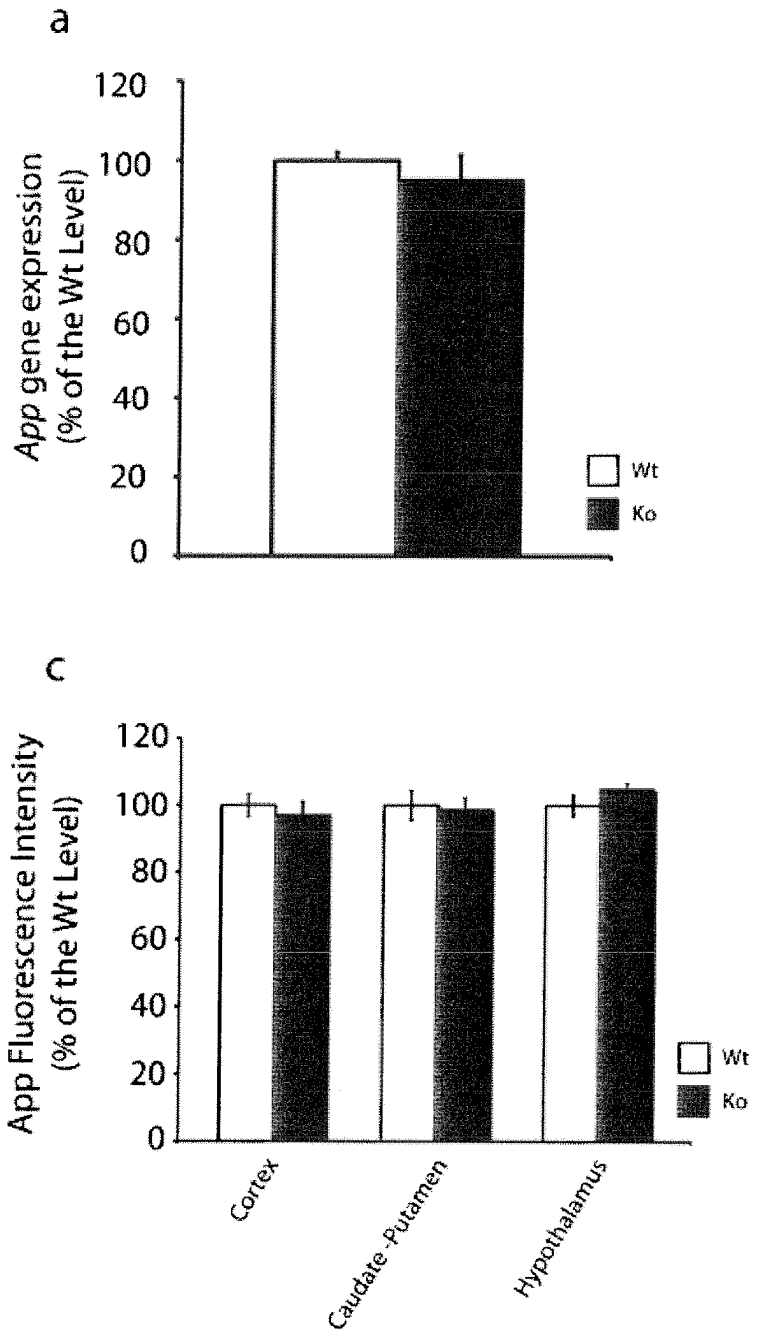

a
App gene expression (% of the Wt Level)
120
100
80
60
40
20
0
Wt
Ko
c
App Fluorescence Intensity (% of the Wt Level)
120
100
80
60
40
20
0
Wt
Ko
Cortex
Caudate-Putamen
Hypothalamus

Figure 5

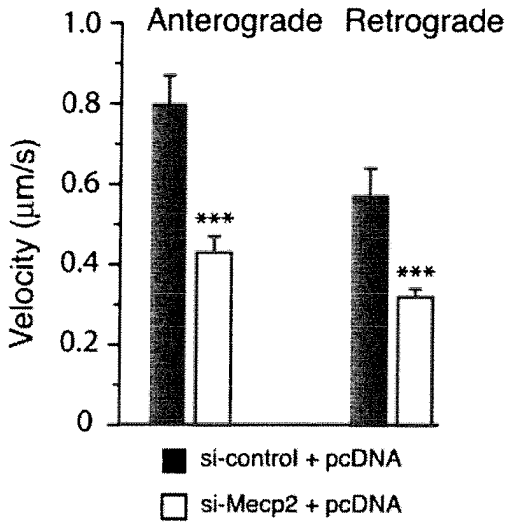

Anterograde
Retrograde
1.0
0.8
0.6
0.4
0.2
0
Velocity (µm/s)
***
***
si-control + pcDNA
si-Mecp2 + pcDNA

Figure 6

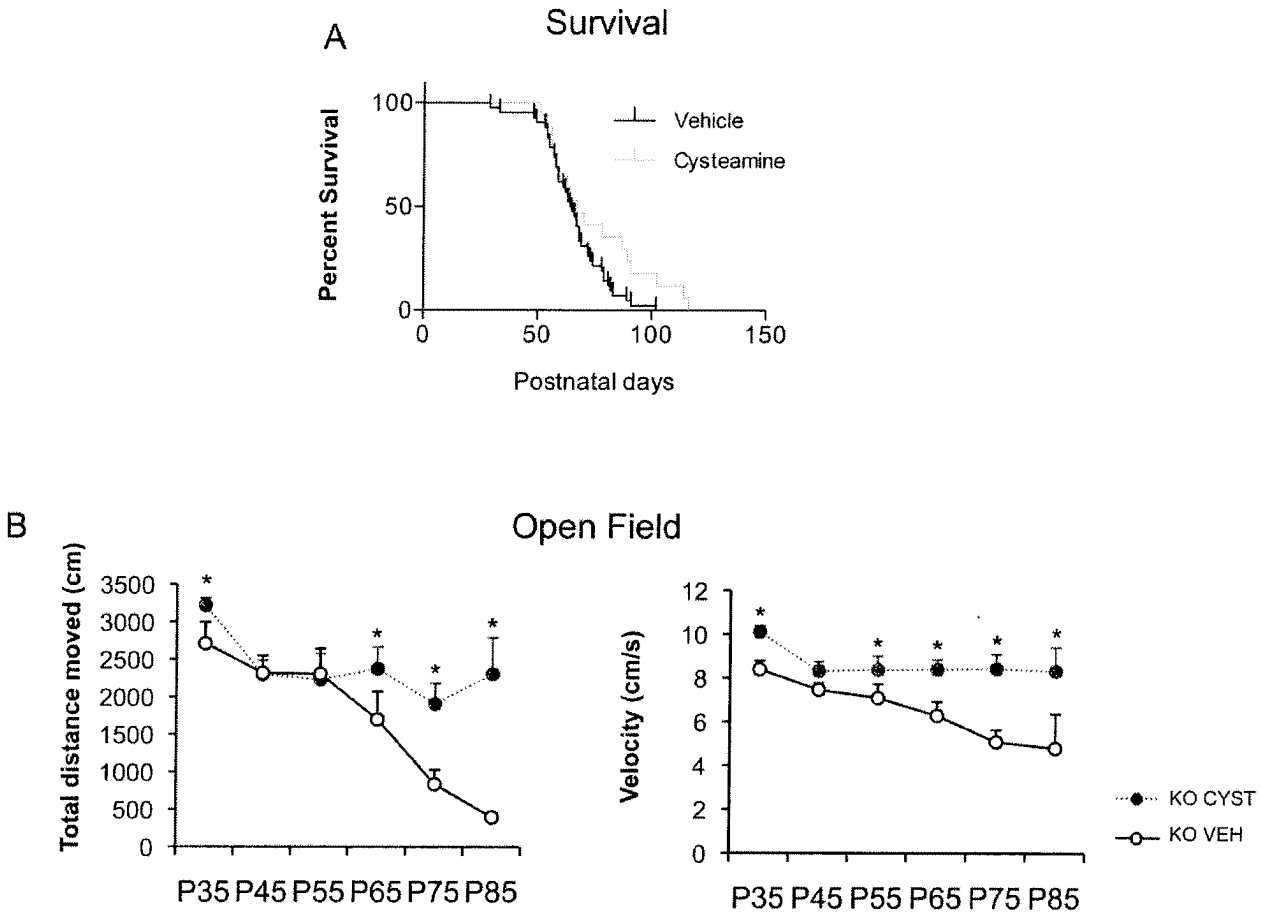

A
Survival
Percent Survival
100
50
0
0
50
100
150
Postnatal days
Vehicle
Cysteamine
B
Open Field
Total distance moved (cm)
3500
3000
2500
2000
1500
1000
500
0
P35 P45 P55 P65 P75 P85
Velocity (cm/s)
12
10
8
6
4
2
0
P35 P45 P55 P65 P75 P85
KO CYST
KO VEH

Figure 7