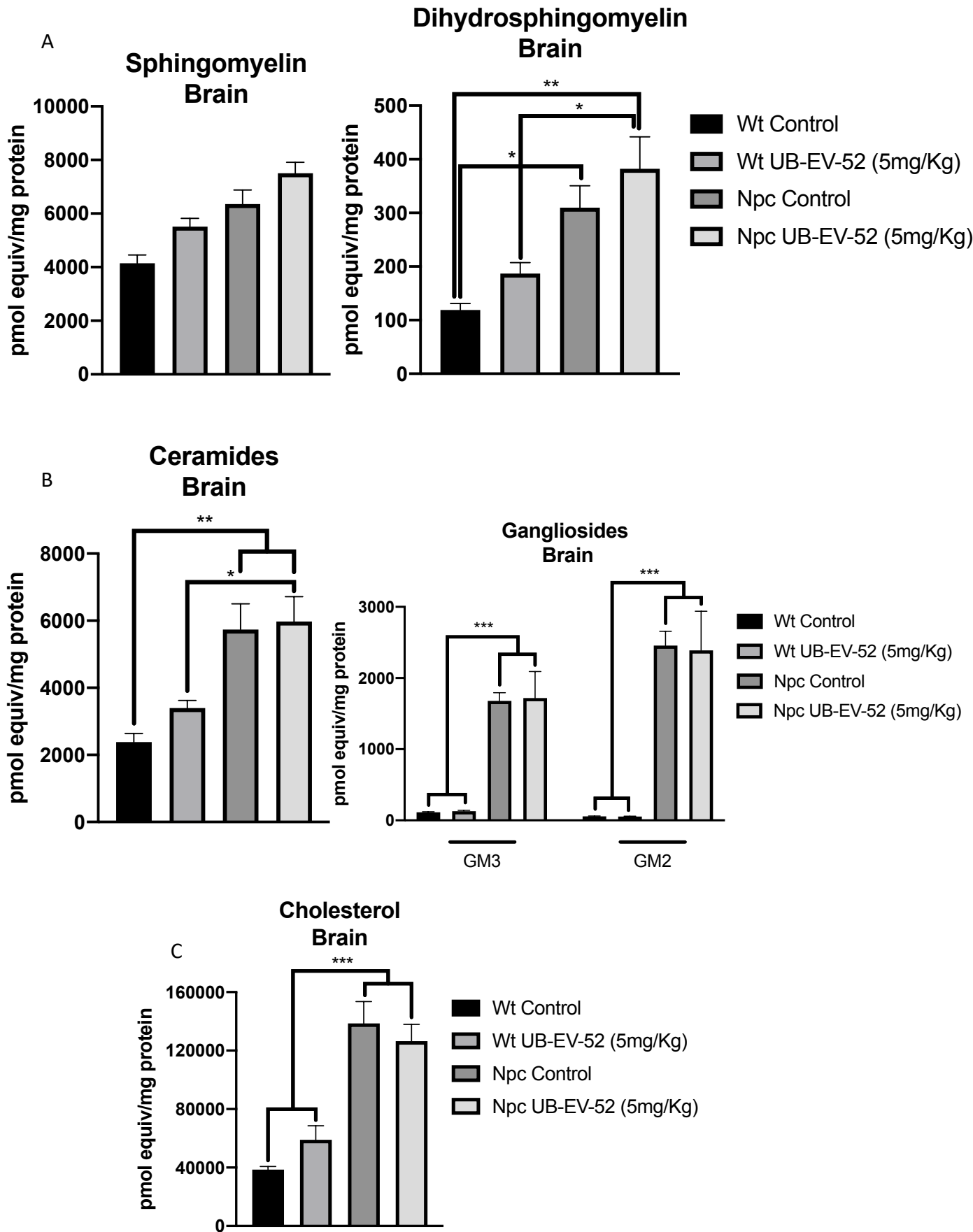


Supplementary Figure S1



Supplementary Figure S2

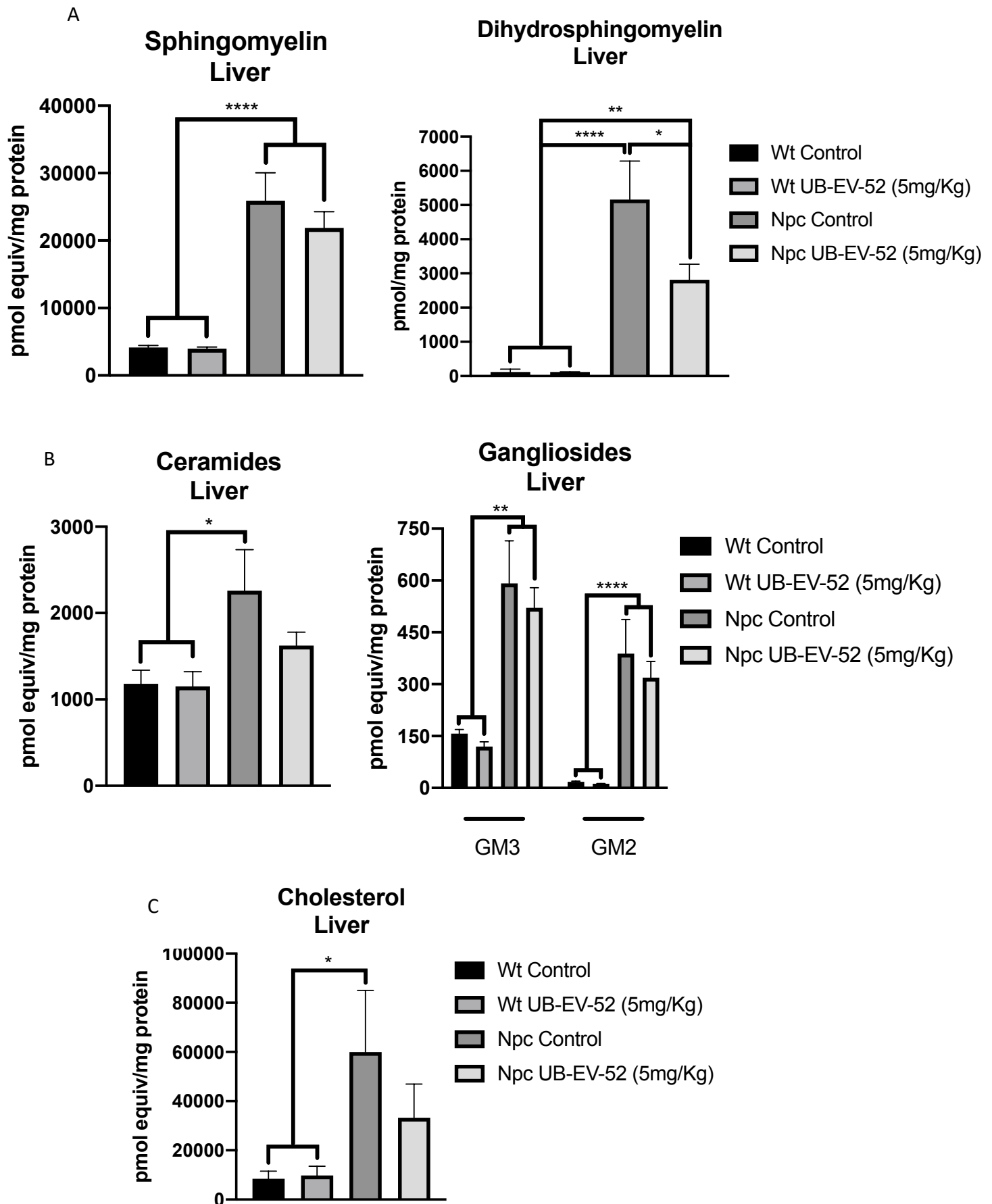


Table S1. Parameters measured in the Open Field Test (OFT). (n): number of events. Results are expressed as a mean $\pm$ Standard error of the mean (SEM). **p <0.01; ****p <0.0001 vs Wt Control. #p <0.05 vs Npc Control.

	Wt Control	Wt UB-EV-52 (5mg/Kg)	Npc Control	Npc UB-EV-52 (5mg/Kg)
Locomotor activity (cm)	3,447.65 $\pm$ 248.64	3,584.27 $\pm$ 219.79	1,359.70 $\pm$ 121.98****	1,832.89 $\pm$ 152.47****#
Distance in zone-Center (cm)	65.72 $\pm$ 10.01	76.73 $\pm$ 10.70	106.64 $\pm$ 1.53****	93.78 $\pm$ 8.75**,#
Distance in zone-Periphery (cm)	3,148.03 $\pm$ 193.09	3,298.81 $\pm$ 162.98	1,410.80 $\pm$ 120.00****	1,802.90 $\pm$ 135.98****#
Rearings (n)	36.30 $\pm$ 6.68	43.80 $\pm$ 2.97	17.25 $\pm$ 5.20	16.38 $\pm$ 2.65
Groomings (n)	2.30 $\pm$ 0.52	3.80 $\pm$ 0.42	0.75 $\pm$ 0.31****	1.63 $\pm$ 0.26****
Defecations (n)	0.70 $\pm$ 0.26	0.50 $\pm$ 0.22	0.38 $\pm$ 0.18	0.50 $\pm$ 0.27
Urinations (n)	0.30 $\pm$ 0.15	0.50 $\pm$ 0.22	0.25 $\pm$ 0.16	0.38 $\pm$ 0.18

Table S2. Parameters measured in the Elevated Plus Maze Test (EPM). (n): number of events. Results are expressed as a mean $\pm$ Standard error of the mean (SEM). **p <0.01; ***p<0.001; ****p <0.0001 vs Wt Control. #p <0.05; ##p <0.01 vs Npc Control.

	Wt Control	Wt UB-EV-52 (5mg/Kg)	Npc Control	Npc UB-EV-52 (5mg/Kg)
Total Distance (cm)	1,492.94 $\pm$ 85.63	1,386.85 $\pm$ 66.07	896.92 $\pm$ 102.80***	1,057.12 $\pm$ 96.57**
Time in Center Zone (sec)	3.87 $\pm$ 0.38	4.25 $\pm$ 0.41	17.72 $\pm$ 1.85	14.12 $\pm$ 1.07
Time in Open Arms (sec)	10.74 $\pm$ 1.68	11.25 $\pm$ 0.87	8.39 $\pm$ 1.05	11.65 $\pm$ 5.18
Time in Closed Arms (sec)	85.39 $\pm$ 1.88	84.50 $\pm$ 0.98	73.87 $\pm$ 2.73	73.30 $\pm$ 6.16
Rearings (n)	54.10 $\pm$ 3.72	44.90 $\pm$ 2.54	8.50 $\pm$ 0.91****	19.88 $\pm$ 2.97****,##
Defecations (n)	0.30 $\pm$ 0.15	0.60 $\pm$ 0.22	0.88 $\pm$ 0.30	0.88 $\pm$ 0.48
Urinations (n)	0.30 $\pm$ 0.15	0.00 $\pm$ 0.00*	0.25 $\pm$ 0.16	0.00 $\pm$ 0.00*,#

Table S3. Antibodies used in Western blot studies.

Antibody	Host	Source/Catalog	WB dilution
Beclin-1	Rabbit	Cell signaling/#3738	1:1000
SYN	Rabbit	Dako/CloneSY38	1:2000
PSD95	Rabbit	Abcam/ab18258	1:1000
LC3B	Rabbit	Cell signaling/#27755	1:1000
LAMP-1	Mouse	Santa Cruz/sc-19992	1:1000
Caspase-3	Rabbit	BD Transduction Laboratories/C31720	1:1000
Actin	Mouse	Sigma-Aldrich/A5441	1:2000
GAPDH	Mouse	Millipore/MAB374	1:5000
Goat-anti-mouse HRP conjugated		Biorad/170-5047	1:2000
Goat-anti-rabbit HRP conjugated		Biorad/170-6515	1:2000

Table 4. Primers and probes used in qPCR studies.

SYBR Green primers

Target	Product size (bp)	Forward primer (5'-3')	Reverse primer (5'-3')
<i>Hmox1</i>	177	TGACACCTGAGGTCAAGCAC	GTCTCTGCAGGGGCAGTATC
<i>Tnf-α</i>	157	TCGGGGTGATCGGTCCCCAA	TGGTTTGCTACGACGTGGGCT
<i>Il-1β</i>	179	ACAGAATATCAACCAACAAGTGATATTCTC	GATTCTTTCCTTGAGGCCCA
<i>Mcp1</i>	159	CCCACTCACCTGCTGCTACT	TCTGGACCCATTCTTCTTG
<i>iNOS</i>	189	GGCAGCCTGTGAGACCTTTG	GAAGCGTTTCGGGATCTGAA
<i>Gfap</i>	125	CCTTCTGACACGGATTGGT	ACATCGAGATCGCCACCTAC
<i>β-actin</i>	190	CAACGAGCGGTTCCGAT	GCCACAGGTTCCATACCCA