

Supplementary Materials

Table S1. Research raw data used for generating Figure 2

Fig. 2A				Fig. 2B			
Brain	WKY	SHRSP	SHRSR	Kidney	WKY	SHRSP	SHRSR
SPHK1/Actin	0,9404566	1,599703	1,31174	SPHK1/Actin	1,080932	1,406951	1,369044
	1,012362	1,137452	0,687535		1,093998	1,285679	1,315465
	1,047181	1,03609	1,394125		0,8250692	1,085446	0,887453
	1,049265	1,283598	1,278426		1,051587	1,002166	0,998396
	1,005049	0,967141	1,072914		1,07878	0,977307	1,061202
	0,9456854	1,112394	0,873326		1,02888	0,964258	1,014346
			0,755608		0,8407536		
Fig. 2C				Fig. 2D			
Brain	WKY	SHRSP	SHRSR	Kidney	WKY	SHRSP	SHRSR
SPHK2/Actin	0,8101965	0,643296	1,167477	SPHK2/Actin	1,152764	0,921135	0,889108
	1,191391	0,660055	0,999382		1,013845	0,991965	0,631717
	0,9984123	0,584177	1,200412		0,8772969	0,827123	1,27449
	0,9954528	0,76696	1,23875		0,9678484	0,94815	1,199867
	0,9640843	0,910754	0,906435		1,056076	1,177415	0,957411
	1,049686	0,932047	1,095093		0,9760756	1,249721	1,147893
	0,9907768	0,907666	0,952241				
Fig. 2E				Fig. 2F			
Brain	WKY	SHRSP	SHRSR	Kidney	WKY	SHRSP	SHRSR
SGPL1/Actin	0,9243483	0,388135	0,696111	SGPL1/Actin	1,252236	1,245379	1,20521
	1,068057	0,478552	1,048796		0,6525998	1,278968	1,164063
	1,007594	0,752438	1,101234		1,095165	1,162333	1,501205
	1,169532	0,732762	1,057485		1,208875	0,838322	1,115
	1,045154	0,638241	0,887821		0,7673701	0,994958	1,054229
	0,9954996	0,650277	1,382341		1,023755	0,93508	1,049997
	0,7898142	0,851075	1,019141			0,876816	0,946886

Table S2. Research raw data used for generating Figure 3

Fig. 3A				Fig. 3B			
Brain	WKY	SHRSP	SHRSR	Kidney	WKY	SHRSP	SHRSR
S1PR1/Actin	1,037206	1,151377	1,995708	S1PR1/Actin	0,8121079	0,928123	1,538605
	1,186173	1,084609	2,177769		1,254523	1,064127	1,680846
	0,921421	1,111785	1,282252		0,933369	0,915357	1,261811
	0,8552	0,776294	1,229511		0,6890233	1,274984	1,323123
	1,056409	0,87505	1,079444		1,332768	1,162414	1,201363
	0,911215	0,643283	0,781973		1,177974	1,216978	1,510164
	1,058344				0,8002344	0,913192	1,200468
	0,974032						
Fig. 3C				Fig. 3D			
Brain	WKY	SHRSP	SHRSR	Kidney	WKY	SHRSP	SHRSR
S1PR2/Actin	0,9720842	0,990761	0,908389	S1PR2/Actin	0,9832389	0,869594	1,236219
	1,122318	0,895176	1,077852		1,072379	0,834955	1,434172
	0,9055977	1,15655	0,846179		0,9443825	0,813219	1,600734
	0,918593	0,841749	1,115427		0,8080044	0,866409	1,526205
	0,9981151	1,000188	1,038811		1,143765	1,137629	1,414281
	1,135551	1,01965	1,106329		1,075171	1,12956	1,112413
	0,9477406	1,209775	1,103557		0,9730599	0,931034	0,995067
Fig. 3E				Fig. 3F			
Brain	WKY	SHRSP	SHRSR	Kidney	WKY	SHRSP	SHRSR
S1PR3/Actin	1,166148	1,161502	1,420357	S1PR3/Actin	0,9760419	1,5664	0,935749
	0,9003416	1,252774	1,422551		1,321565	1,681744	1,212494
	0,9974293	1,296696	1,116424		0,7023931	1,477414	0,96066
	0,9360809	1,224871	1,30212		1,243754	0,533232	0,916005
	0,9879002	1,076159	1,43727		1,143428	0,585973	0,918348
	0,9056146	1,523401	1,393428		0,9632587	0,815736	1,01134
	1,106485	1,632333	1,140901		0,6495588	0,810117	1,052952

Table S3 Research raw data used for generating Figure 4

Fig. 4A				Fig. 4B			
Brain	WKY	SHRSP	SHRSR	Brain	WKY	SHRSP	SHRSR
CerS1 mRNA expression	1,058	1,999	0,859	CerS2 mRNA expression	1,159	1,37	0,343
	0,892	1,511	1,377		1,429	1,454	0,66
	1,06	1,359	0,786		0,787	0,741	0,943
	0,848	1,756	1,235		0,768	1,114	0,552
	1,18	1,09	0,755		0,961	1,074	0,425
			1,126		1,04		0,655

Fig. 4C				Fig. 4D			
Kidney	WKY	SHRSP	SHRSR	Kidney	WKY	SHRSP	SHRSR
CerS2 mRNA expression	0,894	0,76	0,579	CerS6 mRNA expression	0,881	0,703	0,594
	1,007	0,878	0,81		0,902	0,718	0,487
	0,994	0,917	0,776		1,055	0,743	0,516
	1,117	0,913	0,672		1,193	0,814	0,652
	1,269	0,843	0,491		0,9	0,503	0,534
	0,788	0,679			1,111	0,536	0,435

Table S4. Research raw data used for generating Figure 5

Fig. 5A				Fig. 5B			
Brain	WKY	SHRSP	SHRSR	Kidney	WKY	SHRSP	SHRSR
SPTLC1/Actin	1,000762	0,5913	0,74723	SPTLC1/Actin	0,817981	0,92582	0,816306
	0,977372	0,499868	0,88475		0,990848	0,667117	1,295899
	1,021867	0,633237	1,467964		1,150198	0,728644	1,238768
	1,014579	0,53329	1,024956		1,040973	0,886519	1,132571
	0,98555	0,824854	0,986082		1,10635	0,763907	0,926638
	1,071548	0,916006	1,263941		0,966253	0,611491	0,850861
	0,928323	0,834172	0,898149		0,927398	0,57639	0,852729

Fig. 5C				Fig. 5D			
Brain	WKY	SHRSP	SHRSR	Kidney	WKY	SHRSP	SHRSR
SPTLC2/Actin	0,991127	0,620984	1,09859	SPTLC2/Actin	1,140124	0,794648	0,616402
	1,109686	0,453217	1,302147		0,933301	0,63171	0,659012
	0,899186	0,601085	0,977586		0,926574	0,702714	0,551422
	0,932252	0,948132	1,289812		0,788972	0,694774	0,937982
	1,160061	0,955952	1,007702		0,993027	0,985693	1,012699
	0,907688	1,026975	0,964268		1,28293	1,076916	1,028436
			0,951798		0,935072	1,19468	

Table S5. Research raw data used for generating Figure 6

Fig. 6A				Fig. 6B			
Brain	WKY	SHRSP	SHRSR	Kidney	WKY	SHRSP	SHRSR
Kdsr mRNA expression	1,29266	1,302193	1,044805	Kdsr mRNA expression	1,028	0,837	1,023
	0,985701	1,013346	0,546235		1,014	0,848	0,611
	1,326025	0,768351	0,990467		0,853	0,754	0,682
	0,489037	0,781697	1,104862		1,124	0,816	0,945
	0,949476	0,978074	0,805529		1,145	0,605	0,44
	0,957102		0,575786		0,873	0,561	0,569

Fig. 6C				Fig. 6D			
Brain	WKY	SHRSP	SHRSR	Kidney	WKY	SHRSP	SHRSR
Degs mRNA expression	1,031	1,092	1,196	Degs mRNA expression	1,187	0,969	1
	1,155	0,983	0,874		0,842	0,912	1,069
	1,282	0,715	1,27		0,86	0,923	1,03
	0,655	0,88	1,121		0,969	0,985	1,09
	0,891	0,822	1,143		0,947	0,978	1,122
	1,122		1,053		1,266	1,043	1,09