

Figure S1

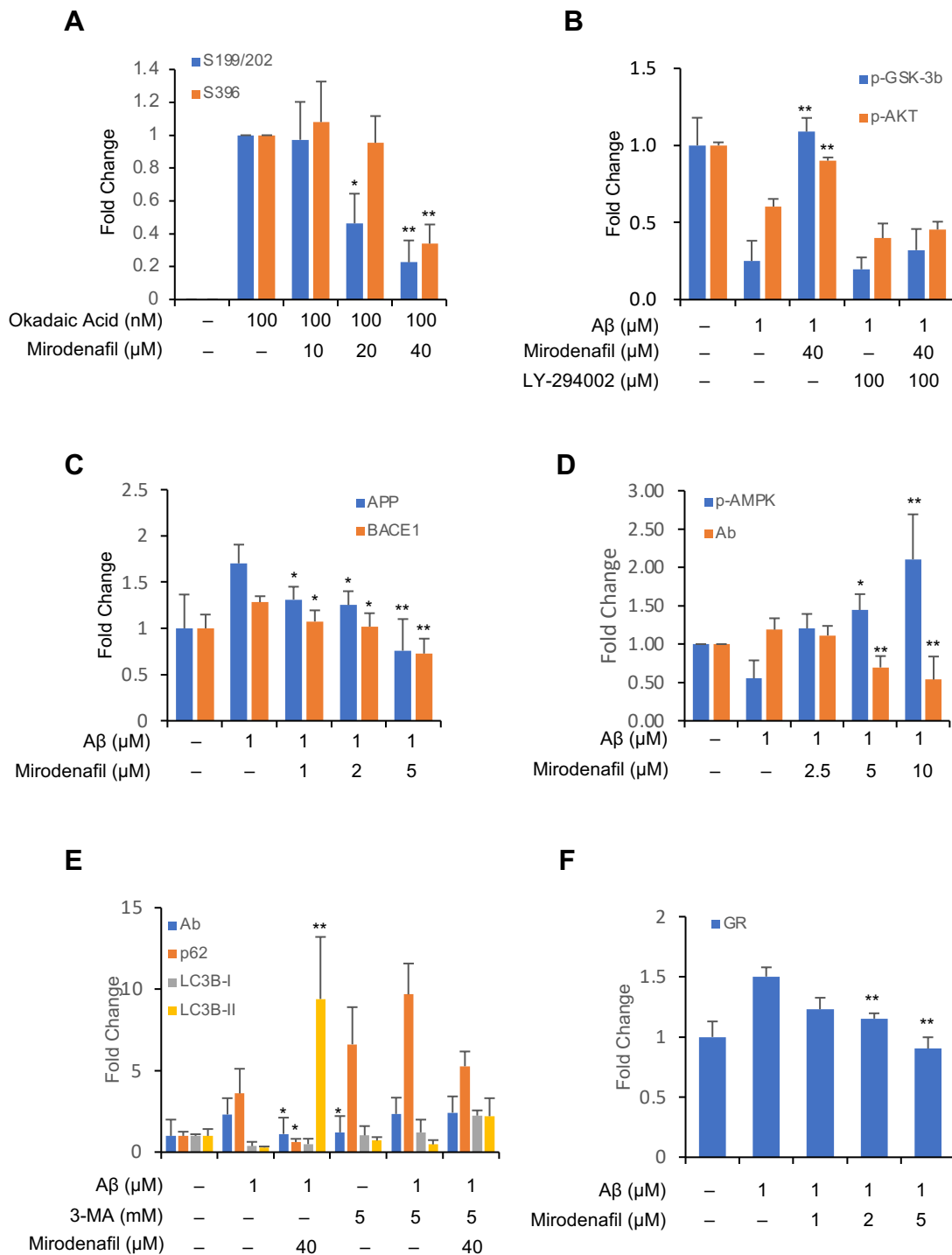


Figure S2. A

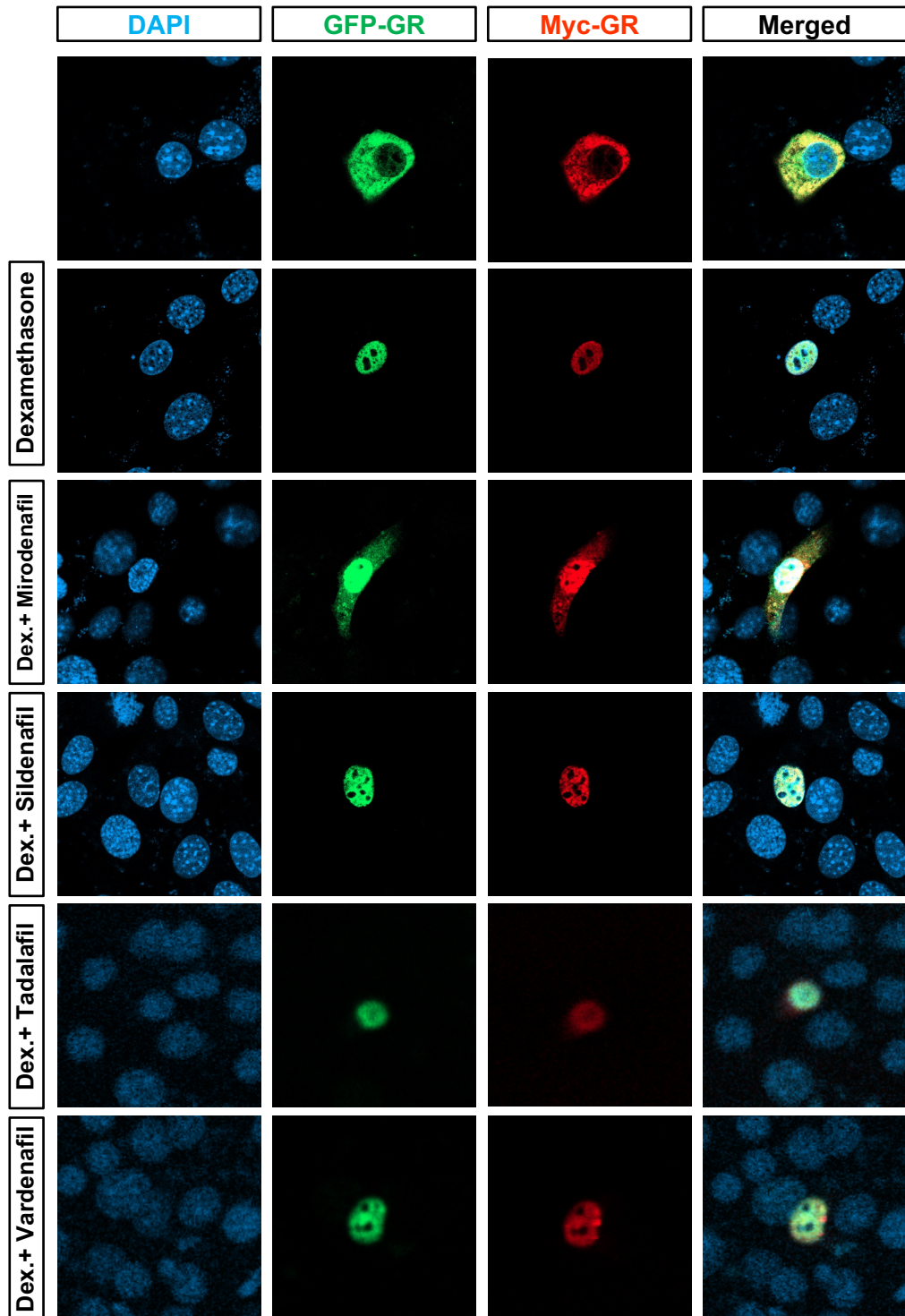


Figure S2. B

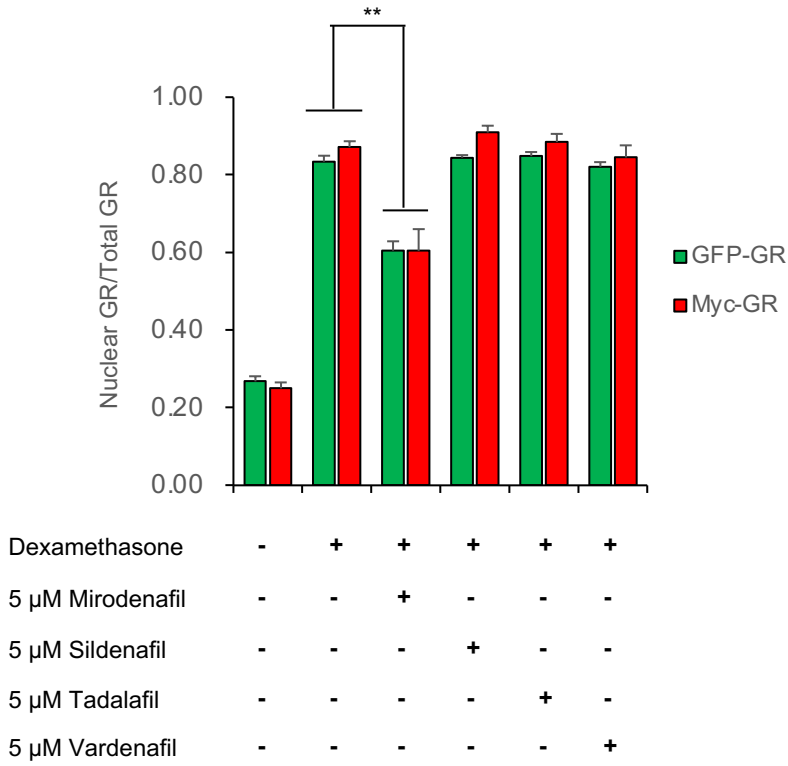


Figure S3

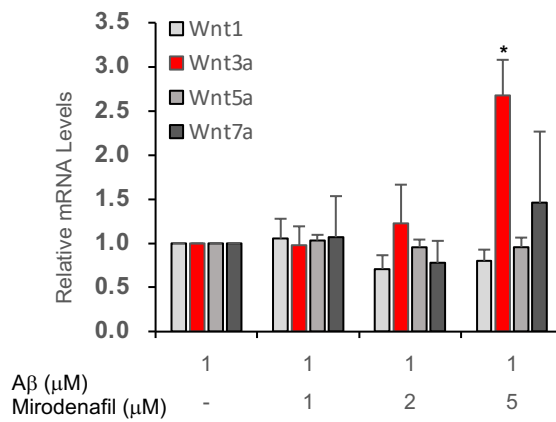


Figure S4

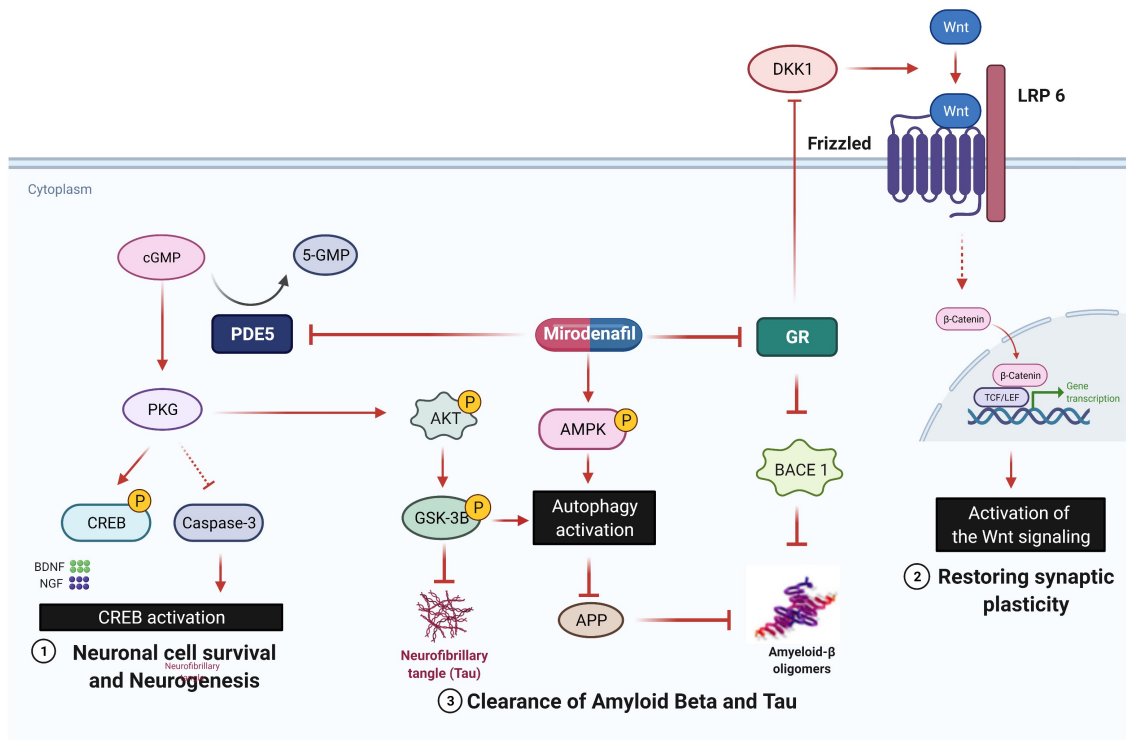


Table S1. Summary of general pharmacology study on the CNS in healthy mice

CNS Effects	Testing Method	Results compared with Vehicle Control Group
Spontaneous Locomotor Activity	Activity Monitor	No difference
Motor Coordination	Rotarod Test	No difference
Analgesia	Acetic Acid	No difference
	Hot Plate	No difference
Body Temperature	Rectal Temperature	No difference
Sleeping Time	Pentobarbital Sodium	No difference

Table S2. Primary antibodies used

Antibodies	Suppliers	Catalog No.	Species
A $\beta$ 1-42	Abcam	ab12267	Rabbit
AKT	Cell Signaling Technology	9272	Rabbit
Phospho-Akt (Ser473)	Cell Signaling Technology	4060	Rabbit
AMPK	Cell Signaling Technology	2532	Rabbit
p-AMPK	Cell Signaling Technology	2531	Rabbit
APP	Abcam	ab32136	Rabbit
ATG5/ATG12	Abcam	ab109490	Rabbit
ATG7	Abcam	ab133528	Rabbit
BACE1	Cell Signaling Technology	5606	Rabbit
BDNF	Abcam	ab108319	Rabbit
$\beta$ -ACTIN	Santa Cruz	sc-47778	Mouse
Caspase-3	Cell Signaling Technology	9662	Rabbit
Cleaved Caspase-3	Cell Signaling Technology	9661	Rabbit
p-CREB (phospho S133)	Abcam	ab32096	Rabbit
Dkk1	Abcam	ab61275	Mouse
GAPDH	Cell Signaling Technology	2118	Rabbit
GFAP	Millipore	AB5541	Chicken
Glucocorticoid Receptor	Cell Signaling Technology	3660	Rabbit
Phospho-GSK-3-beta (Ser9)	Cell Signaling Technology	9322	Rabbit
LC3B	Cell Signaling Technology	2775	Rabbit
NGF	Abcam	ab52918	Rabbit
p62	Cell Signaling Technology	39749	Rabbit
PARP	Cell Signaling Technology	9532	Rabbit
Tau	Cell Signaling Technology	46687	Rabbit
pSer199/202-Tau	Millipore	AB9674	Rabbit
pSer396-Tau	Abcam	ab109390	Rabbit

Table S3. PCR primers

Targets	Strand	Primer sequences	Size (bp)	T <sub>m</sub> (°C)	Origin
APP	S	5'- CTACGGAAACGACGCTCTCATG -3'	209	59	Mouse
	AS	5'- CAGAACCTGGTCGAGTGGTCAG -3'			
BACE1	S	5'- GGAACCCATCTCGGCATCCGG -3'	215	59	Mouse
	AS	5'- ACCAGGATGTTGAGCGTCTGTG -3'			
β-ACTIN	S	5'-AGAAGCTGTGCTATGTTGCTCT -3'	191	53	Mouse
	AS	5'- AGTTTCATGGATGCCACAGGAT -3'			
DKK1	S	5'- TCTGCTAGGAGCCAGTGCC -3'	191	50	Mouse
	AS	5'- GATGGTGATCTTTCTGTATCC -3'			
WNT1	S	5'- CTCTTTGGCCGAGAGTTCGTGG -3'	251	60	Mouse
	AS	5'- CCTCGGTTGCCGTAAGGACGC -3'			
WNT3A	S	5'- CTCGCATGGCATAGATGGGTGC -3'	153	60	Mouse
	AS	5'- GCAGGTGTGCACGTCATAGAC -3'			
WNT5A	S	5'-CATGGAGTGTCTGGCTCCTG -3'	279	60	Mouse
	AS	5'- GTCCATCCCCTCTGAGGTCTTG -3'			
WNT7A	S	5'- CGGGAGATCAAGCAGAATGC -3'	167	57	Mouse
	AS	5'- GCCTAGCTCTCGGAACTGTGGC -3'			