Supplementary Figures and Tables for

Cannabidiol prevents depressive-like behaviors through the modulation of neural stem cell differentiation

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This file contains:

Figures S1-S2
Tables S1-S2

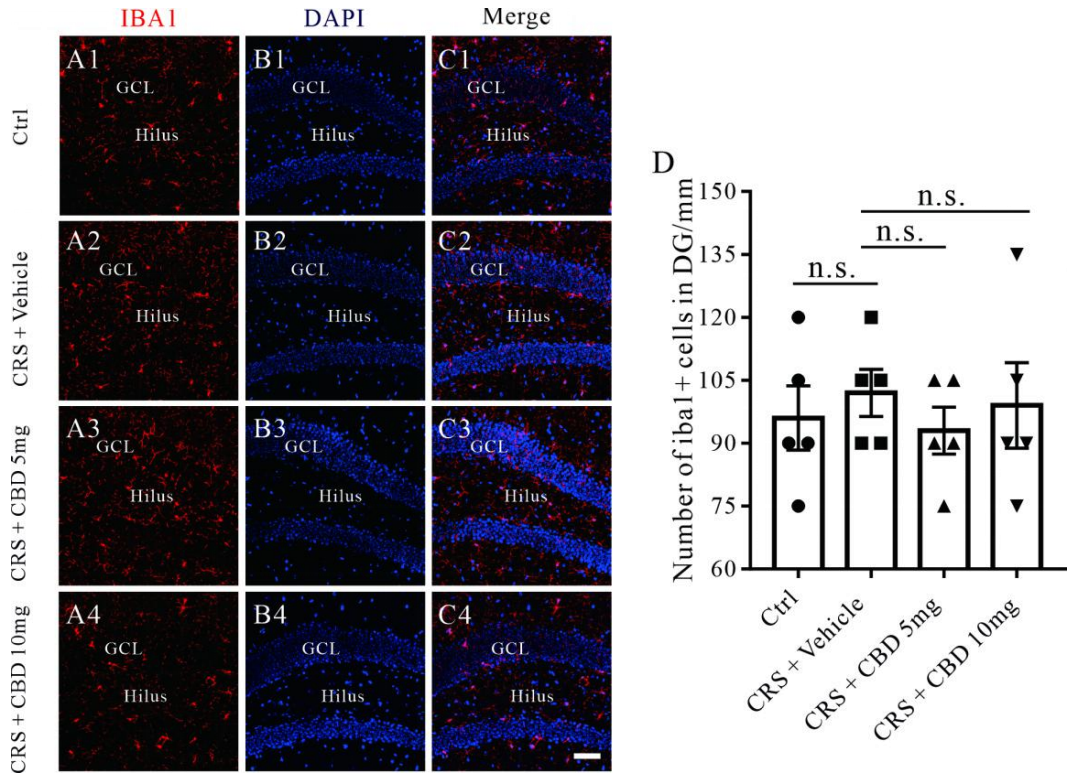

Fig. S1 Chronic restraint stress did not cause microglia cell activation in the DG of hippocampus.

(A-D) Representative confocal microscopy images showing IBA1 labeled cells in the DG of control, CRS and CBD treatment (5 mg/kg or 10 mg/kg) groups (A1-C4) and the corresponding quantification results (D, n = 5). Scale bar = 50 μm. *$P < 0.05$, **$P < 0.01$, n.s, no significant difference.

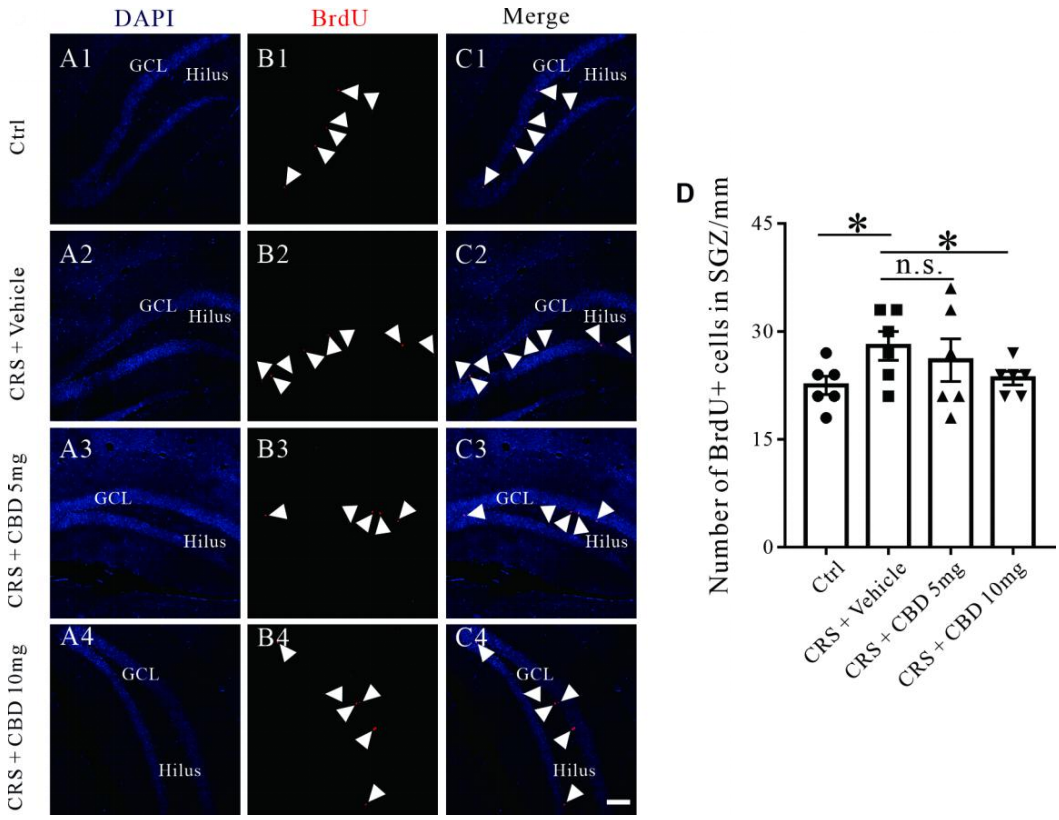

Fig. S2 CBD treatment prevented abnormal neural stem cell activation in CRS mice.

(A-D) Representative confocal microscopy images showing BrdU labeled cells in the DG of control, CRS and CBD treatment (5 mg/kg or 10 mg/kg) groups (A1-C4) and the corresponding quantification results (D, n = 5). Scale bar = 50 μm. *$P < 0.05$, **$P < 0.01$, n.s, no significant difference.

Supplementary Tables

Table S1 FoxO signaling pathway related gene expression of Ctrl and CRS mice

Gene_id	Gene name	Gene relative expression		Log2FC(CRS/ Ctrl)	P adjust	Significant	Regulate
ENSMUSG00000023067	cdkn1a	**Ctrl**		2.015531	0.000757	yes	up
		ctrl_1	8.83				
		ctrl_2	6.53				
		ctrl_3	4.46				
		CRS					
		crs_1	35.1				
		crs_2	19.1				
		crs_3	21.81				
ENSMUSG00000019970	sgk1	**Ctrl**		1.338261	0.000454	yes	up
		ctrl_1	48.21				
		ctrl_2	59.18				
		ctrl_3	44.91				
		CRS					
		crs_1	147.06				
		crs_2	108.56				
		crs_3	118.66				
ENSMUSG00000025915	sgk3	**Ctrl**		0.871508	0.019059	yes	up
		ctrl_1	5.8				
		ctrl_2	6.04				
		ctrl_3	4.96				
		CRS					
		crs_1	12.64				
		crs_2	8.95				
		crs_3	8.8				
ENSMUSG00000039304	tnfsf10	**Ctrl**		-0.93538	0.655633	yes	down
		ctrl_1	1.62				
		ctrl_2	1.04				
		ctrl_3	1.08				
		CRS					
		crs_1	0.36				
		crs_2	0.89				
		crs_3	0.73				

Table S2 FoxO signaling pathway related gene expression in chronic restraint stress (CRS) mice with or without 10 mg/Kg CBD treatment

Gene_id	Gene name	Gene relative expression	Log2FC(CRS+ CBD 10mg/CRS)	P adjust	Significant	Regulate
ENSMUSG00000023067	cdkn1a	**CRS** crs_1 35.1 crs_2 19.1 crs_3 21.81 **CRS+CBD 10mg** cbd_1 7.49 cbd_2 6.47 cbd_3 6.73	-1.933158068	5.037090	yes	down
ENSMUSG00000019970	sgk1	**CRS** crs_1 147.06 crs_2 108.56 crs_3 118.66 **CRS+CBD 10mg** cbd_1 58.26 cbd_2 57.6 cbd_3 49.71	-1.242254514	2.125853	yes	down
ENSMUSG00000025915	sgk3	**CRS** crs_1 12.64 crs_2 8.95 crs_3 8.8 **CRS+CBD 10mg** cbd_1 4.99 cbd_2 4.55 cbd_3 3.89	-1.11192890738	0.000081	yes	down
ENSMUSG00000039304	tnfsf10	**CRS** crs_1 0.36 crs_2 0.89 crs_3 0.73 **CRS+CBD 10mg** cbd_1 0.89 cbd_2 1.27 cbd_3 1.16	0.832814234	0.635067	yes	up