

## Supplementary Material

### Material and Methods

#### Sample preparation

All mice were sacrificed under CO<sub>2</sub> anesthesia through removal of blood from an abdominal vein. A partial blood sample was used for complete blood count analysis using hematological autoanalyzer (Exigo EOS Vet, Boule Medical AB, Sweden).

### Results

#### Body weights

The body weights between sham and ADX groups were not significantly changed during 7 days (Supplementary Figure 2).

#### Hematological parameters

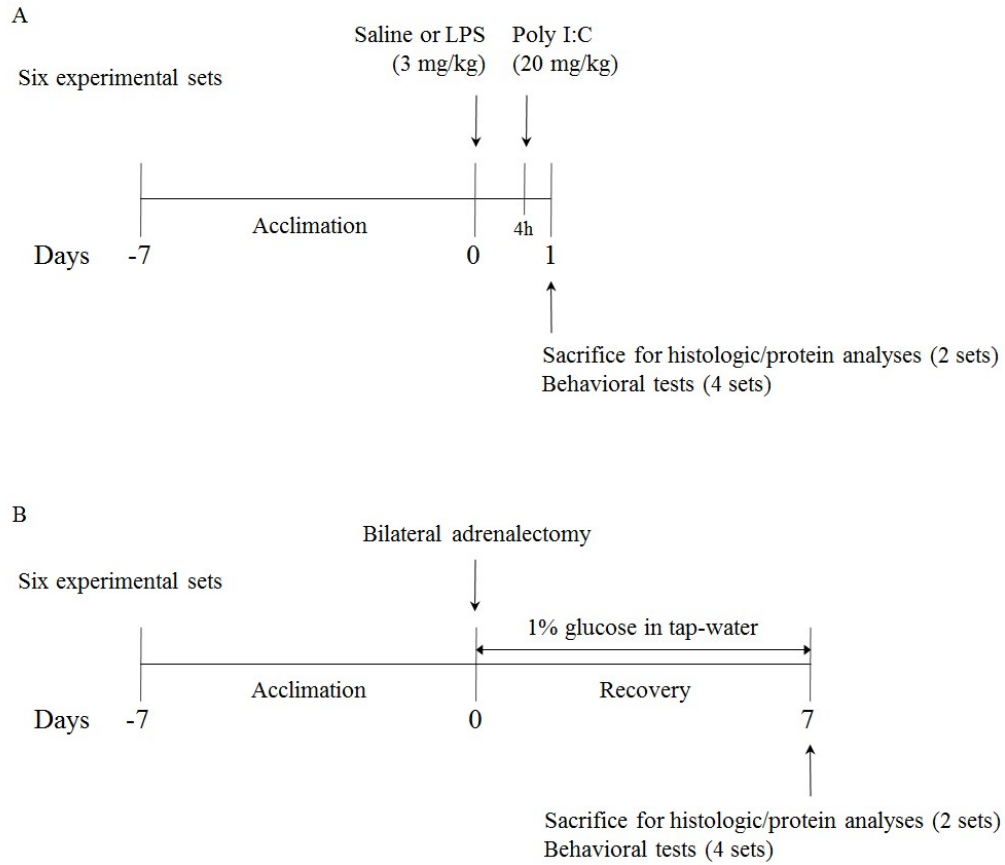
The blood cell population was changed by LPS and poly I:C injection. The LPS significantly reduced absolute WBC count [ $F(3,20) = 7.840, p < 0.01$ ] compared with the vehicle ( $p < 0.05$  or  $p < 0.01$ ). Its components including lymphocyte [ $F(3,20) = 22.859, p < 0.01$ ], monocyte [ $F(3,20) = 8.266, p < 0.01$ ], and granulocyte [ $F(3,20) = 20.796, p < 0.01$ ] were significantly altered by LPS and poly I:C injection ( $p < 0.05$  or  $p < 0.01$ , Supplementary Table 1). Absolute and percentage of blood cells were not affected by ADX compared with both the vehicle and sham group.

**Supplementary Table S1.** Hematological parameters in the blood of mice.

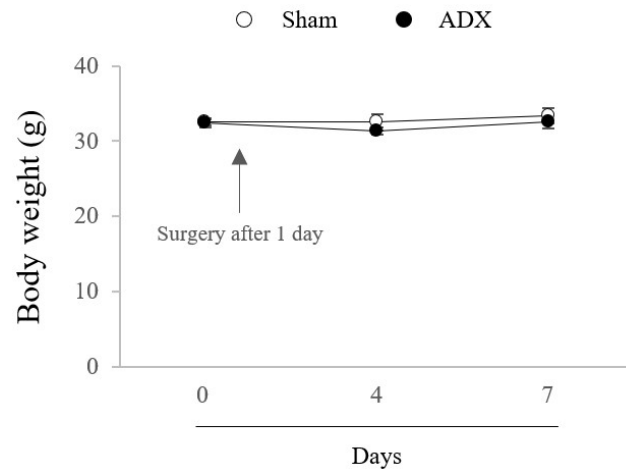
Treatment	Vehicle	LPS	Poly I:C	Sham	ADX
RBC (10 <sup>12</sup> /L)	7.98 ± 0.27	7.79 ± 0.46	7.69 ± 0.49	7.36 ± 0.31	7.79 ± 0.44
Hemoglobin (g/dL)	14.42 ± 0.29	14.05 ± 0.79	14.01 ± 0.84	12.21 ± 0.35	14.12 ± 1.01
WBC (10 <sup>9</sup> /L)	14.28 ± 2.29	5.53 ± 1.73**	12.86 ± 2.44	13.51 ± 2.63	11.65 ± 5.69
Lymphocyte (%)	65.85 ± 2.64	31.45 ± 12.83**	43.50 ± 14.11*	66.26 ± 4.00	70.92 ± 6.19
Monocyte (%)	6.50 ± 0.28	10.60 ± 2.90*	8.76 ± 1.51*	7.38 ± 0.51	6.70 ± 0.71
Granulocyte (%)	27.65 ± 2.77	57.95 ± 12.22**	47.74 ± 12.99*	26.36 ± 3.55	22.38 ± 5.59

Data are expressed as the mean ± SD (n = 6) \*P < 0.05, \*\*P < 0.01 compared with the vehicle group. RBC, red blood cell; WBC, white blood cell

## Supplementary Figures



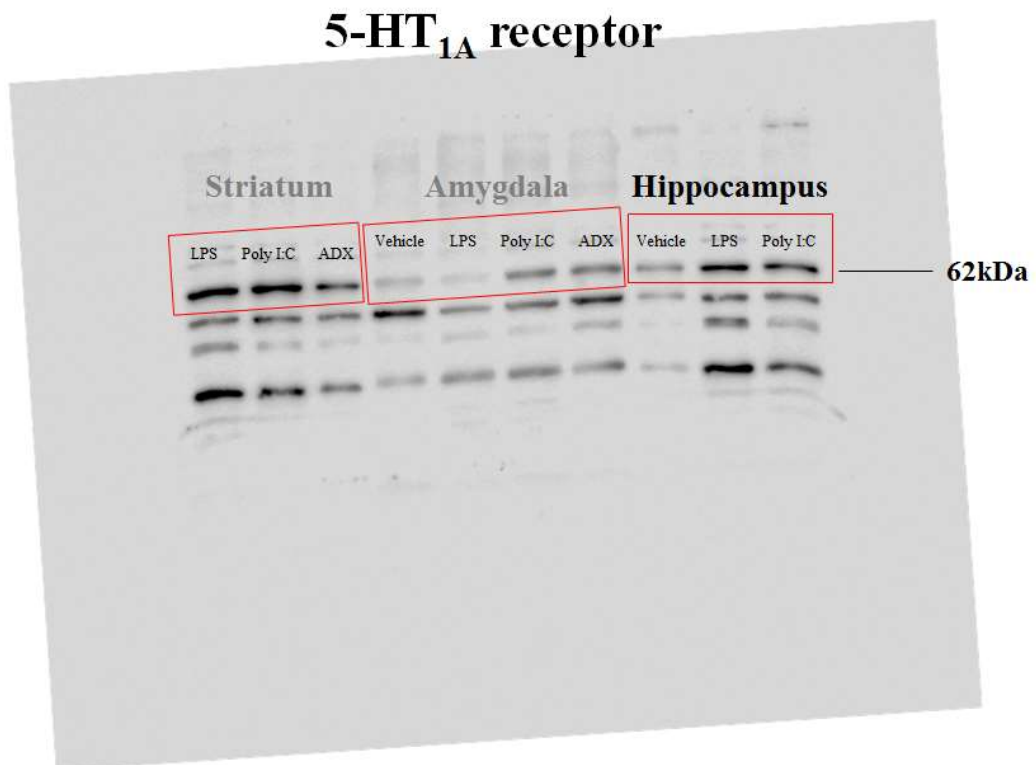
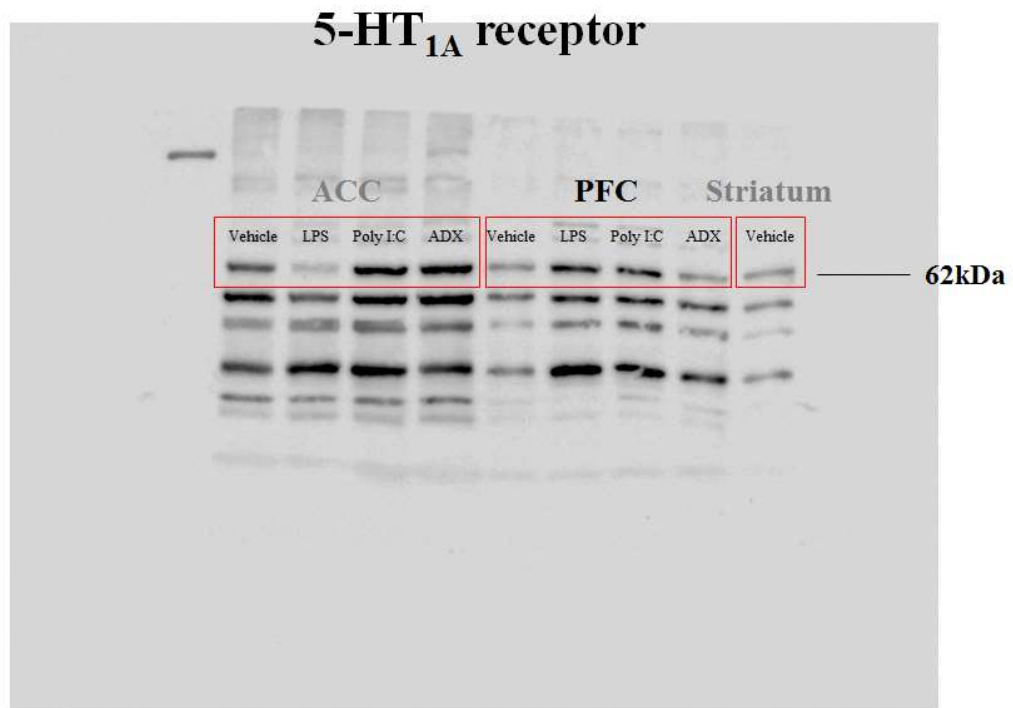
**Supplementary Figure S1. Experimental schedule.** ICR mouse (8 weeks old) was injected to LPS (3 mg/kg for 24 h) or poly I:C (20 mg/kg for 4 h) intraperitoneally (A). Other mice were subjected to bilateral adrenalectomy and then they were allowed to rest with 1% glucose for 7 days (B).



**Supplementary Figure S2. Changes in body weight of the sham or ADX mice during recovery.**

The body weight of sham (open circles) and ADX (filled circles) was measured during 7 days.

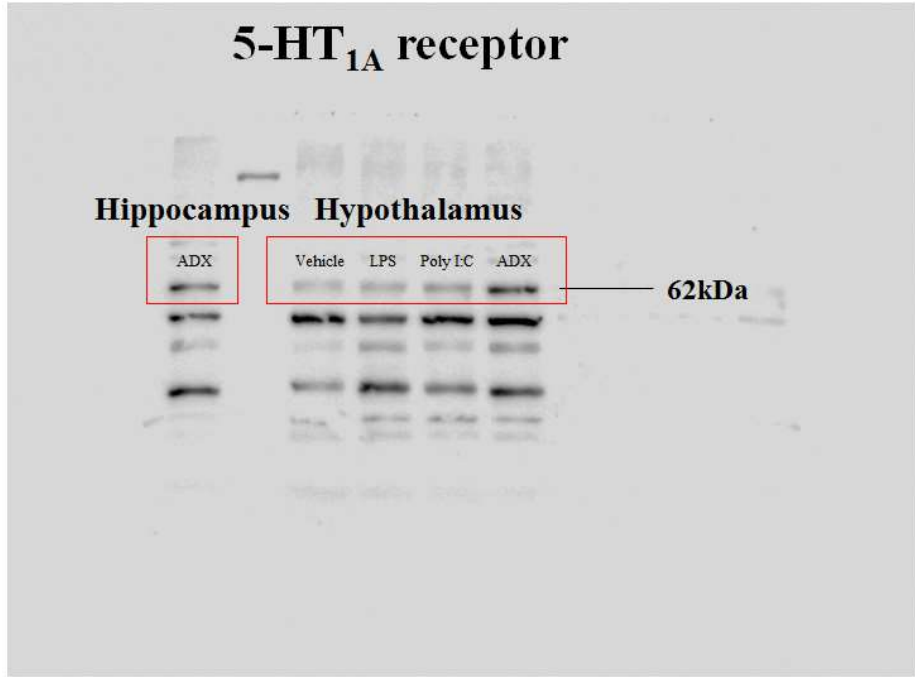
**Figure 5A full-length gel and blots**



# 5-HT<sub>1A</sub> receptor

Hippocampus Hypothalamus

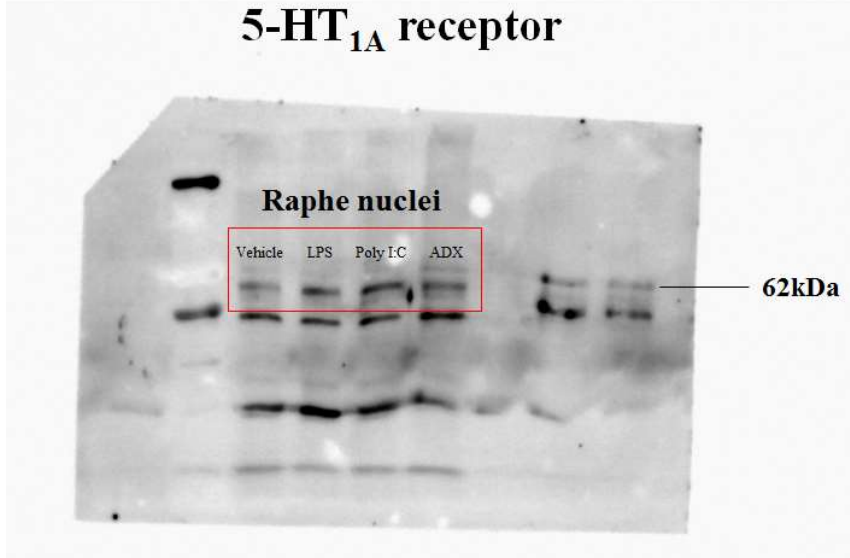
ADX Vehicle LPS Poly I:C ADX 62kDa



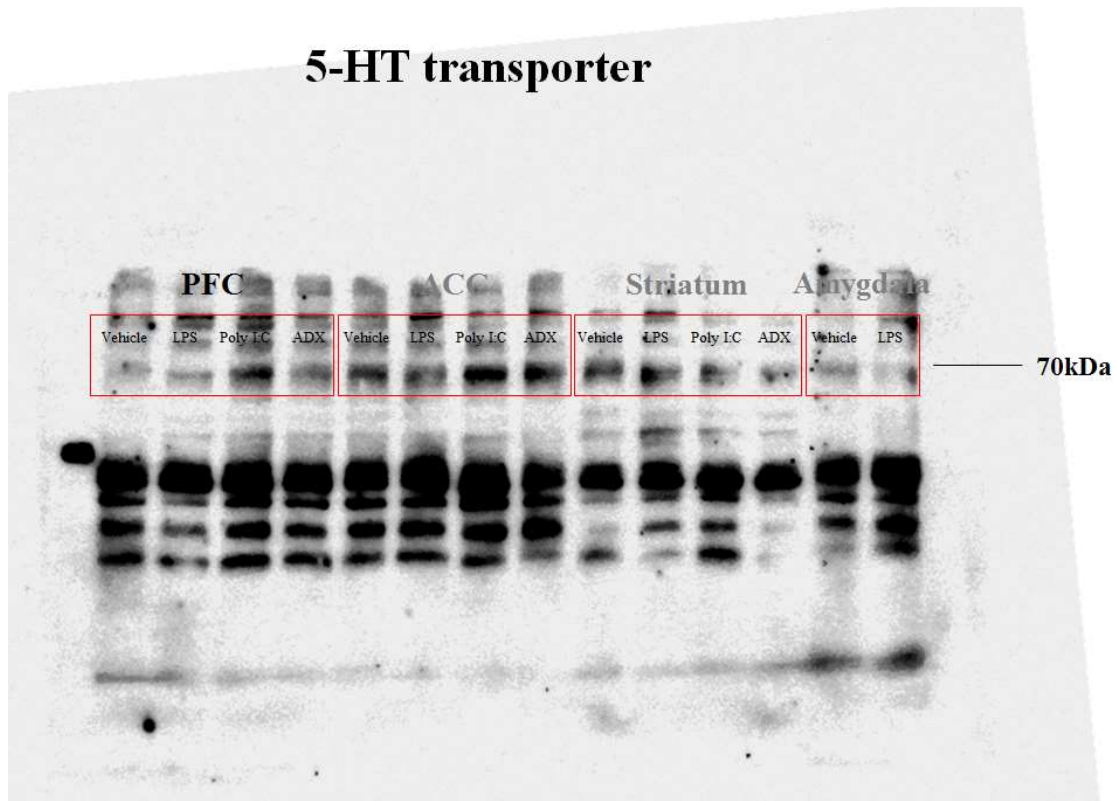
# 5-HT<sub>1A</sub> receptor

Raphe nuclei

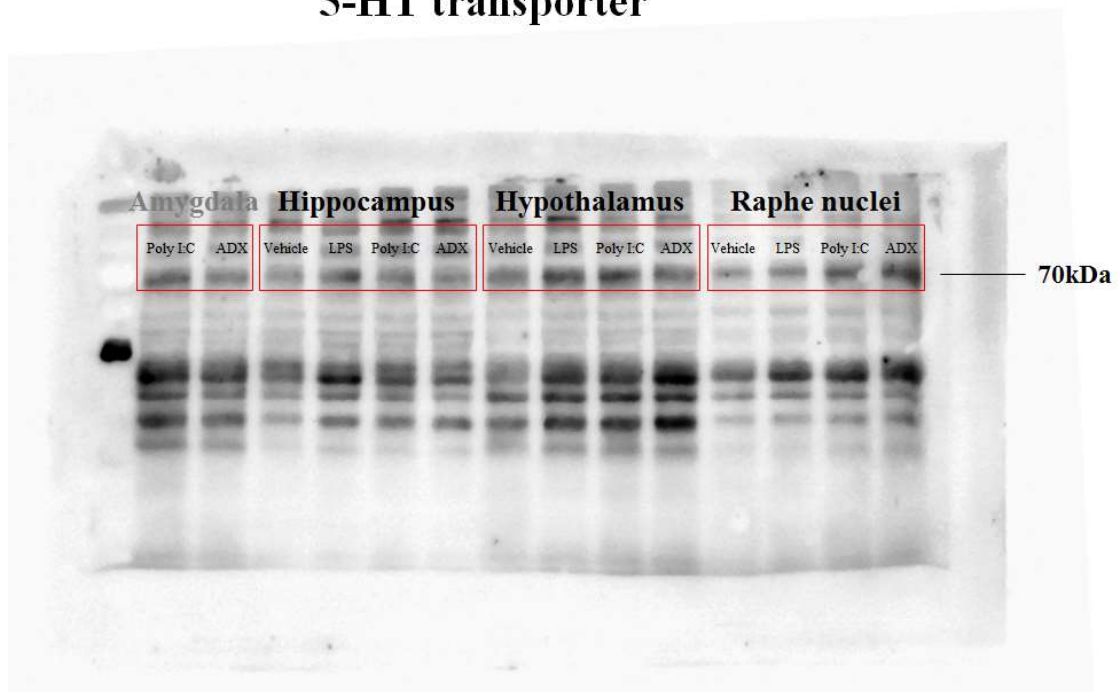
Vehicle LPS Poly I:C ADX 62kDa



## 5-HT transporter



## 5-HT transporter



# $\beta$ -actin



# $\beta$ -actin

