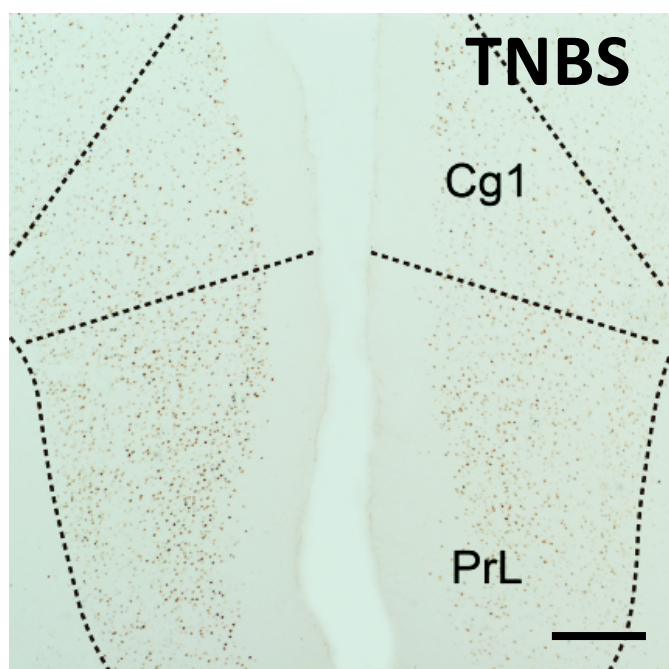
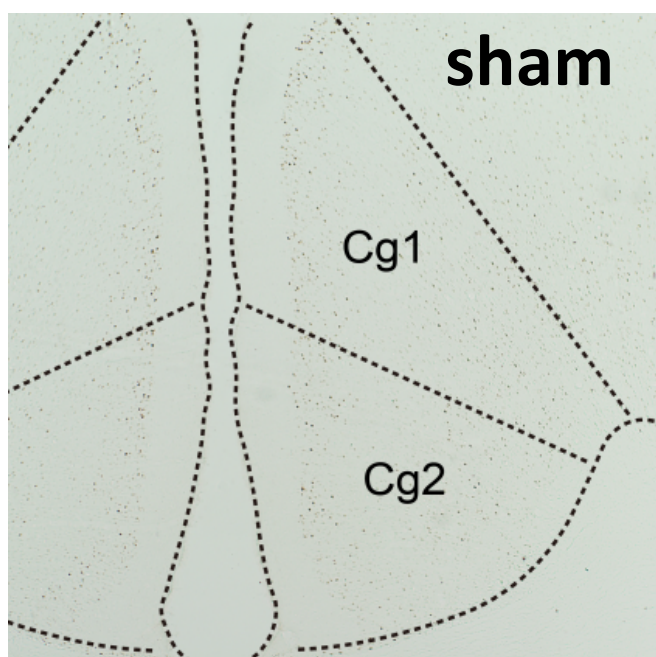


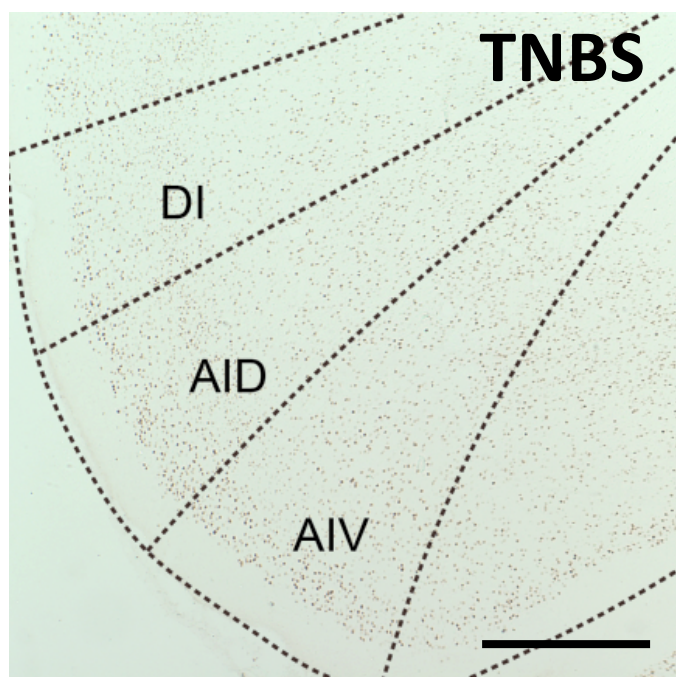
**C** orbital cortex



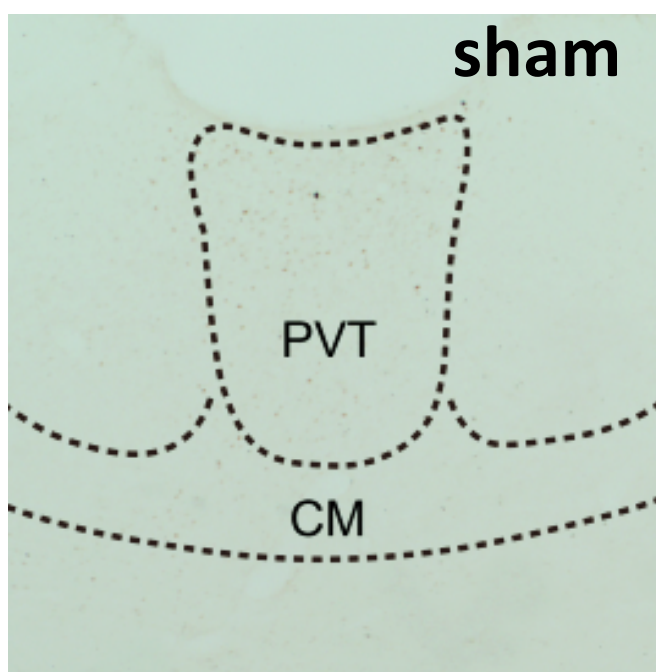
**D** anterior cingulate



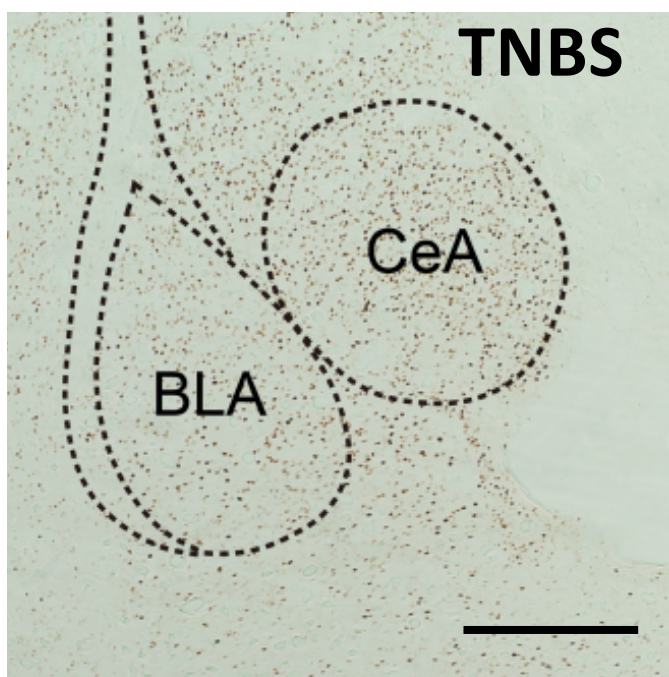
**E** cortex



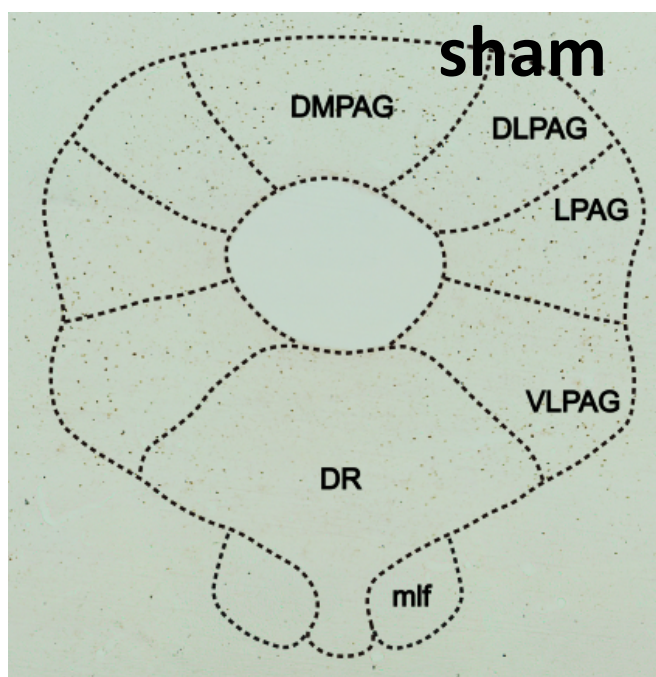
**F** thalamus



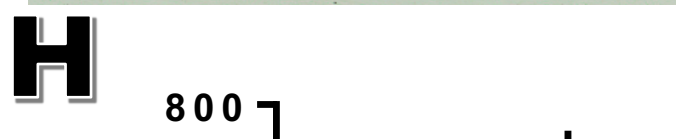
**G** amygdala



**H** periaqueductal gray



**I** medial nucleus



- **Supplemental Figure 1. The expression of FOS was up-regulated in different brain areas in trinitrobenzene sulfonic acid-treated rats.** (A-G) Representative immunohistochemical staining for FOS in medial prefrontal cortex (A), anterior cingulate cortex (B), insular cortex (C), thalamus (D), amygdala (E), periaqueductal gray (F), parabrachial nucleus (G) in sham (left) and TNBS (right) groups. (H) Histogram showing the quantification of FOS-expressing neurons in above brain areas of saline- and TNBS-treated rats (n = 4 slices per mouse; 4 mice per group). Bars = 300  $\mu$ m in (A-G). <sup>a</sup> $P < 0.05$ , <sup>b</sup> $P < 0.01$ , <sup>c</sup> $P < 0.001$ , TNBS vs sham. AID: agranular insular cortex, dorsal part; AIV: agranular insular cortex, ventral part; BLA: basolateral amygdaloid nucleus, anterior part; CeA: central amygdaloid nucleus; Cg1: cingulate cortex, area 1; Cg2: cingulate cortex, area 2; CM: central medial thalamic nucleus; DI: dysgranular insular cortex; DMPAG: dorsomedial periaqueductal gray; DLPAG: dorsolateral periaqueductal gray; DR: dorsal raphe; LPAG: lateral periaqueductal gray; LPB: lateral parabrachial nucleus; mlf: medial longitudinal fasciculus; MPB: medial parabrachial nucleus; PrL: prelimbic cortex; PVT: paraventricular thalamus; scp: superior cerebellar peduncle; TNBS: trinitrobenzene sulfonic acid; VLPAG: ventrolateral periaqueductal gray.